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## 2020/2021 University of the Pacific San Francisco Catalog

University of the Pacific

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# SAN FRANCISCO

## Academic Divisions of the University

Arthur A. Dugoni School of Dentistry

Benerd College

College of the Pacific (Arts and Sciences)

Conservatory of Music

Eberhardt School of Business

Graduate School

McGeorge School of Law

School of Engineering and Computer Science

School of Health Sciences

School of International Studies

Thomas J. Long School of Pharmacy

## Accreditation

University of the Pacific is accredited by the Accrediting Commission for WASC Senior College and University Commission (WSCUC), located at 985 Atlantic Ave., Suite 100, Alameda, CA 94501; (510)748-9001.

## University Campuses

Procedures, rules, regulations, services, tuition, etc. vary on the three campuses of University of the Pacific. This catalog states those for the schools and colleges listed in this catalog. The university reserves the right to change fees, modify its services or change its programs at any time and without prior notice being given.

## Statement of Non-discrimination

Pacific does not discriminate on the basis of race, color, religion, national origin, ancestry, age, genetic information, sex/gender, marital status, veteran status, sexual orientation, medical condition, pregnancy, gender identity, gender expression or mental or physical disability.

In accordance with the above university policy and in compliance with all applicable laws, all educational services will be provided and all employment decisions (including recruitment, training, compensation, benefits, employee relations, promotions, terminations) will be made without regard to the individual's status protected by law. To the extent provided by law, the university will reasonably accommodate qualified individuals with disabilities that meet the legal standards for documentation, whenever the individual is otherwise qualified to safely perform all essential functions of the position.

This notice is given pursuant to the requirements of Title IX of the Educational Amendments of 1972, Title VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973 and amendments and other laws, orders and regulations governing discrimination. University of the Pacific has designated the Director of Human Resources to coordinate the university's efforts to comply with laws, orders and regulations governing discrimination. Any person having a complaint should contact in writing:

Director of Human Resources  
University of the Pacific

3601 Pacific Avenue  
Stockton, CA 95211

*Because the catalog is compiled well in advance of the academic year it covers, changes in programs, policies and the academic calendar may well occur.*

*All catalog information is subject to change without notice or obligation.*

## About University of the Pacific

### Preparing Our Students: Success After Graduation

University of the Pacific provides a superior, student-centered learning experience that integrates liberal arts and professional education to prepare students for lasting achievement and responsible leadership in their careers and communities.

At six months after graduation, more than 90 percent of class of 2019 survey respondents reported being employed or accepted to a graduate or professional school, completing a post-graduate internship or fellowship, or serving in a military or community service experience. In 2019, Pacific ranked No.7 for graduation rate among among similar-sized public and private nonprofit colleges in California, according to the U.S. Department of Education Scorecard. The Wall Street Journal and Times Higher Education ranked Pacific No. 21 in the West for 2020 and the 2019 U.S. News & World Report Best Colleges ranking placed Pacific at No. 7 for Best Ethnic Diversity among private California universities.

### Looking Back: Our Unique History

University of the Pacific was established in 1851 as California's first chartered institution of higher learning. It was founded by pioneering Methodist ministers and remains the only Methodist-related university in California. Originally located in Santa Clara, the university later moved to San Jose, and in 1924, moved to Stockton making it the first private four-year university in the Central Valley.

An innovator and leader in higher education, Pacific provided California with its first chartered medical school in 1858, its first coeducational campus in 1871, and its first conservatory of music in 1878. It was the nation's first to offer an undergraduate teacher corps program, the first to send an entire class to an overseas campus, the first to establish a Spanish-speaking inter-American college, and the first to offer a four-year graduation guarantee.

Pacific has enjoyed extraordinary stability in administration. Provost Maria Pallavicini currently serves as interim president following the retirement of Pamela A. Eibeck, the university's 24th and first female president. On Nov. 21, 2019, Pacific announced Christopher Callahan was chosen to become the university's 26th president. Callahan was selected after a nationwide search and a unanimous decision by the Board of Regents. His tenure begins July 1, 2020.

### Looking Forward: Innovating with the Times

Today, University of the Pacific is a highly ranked national university that remains deeply committed to its personal, student-centered approach. Campuses in Stockton, Sacramento and San Francisco strategically position Pacific in three of California's, and the nation's, most important and dynamic markets. The university earns widespread recognition for its deep commitment to teaching and learning, its history of innovation and the accomplishments of its alumni.

Pacific has added more than a dozen new academic programs across its three campuses over the last three years. Once the exclusive homes

to Pacific's law and dental schools, the Sacramento and San Francisco campuses now reach new students with graduate programs in data science, physician assistant studies, audiology, music therapy, education, public policy and public administration. These programs help address the region's critical need for leaders in technology, health care, education, government and nonprofit sectors.

In fall 2019, Pacific launched the School of Health Sciences that includes four new programs—accelerated master's degrees in clinical nutrition, nursing and social work, and a doctor of occupational therapy—as well as existing popular health programs. The university also introduced Benerd College, a merger of the Gladys L. Benerd School of Education and University College, to enhance access to education by providing innovative, flexible online and hybrid educational programs.

### **Beyond Academics: Pacific's Community Impact**

In addition to academics, Pacific is making a positive community impact across the Northern California region through tens of thousands of hours of public outreach, innovative new programs and the efforts of students, faculty and staff across the university.

For example, the Thomas J. Long School of Pharmacy has provided more than a decade of outreach events through its Mobile Medicare Clinics that have saved more than 8,695 Medicare recipients nearly an estimated total of \$8.65 million in prescription drug costs. Since 2010, more than 3,000 of the most vulnerable and underserved in our communities have received health care services through our Virtual Dental Home program, a revolutionary new care delivery system developed by Pacific's Center for Special Care. And, McGeorge's legal clinics on important topics, such as immigration law, benefit the community while preparing students through meaningful experiential learning.

### **Our Schools, Majors and Programs**

Pacific's 11 schools and college on its three campuses offer students their choice of 80-plus programs of study, including 30 graduate programs and 10 accelerated program options. For example, students can go directly into certain professional programs, including pharmacy, dentistry and law, while accelerated programs in business, engineering and education make it possible to earn both undergraduate and graduate degrees in five years.

### **College of the Pacific (1851)**

The College of the Pacific is the oldest and largest academic unit, encompassing 18 departments and 31 majors in the natural sciences, social sciences, humanities, and the fine and performing arts. Based upon its foundation of a rigorous liberal arts curriculum, the College champions experiential learning through undergraduate research and creative activity, fieldwork, internships, and study abroad. The College prepares graduating students to command a broad perspective in their professional careers, ready to assume the responsibilities of leadership.

### **Conservatory of Music (1878)**

Pacific's Conservatory of Music has been delivering an outstanding music education for more than 140 years. Degree programs are offered in performance, composition, jazz, education, music industry studies, music therapy and history. Conservatory faculty artists/scholars provide a rigorous and supportive learning environment. Students have access to a recording studio and technology and composition labs. Seminars and master classes with accomplished alumni and visiting artists along with numerous performance and other experiential opportunities help prepare graduates for professions in music.

### **Arthur A. Dugoni School of Dentistry (1896)**

The nationally renowned Arthur A. Dugoni School of Dentistry, named in honor of its dean of 28 years, is committed to providing a world-

class dental education for its students and comprehensive, affordable patient care for adults and children. The Dugoni School is highly regarded for its humanistic model of education that respects the dignity of each individual and for innovation in dental curriculum, including comprehensive patient care and competency-based education. Its programs include an accelerated year-round pre-doctoral DDS program that enables students to complete four academic years of instruction in three calendar years and a high-demand Master of Physician Assistant Studies program.

### **McGeorge School of Law (1924)**

McGeorge educates lawyers for large and small law firms, government agencies and corporate legal departments around the world. McGeorge's success is built on its distinguished faculty, high-quality students, committed and involved alumni, and beautiful, spacious campus with state-of-the-art classrooms and student facilities. McGeorge is a dynamic law school that is changing and growing to meet the challenges of the global economy and to educate the lawyers of the future.

### **Benerd College (1924)**

Benerd College, a merger of the Gladys L. Benerd School of Education and University College, is Pacific's home for professional and continuing education. Students in Benerd College are prepared to deliver thoughtful, reflective, caring and collaborative services to diverse populations. The College offers relevant learning opportunities, flexible pricing and accessible program delivery to meet the needs of both the K-12 education community and adults across the region looking to advance their education and training.

### **Thomas J. Long School of Pharmacy (1955)**

The Thomas J. Long School of Pharmacy is named in honor of the financial commitment of the Thomas J. Long Foundation and the Long family. The School offers a three-year accelerated pharmacy program. The School is committed to creating a leadership focused, success-centered environment for its diverse student body. Students are empowered to succeed through meaningful, experiential learning in state-of-the-art laboratories. The School's programs have received continuous national accreditation.

### **Graduate School (1956)**

The Graduate School collaborates with University of the Pacific's academic schools and colleges to offer more than 30 master's, doctoral, and graduate certificate programs, serving graduate students on Pacific's Stockton, San Francisco and Sacramento campuses. The school serves as the central, student-centered resource for graduate admission, education and services at the university and works to promote and support the success and development of Pacific's diverse graduate population.

### **School of Engineering and Computer Science (1958)**

The School of Engineering and Computer Science empowers its students to solve problems by developing their own projects and working alongside professors on contemporary research. The School's faculty take each student's education personally and are committed to mentoring them both inside and outside of the classroom. With its distinguished cooperative education program, students also get to "learn and earn" through a paid professional internship, built right into the curriculum, with one of the School's 200-plus industry partners worldwide.

### **Eberhardt School of Business (1977)**

The Eberhardt School of Business was renamed in 1995 in recognition of the Eberhardt family's endowed gifts. Fully accredited by the Association to Advance Collegiate Schools of Business, the School boasts a \$3 million Eberhardt Student Investment Fund, a dedicated Career Management Center, top-rated faculty, state-of-the-art classroom technology, and exceptional experiential learning opportunities. The School offers valuable leadership development and business resources through its centers and institutes, including the Center for Business and Policy Research, the Center for Entrepreneurship, the Westgate Center for Leadership and Management Development and the Institute for Family Business.

#### School of International Studies (1987)

A school within the College of the Pacific, the School of International Studies is devoted to the interdisciplinary study of international affairs. International, interdisciplinary and intercultural immersion, acquisition of at least one second language and at least a semester of study abroad prepare students to succeed in a variety of professions in industry, government, not-for-profit organizations and educational institutions. The School's programs help students develop strong analytical reasoning ability and written and oral communication skills while building intercultural competence and personal confidence. Its students are frequent recipients of prestigious fellowships.

#### School of Health Sciences (2020)

Building on Pacific's long-standing reputation for preparing health care professionals, the new School of Health Sciences meets the demands of a growing industry. New accelerated master's degree programs in clinical nutrition, nursing and social work and a doctor of occupational therapy join existing popular programs in athletic training, audiology, physical therapy, physician assistant studies and speech-language pathology, with many offered in flexible formats. Housed at our Sacramento Campus, the new School of Health Sciences also includes programs at the San Francisco and Stockton campuses.

## Academic Calendar

- Quarter Programs (p. 4)
- Semester Programs (p. 4)
- Semester Law Programs (p. 4)
- Trimester Programs (p. 4)

## Quarter Programs

### Arthur A. Dugoni School of Dentistry

Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

## Semester Programs

### Arthur A. Dugoni School of Dentistry

Dental Hygiene

### Benerd College

All Programs

### College of the Pacific

All Programs

### Conservatory of Music

All Programs

### Eberhardt School of Business

All Programs

### School of Engineering and Computer Science

All Programs

### School of Health Sciences

Athletic Training

Speech-Language Pathology

### School of International Studies

All Programs

### The Thomas J. Long School of Pharmacy

Pre-Pharm

## Semester Law Programs

### McGeorge School of Law

All Programs

## Trimester Programs

### School of Health Sciences

Master of Science in Clinical Nutrition (Sacramento)

Master of Science in Nursing (Sacramento)

Master of Physician Assistant Studies (Sacramento)

Master of Social Work (Sacramento)

Doctor of Audiology (San Francisco)

Doctor of Occupational Therapy (Sacramento)

Doctor of Physical Therapy (Stockton)

### The Thomas J. Long School of Pharmacy

Pharmaceutical and Chemical Sciences

PharmD

## The calendar on this page is for the following programs.

### Arthur A. Dugoni School of Dentistry

Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

#### 2020-2021

#### Summer 2020 Quarter

Description	Date(s)
Matriculation Week	July 7 - 10
Classes Begin	July 13
Labor Day Holiday	September 7
Last day to add classes (enrichment courses only)	September 21
*Last day to drop classes without record of enrollment	September 21
Study Day	September 22
Final Examination Period	September 23 - 25
Autumn Student Break	September 28 - October 2
Grades Due	September 30

#### Autumn 2020 Quarter

Description	Date(s)
Classes Begin	October 5
Thanksgiving Holiday Break	November 26 - 27
Last day to add classes (enrichment courses only)	December 14
*Last day to drop classes without record of enrollment	December 14
Study Day	December 15

Final Examination Period	December 16 - 18
Winter Student Break	December 21 - January 1
Grades Due	January 6

## Winter 2021 Quarter

Description	Date(s)
Classes Begin	January 4
Martin Luther King Jr. Holiday	January 18
President's Day Holiday	February 15
Last day to add classes (enrichment courses only)	March 15
*Last day to drop classes without record of enrollment	March 15
Study Day	March 16
Final Examination Period	March 17 - 19
Spring Student Break	March 22 - 26
Grades Due	March 24

## Spring 2021 Quarter

Description	Date(s)
Classes Begin	March 29
Memorial Day Holiday	May 31
Last day to add classes (enrichment courses only)	June 7
*Last day to drop classes without record of enrollment	June 7
Study Day	June 8
Final Examination Period	June 9 - 11
Commencement	June 13
Summer Student Break	June 14 - July 9
Grades Due	June 16

## 2021-2022

### Summer 2021 Quarter

Description	Date(s)
Matriculation Week	July 6 - 9
Classes Begin	July 12
Labor Day Holiday	September 6
Last day to add classes (enrichment courses only)	September 20
*Last day to drop classes without record of enrollment	September 20
Study Day	September 21
Final Examination Period	September 22 - 24
Autumn Student Break	September 27 - October 1
Grades Due	September 29

### Autumn 2021 Quarter

Description	Date(s)
Classes Begin	October 4
Thanksgiving Holiday Break	November 25 - 26
Last day to add classes (enrichment courses only)	December 13
*Last day to drop classes without record of enrollment	December 13
Study Day	December 14
Final Examination Period	December 15 - 17

Winter Student Break	December 20 - January 7
Grades Due	January 12

## Winter 2022 Quarter

Description	Date(s)
Classes Begin	January 10
Martin Luther King Jr. Holiday	January 17
President's Day Holiday	February 21
Last day to add classes (enrichment courses only)	March 21
*Last day to drop classes without record of enrollment	March 21
Study Day	March 22
Final Examination Period	March 23 - 25
Spring Student Break	March 28 - April 1
Grades Due	March 30

## Spring 2022 Quarter

Description	Date(s)
Classes Begin	April 4
Memorial Day Holiday	May 30
Last day to add classes (enrichment courses only)	June 13
*Last day to drop classes without record of enrollment	June 13
Study Day	June 14
Final Examination Period	June 15 - 17
Commencement	June 19
Summer Student Break	June 20 - July 15
Grades Due	June 22

\* Dropping core curriculum courses is only possible as part of a complete withdrawal from the university.

## The calendar on this page is for the following programs.

**Arthur A. Dugoni School of Dentistry**  
Dental Hygiene

**Benerd College**  
All Programs

**College of the Pacific**  
All Programs

**Conservatory of Music**  
All Programs

**Eberhardt School of Business**  
All Programs

**School of Engineering and Computer Science**  
All Programs

**School of Health Sciences**  
Athletic Training  
Speech-Language Pathology

**School of International Studies**  
All Programs

## The Thomas J. Long School of Pharmacy

Pre-Pharm

### Fall 2020

Description	Date(s)
Orientation for New Freshmen and Transfer Students	Various Dates (see Pacific Orientation)
Payment Deadline for Fall 2019	August 1
Classes Begin	August 24
Deadline for Application for Graduation Fall 2020 (Graduate)	September 2
# Last Day to Add Classes	September 4
# Last Day for Pass/No Credit or Letter Grade Option	September 4
# Last day to drop classes without record of enrollment	September 4
Labor Day Holiday	September 7
Priority deadline, Application for Graduation Spring 2021/Summer 2021 (Graduate)	September 11
Census Date	October 1
Fall Student Break	October 2
Spring 2021 Schedule of Classes available Online	October 5
Homecoming (classes in session)	October 9 - 11
* Advising for Spring 2020 Registration for continuing students	October 12 - 30
Last Day for Pro-Rated Refund	October 15
Last day to Withdraw	October 29
* Early Registration Appointments begin date for continuing students Spring 2020	November 2
Thanksgiving Break	November 25-27
Classes Resume	November 30
Classes End	December 4
Final Examination Period	December 7 - 11
Deadline for Application for Graduation Spring 2021/Summer 2021 (Graduate)	December 11
Deadline to file Petition to Walk in May 2021 Commencement (Summer 2021 Graduate)	December 11

### Spring 2021

Description	Date(s)
Payment Deadline for Spring 2021	January 1
New International Student Orientation	TBD
New Student/Transfer Orientation and Registration	TBD
Classes Begin	January 11
Martin Luther King Jr. Holiday	January 18
# Last Day to Add Classes	January 22
# Last Day for Pass/No Credit or Letter Grade Option	January 22
# Last day to drop classes without record or enrollment	January 22
President's Day Holiday	February 15
Census Date	March 1
Last Day for Pro-Rated Refund	March 4
Summer 2021/Fall 2021 Schedule of Classes Available Online	March 8
Spring Break	March 8 - 12

Classes resume	March 15
* Advising for Summer/Fall 2021 for continuing students	March 15 - April 2
Last day to withdraw	March 25
* Summer 2021 registration opens for continuing students (no appointments)	March 29
* Early Registration Appointments begin date for continuing students - Fall 2021	March 29
Deadline for Application for Graduation Fall 2021/ Spring 2022/Summer 2022 (Undergraduate)	April 2
Classes End	April 27
Study Day	April 28
Final Examination Period	April 29 - May 5
Commencement	May 8

# Advisers should arrange to be available on this day.

\* Limited to Currently enrolled students.

## The calendar on this page is for the following programs.

### McGeorge School of Law

All Programs

### Fall 2020 & Spring 2021 Registration Dates

Description	Date(s)
Fall Registration Begins (Seniors, LLM, M.S.L., MPA, MPP & JSD)	Tuesday, June 16, 2020
Fall Registration Begins (Continuing Students)	Wednesday, June 17, 2020
Spring Registration Begins (Seniors, LLM, M.S.L., MPA, MPP & JSD)	Thursday, June 18, 2020
Spring Registration Begins (Continuing Students)	Friday, June 19, 2020

(Schedules distributed during New Student Check In at Orientation and available on InsidePacific)

### Fall Semester 2020

Description	Date(s)
LLM Orientation Begins	Thursday, August 6, 2020
First-Year JD (Part-Time) and MSL Orientation Begins	Monday, August 10, 2020
First-Year JD (Full-Time) Orientation Begins	Tuesday, August 11, 2020
MPA and MPP First Year Orientation Begins	Friday, August 14, 2020
Classes Begin	Monday, August 17, 2020
Add/Drop Deadline (Last day without administrative approval)	Monday, August 24, 2020
Labor Day (holiday - no classes)	Monday, September 7, 2020
Study Day (classes are made up on the last Tuesday of semester)	Friday, October 2, 2020

Last day of Classes (Friday classes only-makes up Study Day)	Tuesday, November 24, 2020
Thanksgiving Recess	Wednesday, Thursday, Friday, November 25-27, 2020
Reading Period	Saturday, November 28-Tuesday, December 1, 2020
Final Examination Period	Wednesday, December 2-Wednesday, December 16, 2020
Winter Break	Thursday, December 17, 2020 - Friday, January 1, 2021

## Spring Semester 2021

Description	Date(s)
Intersession	Monday, January 4 - Friday, January 8, 2021
LLM, MPP, MPA, & JSD Orientation Begins	Thursday, January 7, 2021
Classes Begin	Monday, January 11, 2021
Martin Luther King Day (holiday)	Monday, January 18, 2021
Add/Drop Deadline (Last day to add/drop classes without administrative approval)	Tuesday, January 19, 2021
President's Day (holiday-classes made up on the last Weds. of semester)	Monday, February 15, 2021
Study Day (classes are made up on the last Tues. of the semester)	Friday, February 26, 2021
Spring Break	Monday, March 22 - Friday, March 26, 2021
Last day of Classes (Monday classes-makes up President's Day)	Monday, April 26, 2021
Friday Classes Only (makes up Study Day)	Tuesday, April 27, 2021
Reading Period	Wednesday, April 28 - Friday, April 30, 2021
Final Examination Period	Saturday, May 1 - Wednesday, May 12, 2021
Commencement	Saturday, May 22, 2021

## Summer Sessions 2021

Description	Date(s)
Summer Registration Begins	Tuesday, March 16, 2021
Memorial Day (holiday)	Monday, May 24, 2021

Session 1	Tuesday, May 25 – Saturday, May 29, 2021
Session 2	Monday, May 31 – Saturday, June 26, 2021
Session 3	Monday, June 28 - Saturday, July 31, 2021
Fourth of July (holiday)	Friday, July 3, 2021

For information regarding tuition refunds, please refer to the McGeorge School of Law Refund Policy: <https://www.mcgeorge.edu/policies/withdrawal-and-refund-policy>

## The calendar on this page is for the following programs.

### School of Health Sciences

Master of Science in Clinical Nutrition (Sacramento)  
 Master of Science in Nursing (Sacramento)  
 Master of Physician Assistant Studies (Sacramento)  
 Master of Social Work (Sacramento)  
 Doctor of Audiology (San Francisco)  
 Doctor of Occupational Therapy (Sacramento)  
 Doctor of Physical Therapy (Stockton)

### The Thomas J. Long School of Pharmacy

Pharmaceutical and Chemical Sciences  
 PharmD

### Fall 2020

Description	Date(s)
Early Registration Fall 2019 - Incoming 1st year students	June 10 - September 4
Early Registration Fall 2019 - Incoming graduate students	June 10 - September 4
Payment deadline for Fall 2019	August 1
Advanced Pharmacy Practice Experiences	August 17 - December 18
Orientation	August 19 - 21
Classes Begin	August 24
Labor Day Holiday	September 7
# Last Day to Add Classes	September 4
# Last Day to Drop Classes without record of enrollment	September 4
Census Date	October 1
Pharmacy Spring 2021 Schedule of Classes Available Online	October 5
Last Day for Pro-rated refund	October 15
* Advising for Pharmacy Spring 2020	October 12 - 16
* Early Registration Pharmacy Spring 2020	October 19 - January 15
Last Day to Withdraw	October 29
Thanksgiving Break	November 25 - 27
Classes Resume	November 30



Classes End	December 4
Final Examination Period	December 7 - 14

## Spring 2021

Description	Date(s)
Payment deadline for Pharmacy Spring 2021	December 1
Deadline for Application for Graduation Spring 2021/Summer 2022 (Graduate)	December 11
Classes Begin	January 4
Advanced Pharmacy Practice Experiences	January 4 - May 7
# Last Day to Add Classes	January 15
# Last Day to Drop Classes without record of enrollment	January 15
Martin Luther King Jr. Holiday	January 18
President's Day Holiday	February 15
Pharmacy Summer 2021 Schedule of Classes Available Online	February 15
* Advising for Pharmacy Summer 2021	February 22 - 26
Last Day for Pro-Rated Refund	February 23
Census Date	March 1
* Early Registration for Pharmacy Summer 2020	March 1 - May 7
Last day to Withdraw	March 11
Deadline for Application for Graduation Fall 2021/ Spring 2022/Summer 2022 (Professional)	April 2
Classes End	April 6
Final Examination Period	April 8 - 15

## Summer 2021

Description	Date(s)
Payment deadline for Pharmacy Summer 2021	April 1
Deadline for Application for Graduation Fall 2020/ Spring 2021/Summer 2021 (Professional)	April 2
Classes Begin	April 26
# Last Day to Add Classes	May 7
# Last Day to Drop Classes without record of enrollment	May 7
Commencement	May 15
Pharmacy Fall 2021 Schedule of Classes Available Online	May 17
Memorial Day Holiday	May 31
* Advising for Pharmacy Fall 2021 Term	May 25 - June 4
* Early Registration for Pharmacy Fall 2021	June 9 - September 3
Last Day for Pro-Rated Refund	June 15
Last Day to Withdraw	June 28
Fourth of July Holiday Observed	July 5
Classes End	July 27
Final Examination Period	July 29 - August 5
Census Date	September 1

# Academic Regulations

## Graduate

### Conservatory of Music

Music Therapy

### School of Engineering and Computer Science

Data Science

### School of Health Sciences

Audiology

## Professional

### Arthur A. Dugoni School of Dentistry

All regulations apply to the DDS and IDS Programs. Not all regulations apply to the Certificate or Dental Residency Programs. For more information, contact your program.

## Undergraduate

### Arthur A. Dugoni School of Denistry

Dental Hygiene

# The Academic Regulations on this page are for the following graduate programs on the San Francisco campus.

### Conservatory of Music

Music Therapy

### School of Engineering and Computer Science

Data Science

### School of Health Sciences

Audiology

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All graduate students are urged to read these general regulations carefully. Failure to be familiar with this section does not excuse a student from the obligation to comply with all the described regulations.

Although every effort has been made to ensure the accuracy of this catalog, students are advised that the information contained in it is subject to change. The University reserves the right to modify or change the curriculum, admission standards, course content, degree requirements, regulations, tuition or fees at any time without prior notice. The information in this catalog is not to be regarded as creating a binding contract between the student and the school.

## Academic Standing

All graduate students are expected to make satisfactory progress toward the academic degree for which they were admitted. Graduate students are required to maintain a cumulative minimum grade point average (GPA) of 3.0 and earn a grade of P (Passing) on all course work that does not affect grade point average to remain in good standing.

### *Minimum grade requirement*

Only grades of A, B, C, and P are acceptable for graduate credit. N is considered acceptable with respect to the minimum grade requirement. Grades of C-, D, F, or NC (No Credit), are not accepted for graduate credit at University of the Pacific.

Students in a credential-only program must maintain a GPA of 2.5 and have a cumulative GPA of 2.5 or higher to clear their credential. Students in a basic teacher education credential only program who wish to do directed teaching in an internship must maintain a 3.0 GPA.

Students enrolled in the Master of Physician Assistant Studies, the Master of Laws (LLM), or the Juris Scientiae Doctor (JSD) programs, should refer to the program's policies for academic standing. For all other students, academic standing is determined at the end of each term (or after completion of six units during summer) to be one of the following:

- good standing
- probation
- dismissal.

The criteria for these academic standings are based upon a combination of cumulative Pacific GPA and the term GPA. Criteria for the different academic standings are outlined below:

### *Probation:*

Any graduate student who has completed six (6) or more course units of study and has a Pacific cumulative GPA below 3.0 or has earned a grade of NC in two separate terms is placed on academic probation. To be removed from probation, a student must achieve a cumulative 3.0 GPA (or higher GPA if required by the program) and not receive any grades of NC within completion of the next nine (9) units. The courses included in the nine units must be approved by the program faculty for degree-seeking students.

A student who is removed from probation is not eligible for placement on probation.

### *Dismissal:*

Students will be dismissed from their graduate program if either of the following apply: (1) a student on probation fails to be removed from probation after the nine unit probationary period; (2) the GPA of a student who has previously been on probation falls below 3.0 or the student receives a grade of NC in any class.

A dismissed student may appeal for reconsideration and possible reinstatement on probation, within the same school. Students who wish to appeal must follow procedures outlined in each program's policy. If no program-specific procedure is outlined, students must submit a written petition to the Dean of Graduate School. Enrollment eligibility during appeals process is determined at the program level.

A dismissed student may not enroll in any graduate program for a minimum of 12 consecutive months (waiting period). A student must reapply, meet current requirements for degree-seeking students, and be accepted by the University and the program to enroll for graduate studies following the waiting period. Schools or programs may develop additional procedures or requirements related to re-enrollment following dismissal. Some schools or programs may not permit reinstatement. Please see the appropriate school or program sections of the catalog for specific requirements.

In addition to the academic standing, other academic and non-academic reasons can result in a student's dismissal from a graduate program.

Refer to each school's code of student conduct/responsibility or any program-specific guidelines. In the absence of a school-specific code of conduct, the Honor Code in Tiger Lore applies.

## Acquisition of Graduate Credit as an Undergraduate

Undergraduate students meeting all of the following requirements may petition the Dean of the Graduate School by submitting the *Application to Receive Graduate Credit as an Undergraduate Student* to open a graduate transcript (i.e., receive credit in graduate-level courses toward a graduate degree) before the last day to add classes of the last semester as an undergraduate:

- The student must be within 9 units of completing the baccalaureate degree.
- The student must be in the last two semesters of the baccalaureate degree at University of the Pacific.
- An *Evaluation of Degree Requirements* form has been submitted to the Office of the Registrar prior to the last day to add classes. This must be submitted before or with the *Graduate Credit as Undergraduate* application. (This serves as permission by the undergraduate advisor for the student to take graduate-level coursework.)
- The student has been accepted into a graduate or credential program.

### *Graduate credit can be received under the following guidelines:*

- The total number of graduate credits for the semester, including coursework completed at other schools, cannot exceed the maximum graduate course load for the department providing the graduate coursework.
- The tuition rate for the entire semester is at the undergraduate rate.
- No more than 12 units (16 units for student teachers) can be transferred from an undergraduate transcript into a graduate degree program.
- Graduate credit will only be granted for graduate-level (200 numbered) courses and above.

- Units cannot be retroactively transferred from an undergraduate transcript to a graduate program. Approvals for graduate credit must be obtained prior to the last day to add classes of the student's last semester.
- Coursework will not count toward graduate credit if the student fails to complete the bachelor's degree by the second semester of taking graduate courses.
- Graduate courses completed under this agreement will not be recorded by the Registrar as graduate coursework until the baccalaureate degree has been completed and matriculation into the graduate program has commenced. Grades from these courses will not be accounted in the undergraduate grade point average, unless the bachelor's degree is not completed.
- Students who do not complete the bachelor's degree by the second term when graduate courses are taken cannot start a graduate program and cannot take additional graduate coursework until the bachelor's degree has been awarded.
- Students bear the responsibility of assuring graduate credits earned as an undergraduate student will transfer to or be counted as post-baccalaureate units by other universities or school districts.

Students are not classified as graduate students until they register for and begin graduate courses following the receipt of their bachelor's degree.

## Changing Degree Programs

Graduate students are admitted to University of the Pacific for a specific degree program. With the exception of programs overseen by the same admission committee, if a student wishes to change a degree program, the student must submit a new application for admission, pay the application fee, and comply with all admission requirements. No more than nine (9) units of coursework taken in non-degree seeking, certificate-seeking, or previous degree-seeking status may be applied to any Master's degree and no more than 12 units may be applied to any doctoral degree. Students who wish to change degree programs overseen by the same admission committee may do so by using the Change of Program form available in the Registrar's Office.

## Classification of Graduate Students

**Full:** All students admitted with full graduate standing.

**Conditional Admission:** Students may be admitted to some of the graduate programs on a conditional admission basis. See the Graduate Admission section of this catalog for additional information.

**Credential:** Students admitted to do post-baccalaureate work that leads toward an initial teaching credential, specialist instruction credential or services credential.

## Clinical Competency

Many of the graduate programs offered at the University include experiential coursework. Prior to taking a course that includes an experiential component, students are required to demonstrate that they have the necessary skills, aptitude and competencies to successfully complete the course. Faculty of departments that offer experiential courses have the discretion of denying or terminating enrollment in these courses to students evaluated as not possessing the necessary clinical competencies. Procedures used to assess clinical competency vary across programs. Students may obtain additional information from their Graduate Program Director.

Students who do not demonstrate adequate clinical and experiential competency can be dismissed from a degree program, regardless of academic standing.

## Commencement

Master's degree students who are near completion of degree requirements are eligible to participate in the May commencement exercises under the following conditions.

- A completed Petition to Participate in Graduation Ceremonies has been submitted to the Graduate School by the fall deadline for filing the Application for Graduation form (see Graduate School Calendar). This petition must be signed by the student's advisor and academic Dean (or Graduate Program Director if appropriate).
- All degree requirements will be met before the end of the summer session of the same year. An approved plan of study that specifies all degree requirements will be completed in time and must be on file in the Graduate School.
- The Master's degree oral examination, which includes thesis defense or written examination (where applicable), will be successfully completed by the Spring semester deadline for Written/Oral Exam – Thesis/Dissertation Defense.
- The student is in good academic standing.

On a case-by-case basis, special consideration is given for international students who complete degree requirements during the fall semester of the same calendar year. Approved Degree Evaluations must be on file by the spring semester deadline and the student must state they are unable to return to campus to participate in ceremonies in the spring following degree completion.

Doctoral degree students are ineligible to participate in graduation ceremonies until all degree requirements are met and the final dissertation has been approved by the Graduate School. However, on a case-by-case basis, special consideration will be given for international and domestic doctoral students who will complete degree requirements by the end of the fall semester of the same calendar year. Approved programs of study must be on file by the spring semester deadline, and the student's Graduate Program Director must approve of the request.

## Continuous Registration

All graduate students in graduate degree or credential programs must satisfy the Continuous Registration Policy of their respective programs from the time of admission until all degree requirements are met or their status as a degree- or credential-seeking student is terminated. This includes students who are completing preliminary or final examinations, or presenting terminal projects. If degree or credential requirements are completed between terms, the student must have been registered during the preceding term. International students may have additional registration requirements depending on their visa status and should consult with the Office of International Programs and Services to obtain current information.

Continuous registration is intended for students who have completed all required coursework. The Continuous Registration Policy can be met by registering for GRAD 200 (master's students) or GRAD 300 (doctoral students) through Inside Pacific (<https://insidepacific.pacific.edu/cp/home/displaylogin/>) at least one semester per academic year (Fall or Spring).

Students enrolled in GRAD 200/GRAD 300 may utilize library facilities, but are not entitled to:

- the use of other University facilities,
- receive a fellowship, assistantship, or financial aid, or
- take course work of any kind at the University of the Pacific.

Students should also be aware that registration in GRAD 200/GRAD 300 may cause existing student loans to come due.

Some programs may require courses other than GRAD 200/GRAD 300 to meet continuous registration requirements. Please consult individual program pages for additional information.

### Failure to Meet Continuous Registration Requirements

A graduate student who fails to meet the continuous registration requirements will be inactivated. Students in good academic standing who were inactivated may petition for readmission to their original degree program by submitting a \$50 reinstatement fee and the Application to Request Reinstatement to the Graduate School prior to the first day of classes.

Reinstatement will occur to current catalog. If reinstated, the student will be required to meet University and degree program admission and degree requirements that are in effect on the date of reinstatement, not the date of original admission.

Reinstatement requests must be accompanied by a plan for completing the degree within the maximum time allowed (see Residence and Time Limits).

A decision to reinstate a former student must be supported by the student's degree program. The continuous registration requirement does not apply to students on approved leaves of absence (see below).

## Course Audits

Graduate courses may be audited only by students admitted to the Graduate School who have the approval of the student's advisor and of the instructor and dean (or designate) of the academic department where the course is offered. Audits are not available for courses in first-professional programs, unless by written permission of the program's dean. Students auditing a course must pay an audit fee and any special fees associated with the course. Audited courses cannot be retroactively converted to course credit unless officially changed to credit before the "Add Classes" deadline of the semester.

## Course Loads

Course load requirements are program-specific. The following are guidelines for non-lockstep programs. Course loads influences financial aid. The following course load categories correspond to financial aid categories.

- Full Time: 8 or more units per semester
- Half Time: 7 to 4 units per semester
- Less than Half Time: 3 to 1 units per semester

Students with teaching or other assistantships should check with their department for specific guidelines concerning unit requirements. Conditionally admitted students are not eligible for assistantships.

## Credit-by-Examination for Graduate Courses

A graduate student in good standing, or a student who has been accepted into one of University of Pacific's graduate programs, may request, or be offered, to take an exam in order to receive "Credit by

Examination" (CbE) for one or more courses offered by a graduate program. Departments have the right to designate which of their courses are appropriate for CbE. This policy is subject to the following restrictions.

1. A student may request CbE for a course covering material in which, through independent study, work experience, or work at another institution which was not accepted for transfer credit, the student feels prepared. It is the responsibility of the student to explain how the material was mastered.
2. Students wishing to pursue CbE should not expect preparation support (tutoring, office hours, etc.) beyond a statement of the scope of topic coverage and expectations for passing the exam(s).
3. A student wishing CbE for a course may not attend the class meetings of the course.
4. A student cannot receive CbE for a course which they have previously taken or audited.
5. A student may not get CbE for a course in a structured sequence if the student has received credit for a higher level course in the sequence.
6. A maximum of 9 units total may be earned by a student via CbE and/or transfer credit.

A student wishing to pursue the credit by examination option must:

1. complete the appropriate form from the office of the University Registrar;
2. obtain approval from his or her adviser, and the dean of the school or college offering the course;
3. pay the scheduled service fee.

Successful completion of the examination will be recorded on the transcript with a grade of Pass and will be made a part of the student's academic record. This will occur in the semester in which the exam is taken, or in a subsequent semester as directed by the student's graduate program, especially in the case where a candidate takes the exam before being a full-time graduate student.

Pending credit for having successfully passed the exam, can be used as justification for prerequisite overrides for courses which require the course to which CbE was earned. Appropriate tuition fees will be assessed.

## Credit Limitations

All courses countable for graduate degree credit must be either graduate-level courses (200 or 300 level) or, where allowable, advanced undergraduate courses (100 level). Students taking 100-level courses for graduate credit will be required to complete extra course assignments. A course can be applied toward only one degree objective, unless an exception is approved in writing by the Academic Affairs Committee on Graduate Studies and the Dean of the Graduate School.

Courses not applicable to graduate degrees:

- Lower division undergraduate courses (001-099)
- Courses in which a grade of C- or lower were received. Courses that receive a C- or lower must be repeated
- Courses for the improvement of English language skills of foreign students'

- Directed teaching or prerequisite courses for directed teaching except for the Master of Education degree or the Master of Arts in Special Education degree.
- Physical education activity courses.
- Unclassified Status: No more than 12 units, no matter when they are earned, can be transferred from an “Unclassified” transcript into a graduate program.
- Credit used toward a degree earned at another institution cannot be applied to a graduate degree at University of the Pacific.

## Double-Listed Courses

In order to differentiate graduate and undergraduate responsibilities in double-listed courses (100/200 levels), there must be significant differentiation between the two levels with the graduate level evidencing additional rigor as denoted by higher level student learning outcomes with corresponding assignments and grading criteria. Graduate students must register using the 200-level course number.

## Grade Point Average

The Pacific grade point average is determined by adding the total quality points and by dividing the resultant sum by the total number of quality hours. As a general rule, the ratio is based on the number of letter graded units completed.

## Grading Policies

### Symbols and Definitions

Graduate students are assigned grades in keeping with the following provisions. Utilization of (+/-) is at the discretion of individual programs.

Symbo	GPA	Definition
A	4.0	Exemplary
A-	3.7	
B+	3.3	
B	3.0	Satisfactory
B-	2.7	
C+	2.3	
C	2.0	Marginal
C-	1.7	
D+	1.3	
D	1.0	Unsatisfactory
F	0.0	Failing

I	Incomplete work due to extenuating and hardship circumstances which prevent the completion of the work assigned within the regular time of the term. Each incomplete grade assigned must be accompanied with a contract statement agreed to by both instructor and student as to: a) what work remains to be completed, b) how it is to be evaluated, and c) a time indicated for completion within by no later than the following deadlines: for fall semester, by July 1 following; for spring semester, by November 1 following; for summer term, by January 1 following. If work is not completed within these stipulated times, the instructor can indicate a grade in lieu of the F/ NC which automatically would be imposed with failure to complete the work. All incompletes must be made up before the last day of the semester in which the student intends to graduate.
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Symbo	GPA	Definition
N		Deferred grading for thesis, dissertation or research work.
NC		No credit recognition. Represents unsatisfactory work under pass/no credit option.
NG		No Grade Received from the Instructor. Please contact the instructor.
P		Passing work on the pass/no credit system. Approved only for certain courses and program of a college or school. Note: Research for thesis or dissertation the department may determine whether letter grades or pass/no credit grades are to be given. In seminar or comparable courses, letter grades or pass/no credit may be used.
W		Authorized withdrawal from courses after the prescribed period.

## Leave of Absence

Students experiencing life changing or catastrophic events are encouraged to request a leave of absence, especially if the Residence and Time Limits policy will be impacted. Consideration for request submitted after the degree time limit has expired will be impacted by evidence of successful continuous progress towards the degree, programmatic changes, and faculty availability. A student who is in good standing may petition for a leave of absence of no more than one academic year and the maximum number of Leave of Absence requests is two. Requests for a leave of absence must be approved in advance by the faculty advisor or Program Director and the Graduate Dean. Once the petition is approved, the registration requirement will be set aside during the period of leave. Leaves will be granted only under conditions that require the suspension of all activities associated with pursuing the degree including use of university facilities and faculty mentoring/advice.

Title IX regulations also require the university to treat pregnancy, childbirth, false pregnancy, termination of pregnancy, and recovery therefrom as a justification for a leave of absence for so long a period of time as is deemed medically necessary by the student’s physician. Students requesting leave of absence under this provision must submit their request to the Title IX Coordinator, who will initiate the process.

Counting of the time to the completion of the degree ceases when a leave of absence is granted and resumes when the student re-enrolls to continue the program. A student who returns to the University after an approved leave of absence will not be required to submit an application for readmission.

Unapproved Leaves of Absence may result in the student being required to re-apply to their program. International student should visit the

International Programs and Services to find out how a Leave of Absence may impact their stay or re-entry into the U.S.

## Registration

Registration is the means by which an individual officially becomes a student at Pacific. Registrants are further identified by school/college of the University, degree status, classification and major.

All students must register by the last day to add or drop. Students are held accountable to complete every course for which they register. If it is necessary to add or drop a course, the student must complete the appropriate registration transaction by the last day such activity is allowed as published in the University Calendar (<http://www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-the-Registrar/Calendars/Academic-Calendar.html>).

After the add/drop deadline dates has passed (but prior to the end of the term) requests to add or drop courses must be made by special petition to the student's respective school/college.

Requests to drop courses after the term must be made to the Academic Regulations Committee (ARC). In either case, petitions are only approved if it can be shown that the request is warranted due to some special situation or hardship. Courses approved to drop after the deadline appear on the student's transcript with the notation "W" but do not count in the units earned or in the calculation of the grade point average.

Any petitions approved after the deadline dates are subject to a service fee. Tuition and fee refunds are based on the date a withdraw form is initiated in the Office of the Registrar.

## Registration - Individualized Study

To register for Individualized Study (Independent Study course, Internships, or Practicum) students must use the Individualized Study Request form. This form is a written contract between students and faculty that specifies the nature of the work to be undertaken and the method of evaluation. The form must have proper approval within the unit and be filed with the Office of the Registrar. An independent study course may not be taken in the same term in which a regular course in the same subject is offered.

## Repeating of Courses and Grade Replacement Policy

For courses in which the grade earned is C- or lower, the units are counted for GPA purposes in a student's degree program, and – if required for the degree – must be repeated. Some departments or programs have established higher grading standards which must be met by students in those programs. All grades earned in courses taken as a graduate student at the University are counted in the cumulative GPA.

Only courses with grades of "B-" or lower can be repeated. Once a course is completed with a grade of B or higher, the graduate student cannot repeat that course or any prerequisites for the course. When a course is repeated, grades from both the original and repeated attempt appear in the official records and transcripts. A course can only be repeated once and programs determine the exact number of courses that can be repeated (up to 25% of courses required for a degree). The grade received in the repeated course is used for calculation of the Pacific grade point average.

## Requirements for the Master's degree

In addition to the requirements above, the following requirements apply specifically to the Master's degree.

### Total Units

Most Master's programs at University of the Pacific require a minimum of 30 units of approved graduate credit.

### Degree Candidacy

Successful completion of 12 units with a cumulative GPA of 3.0 or better.

### Grade Point Average

Students must maintain a minimum GPA of 3.0 in all work taken as a graduate student, either at the University of the Pacific or any other institution. See the Grading Policy and Academic Standing sections, in addition to program-specific guidelines. Students enrolled in the Master of Physician Assistant Studies program, should refer to the program's GPA policies.

### Exit Requirements

#### *Comprehensive Examination/Capstone Experience/Creative Project/Thesis*

Most programs have a culminating experience. In addition to successful completion of all courses required for graduation, students may be required to pass a comprehensive examination taken during their final semester of enrollment or, if specified by the program, successfully complete a capstone experience or creative project or defend a thesis.

The thesis must be checked for plagiarism and approved by the thesis committee prior to the defense.

Students must be enrolled the semester in which the defense/final examination occurs.

(See individual program sections for more information).

## Requirements for Terminal Degree Programs (Ph.D., Ed.D, and JSD)

The goal of terminal degree programs at the University of the Pacific is to provide students with a comprehensive discipline-specific knowledge base and extensive training in the methods of research/creative activity. The programs are designed to encourage students to make contributions that advance their field of expertise.

Students are expected to demonstrate an ability to conduct independent research, and the ability to express thoughts clearly in both verbal and written and/or creative formats. In order to earn a terminal degree, candidates must successfully complete all degree requirements, demonstrate a high level of professional skill and performance in their academic work and their internship experience (if required), and submit a dissertation, acceptable to the student's committee. Specific program requirements can be found in the appropriate sections of the catalog.

### Degree Candidacy

Successful completion of approved candidacy requirements as defined by the degree program (e.g., qualifying scholarly activities or preliminary examinations). Doctoral degree program directors are responsible for written requests of advancement to candidacy when requirements are met, and final approval is the responsibility of the Dean of the Graduate School.

## Grade Point Average

Students must maintain a minimum GPA of 3.0 in all work taken as a graduate student, either at the University of the Pacific or any other institution. See the Grading Policy and Academic Standing sections, in addition to program-specific guidelines. Students enrolled in the Juris Scientiae Doctor (JSD) program should refer to the program's GPA policies.

## Presentation of an acceptable Dissertation

In order to be acceptable, the doctoral dissertation must be:

1. a significant contribution to the advancement of knowledge and
2. a work of original and primary research.

## Final oral examination

When the dissertation is completed, candidates present themselves for the final examination to an examining committee, which consists of the candidate's advisor (who shall act as chair) and such other examiners as the advisor shall approve. The examination is oral and deals intensively with the field of specialization in which the candidate's dissertation falls, though it need not be confined to the subject matter of the dissertation.

In order to be considered satisfactory, the report of the examining committee must be unanimously favorable.

(See individual program sections for more information).

## Residence and Time Limits

The period of residence involves students in a total commitment to their graduate program.

Completion of a minimum of one academic year of "residence work" is required for all graduate programs; i.e., the student must be registered for at least 4 units per semester for two semesters. Two summer sessions of at least 4 units each are considered the equivalent of one-half year of residence.

## Time Limits for Master's Degrees

The requirements for a Master's degree must be completed within five (5) years subsequent to admission to the program. The five-year period begins the first semester students are enrolled and is calculated from the date of degree conferral. Credit that is more than five years old will not be counted toward a Master's degree. Exceptions, provided the courses were completed at this university, will require strong justification in writing from the student requesting the exception as well as revalidation plan. Written approval from the department, the Dean of the school/college at which the degree is offered, and the Graduate Dean are required. See revalidation process below. Students enrolled in the Master of Law (LL.M.) program should refer to the program's time limits policies.

Individual programs may have additional residency and time limit requirements.

## Time Limits for Terminal Degrees

The requirements for a terminal degree must be completed within ten years subsequent to admission to the terminal degree program. The ten-year period begins with the first semester students are enrolled and is calculated from the date of degree conferral. Students have a maximum of five years to advance to candidacy and a maximum of five years from candidacy to successfully defend the dissertation. Students who exceed the candidacy deadline may request an extension. Candidacy extensions will require strong justification in writing from the student and should be accompanied by a plan of study for timely completion of all requirements for advancing to candidacy. The extension must be approved by the

student's advisor, the Program Director, and the Graduate Dean. Students enrolled in the Juris Scientiae Doctor (JSD) program should refer to the program's time limits policies.

Courses taken ten or more years prior to the comprehensive examination (terminal degree programs) do not apply towards the graduate degree and must be repeated or revalidated to satisfy the degree requirements.

Individual programs may have additional residency and time limit requirements.

## Revalidation Request

If revalidation of expired courses is requested, the faculty advisor or Program Director recommend a revalidation plan. Revalidation will verify that the student's knowledge in a specific subject area is current and documented. Options for course revalidation include a written examination, a scholarly paper, a project, an annotated bibliography, a course retake, or other equally rigorous academic means appropriate to the discipline to determine the student learning outcomes have been met.

Revalidation request should be submitted on the Revalidation Request Form and accompanied by a written justification, revalidation plan, and documentation used for revalidation. All revalidation request and plans must be approved by the student's advisor or Program Director, the School/College Dean, and the Graduate Dean. The student's advisor/Program Director and College Dean are responsible for determining whether the student demonstrated sufficient course knowledge necessary for successful course revalidation. Successfully revalidated courses may be included in the student's plan of study. Failure to follow all designated requirements of the revalidation agreement may result in dismissal from the program. Graduate students will not be permitted to submit more than 12 units of the program's courses for revalidation.

Courses beyond the 12-unit limit will need to be retaken. Only courses completed at University of the Pacific are eligible for revalidation.

## Thesis or Dissertation Committee

This section outlines the general requirements for thesis or dissertation committees. Units and colleges may adopt additional program-specific criteria and guidelines.

**Thesis or dissertation chair:** Faculty chairing thesis or dissertation committees must be regular, full-time members of University of the Pacific's faculty in the student's graduate program, hold a terminal degree, and have demonstrated expertise to serve as a thesis or dissertation chair. Faculty members without supervisory experience must serve for at least one year as a co-chair with an experienced advisor before they may be recommended to independently supervise thesis or dissertation research. Exceptions to this policy must be approved by the college or school Dean and the Graduate Dean.

**Thesis or dissertation committee:** The Thesis or Dissertation Committee is composed of a Chair and a minimum of 1 (thesis) or 2 (dissertation) other committee members. The number of committee members depends on the degree objective. All members of the committee must hold degrees at least equivalent to the degree being sought or have demonstrated expertise in the student's field of study. In addition to the committee chair, who must be a University of the Pacific faculty member, the committee member(s) may be selected from within the student's school or college, from another school or college, or from another institution or organization with recognized expertise in the field or industry.

It is recommended that the committee be formed after a student selects a chair for their research and the faculty member agrees to chair. The

student, in consultation with the chair, is responsible for contacting potential members of the committee, inviting members to serve, and completing the Masters' Thesis Committee form or the Doctoral Dissertation Committee form. Upon the approval of thesis or dissertation advisor, department chair, and college or school Dean, the form will be forwarded to the Graduate School. Committee members from outside the University of the Pacific must be approved by the Graduate Dean.

The responsibilities of the thesis or dissertation committee members are:

1. providing the student with guidance in their thesis or dissertation research,
2. monitoring the student's research progress of their thesis or dissertation research, and
3. approving the content of the final thesis or dissertation.

In order to fulfill the above responsibilities, the committee should hold at least one meeting each semester.

## Thesis and Dissertations

Many master's degree programs and all doctoral programs in the Graduate School require the completion of a thesis (master's degrees) or dissertation (doctoral degrees) as partial fulfillment of an advanced degree. The Graduate School makes available to faculty and graduate degree candidates instructions for the preparation of theses and dissertations. The instructions are to be applied to all theses and dissertations submitted at University of the Pacific. Theses and dissertations must be submitted by the deadline dates published in the Academic Calendar.

Graduate programs have specific courses that must be taken for work on a thesis or dissertation. These courses are numbered 299 (Master's Thesis) and 399 (Dissertation), and are graded on a Pass/No Credit basis.

## Transfer Credit

Coursework completed at University of the Pacific or at other regionally accredited institutions of higher education since completion of the baccalaureate can be evaluated for transfer credit work with the following restrictions:

- Up to nine (9) semester units can be transferred at the Master's level and up to 12 semester units at the doctoral level.
- Only courses that qualify for graduate or first-professional credit by the transferring institution can be transferred.
- Only courses in which a grade of B or better are eligible for consideration of transfer credit. Some departments set higher standards and there are identified by individual program catalog sections.
- The course work must be less than five years old for Master's degrees and less than 10 years old for Doctoral degrees at the time the University of the Pacific degree is awarded.
- Credit used toward a degree earned at another institution cannot be transferred to a graduate degree at University of the Pacific.
- Extension courses do not qualify for transfer credit with the exception of university-approved transfer agreements.

Grade points earned in those courses are not counted in the student's Pacific grade point average. This process is initiated using the Degree Requirement Adjustment Form and must be approved by the Director of the Graduate Program and the Office of the Registrar.

Some programs may have more restrictive transfer credit policies.

## Unclassified Graduate Students

Students may take graduate level courses as an unclassified graduate student if they meet the following:

- Have a bachelor's degree or the equivalent from a regionally accredited institution or other international institution of acceptable standing
- Apply using the First Time Unclassified Application and submit it to the Office of the Registrar

A maximum of 12 units (16 units for student teachers) taken as an unclassified graduate student will count toward a graduate-level program at University of the Pacific. Upon acceptance to the university, resident and transfer coursework are evaluated by school/department for applicability to degree. Some programs/courses have restricted enrollment and are not open for enrollment for unclassified students.

## Withdrawal from a Term or the University

Students who intend to completely withdraw from a term or from the university have to initiate the process in the Office of the Registrar. The withdrawal date used by Financial Aid for return of Title IV Aid calculation and the effective date used by Student Accounts for tuition refunds are based on the date of your notification to the Office of the Registrar. If a student intends to withdraw from a semester after the last day to withdraw, the withdrawal must be approved by the Academic Regulations Committee. Courses the student was registered for after the last day to drop appear on that student's transcript with the notation "W" but do not count in the units earned or in the calculation of the grade point average. A student who only withdraws from a semester, has one more semester to remain in continuing active status. A student who has completely withdrawn from the University, must file a Petition for Reinstatement Form (with a \$50 fee) available on the Graduate School web site. The deadline is August 1st for fall admission or December 1st for spring admission.

An official withdrawal from the University is the termination of rights and privileges offered to currently enrolled students, which include, but are not limited to, early registration.

## Professional The Academic Regulations on this page are for the following professional programs on the San Francisco campus.

### Arthur A. Dugoni School of Dentistry

All regulations apply to the DDS and IDS Programs. Not all regulations apply to the Certificate or Dental Residency Programs. For more information, contact your program.

- Academic Good Standing (p. 18)
- Academic Performance (p. 17)
- Academic Probation (p. 18)
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All students and residents are urged to read these general regulations carefully. Failure to be familiar with this section does not excuse a student or resident from the obligation to comply with all described regulations.

Although every effort has been made to ensure the accuracy of this catalog, students and residents are advised that the information contained in it is subject to change. The University reserves the right to modify or change the curriculum, admission standards, course content, degree requirements, regulations, tuition or fees at any time without prior notice. The information in this catalog is not to be regarded as creating a binding contract between the student and the school.

Academic and administrative policies set forth in this section are in force for students and residents during the academic year 2020-21. Students or residents who join a subsequent cohort for any reason are governed by the policies, requirements, and curriculum of the catalog in effect at the time of re-entry. The right to change academic programs, policies, and standards at any time without prior notice is reserved by the university. It is the student's or resident's responsibility to regularly consult this site for changes or modifications.

## Catalog

A San Francisco campus catalog is published annually in the Spring by the Registrar's Office. The catalog describes all graduate, undergraduate, and first-professional programs offered on the San Francisco campus.

Unless otherwise noted, policies described below apply to all academic programs under the authority of the dean of the School of Dentistry: first-professional programs (36- month and 24-month Doctor of Dental Surgery), graduate programs (Master of Science in Dentistry in Orthodontics, Master of Science in Dentistry in Endodontology), and undergraduate programs (Bachelor of Science in Dental Hygiene). All future programs housed in the School of Dentistry are governed by the policies presented here or, when warranted and approved by the dean, by policies developed locally.

Program abbreviations used in this section are: DH (dental hygiene), DDS (36-month Doctor of Dental Surgery program), IDS (24-month Doctor of Dental Surgery Program), and MSD (27- month Master of Science in

Dentistry in Orthodontics or Endodontology). The DDS and IDS programs are first-professional programs, DH is an undergraduate program, and the MSDs are graduate programs.

## Registration

Registration at the School of Dentistry includes payment of tuition and fees, enrollment in courses, submission of all required application materials (including one official transcript of academic record from each college or university attended through the last completed quarter, semester, or summer session), and submission of required medical examination and clearance forms.

In order to receive credit for coursework taken during a particular term, a student or resident must be properly registered during that term. Barring a written notice of withdrawal or a dismissal from the school, registration is assumed for all students and residents.

All DDS, IDS, and MSD programs offered through the School of Dentistry are lock-step sequential cohort models: all students in a cohort are enrolled in the same "block" of courses each term. Because enrollees have no choice in selecting classes or sections of classes, dental school programs use a "block scheduling" process. Students enrolled in the DDS, IDS, and MSD programs are registered each term for the appropriate block of courses by the Registrar's Office. DH students are block scheduled by the Academic and Career Advising Center, each of which also maintain the "block" schedule.

Similarly, and as a function of the lock-step curriculum model, students enrolled in programs under the umbrella of the School of Dentistry are not allowed to add or drop courses except in extreme cases (usually a complete withdrawal from the program, see Withdrawal policy). For this reason, the School does not use add/drop dates common in traditional graduate and undergraduate programs. The assistant or associate dean in the Office of Academic Affairs is authorized to approve student requests to drop selective (enrichment) courses after the established drop date. If approved, the assistant or associate dean will direct the San Francisco Registrar's Office to drop the course from the student's academic record.

## Records & Transcripts

Upon written request by the student to the Office of the Registrar, an official transcript is issued to whomever is designated. Students can request a transcript online, in person, or by mail. The official transcript shows all work completed to date. On the dental school transcript the DDS program is divided into four program years (the structure of all other U.S. DDS programs) and the IDS program is divided into three program years; the MSD and DH programs reflect years of study in the traditional manner. Students can access their unofficial transcript any time through Inside Pacific, the university portal.

Official transcripts from other institutions become the property of the University and are not reissued or copied for distribution to other institutions. Copies of transcripts of work completed at other institutions must be obtained from the originating institution.

## Operating and Instructional Hours

The instructional hour is 50 minutes, beginning on the hour and ending at ten minutes to the subsequent hour. The instructional day (for class, simulation lab, and patient care) is from 8:00 a.m. to 5:00 p.m. unless otherwise noted. Pre-doctoral dental clinic hours extend until 8:30 P.M. on Monday and Thursday. Departmental and administrative offices are open from 8:00 A.M. to 5:00 P.M. Monday through Friday.

## Quarterly Class Schedule

The School of Dentistry curriculum committee approves class schedules for DDS and IDS students every quarter. Upon review and approval by the committee, class schedules are posted on the school website. Schedules for the MSD programs are approved annually by the associate dean of oral health education.

## Attendance Policy

Students and residents at the School of Dentistry assume professional obligations which include regular and consistent attendance at all learning activities. This includes classroom, laboratory, seminar, and remedial instruction; written and oral examinations, quizzes, and practicals; and patient care experiences. Regular and consistent attendance is an essential qualification of all students and residents. A student or resident who in the judgment of the school fails to meet this qualification may be dismissed from school.

Course directors (or program directors of residency programs) determine a reasonable attendance policy specific to their course (or program), and must provide students or residents a written statement of such policy in the course syllabus. Attendance policies may vary by course and department, and even by course within department, and it is the student's responsibility to be aware of and adhere to course attendance policies.

The student or resident is responsible for making up all work missed due to an absence. Faculty have sole discretion in determining whether and under what conditions missed work is to be made up. Faculty also decide if, when, and under what conditions a make-up exam or practical will be provided. It is expected that make ups will replicate the original assessment in difficulty and content coverage, although an alternative format may be used.

## Notification of Absence from School

A student or resident who will be absent for all or part of an instructional day must notify the Office of Academic Affairs at dentalabsence@pacific.edu in advance of the absence or by 9:00 a.m. on the day of the absence. Absences must be communicated daily. In the event of an emergency, the student or resident must notify Academic Affairs as soon as reasonably possible. The Office of Academic Affairs will notify faculty promptly of the student's or resident's absence and will maintain a log of absences. The log will be circulated quarterly, or upon request, to course directors, program directors, and chairs.

## Grades

Grades represent passing or failing performance: in general, grades of A, B, C, and D represent passing performance, and the grade of F represents failure. More specifically, grades of A (excellent performance); B (good performance); and C (acceptable performance) represent unconditional passing performance; the grade D indicates conditional passing performance that must be remediated. Special conditions on D grades must be specified in writing (disposition form) to the Office of Academic Affairs when grades are submitted. Conditions may include additional instruction or evaluation before advancement to clinical practice or eligibility for national or clinical board examinations. Course directors are required to provide a grade for every enrolled student at the end of each term of instruction.

## Credit (CR)

A credit grade (CR) may be awarded in clinical courses to indicate overall satisfactory progress OR when it is determined that a student has not been assigned sufficient patients for clinical ability to be fairly assessed.

A CR grade should also be used for DDS and IDS students to record satisfactory completion of the PIP experience. In clinical and nonclinical

courses, CR signifies satisfactory completion of a course where reliable differentiation among passing grades is not possible.

## Incomplete (INC)

An incomplete grade (INC) is given temporarily when a student or resident is progressing satisfactorily but the course director has insufficient information because the student or resident has not completed all assigned coursework for reasons beyond the student or resident's control. The course director determines the conditions under which and the date by which the deficiency that caused the INC must be removed, and communicates that to the Office of Academic Affairs on the disposition form and to the Registrar's Office. If no completion date is stipulated, by default the end date of the subsequent term is the completion date. Failure to comply with stated conditions by the stipulated date will result in the INC reverting to the grade F, failure. Prior to posting an F grade, the Registrar's Office sends to the dean the names of students whose grades will revert to F. The dean has seven calendar days in which to intervene to prevent the posting of a failing grade. No student may earn a diploma with a permanent INC or F in a core curriculum course.

## Grade Point Average

In computing a grade point average (GPA) numerical values are: A, 4 points; B, 3 points; C, 2 points; D or INC, one point; and F, zero points. Credit (CR) notations do not affect the grade point average. Separate didactic and lab/clinic GPAs are used in the DDS and IDS programs. The dental school does not award "+" or "-" modification of grades and does not use the W grade.

## Change of Grades

Final passing grades (A, B, C, D, CR) are not subject to change on the basis of second examination or additional work completed after grades are submitted. Passing grades may be changed to correct an error in computation or when some part of a student's work has been overlooked within one term of issuing the final grade. A failing grade of F may be changed only on the basis of successful formal remediation or repeat of the course. The decision to remediate or repeat is at the discretion of the course director or the Student Academic Performance and Promotions Committee. Formal remediation requires enrollment in a dedicated, unit-bearing, transcribed remedial course created and managed by the Registrar's Office. Upon successful completion of remediation, defined as a C or higher grade in the remedial course, the Registrar's Office changes the F grade in the original course to a D (a pound symbol # precedes the D grade indicating the grade history in the course; see below). No formal change of grade form is required. The "A" is a temporary grade posted by the Registrar's Office in cases where the grade submission deadline has not been met.

When a final grade is awarded to substitute for INC or when remediation has been successfully completed in a course where a failing grade of F was earned, this will be indicated on the transcript by an appropriate symbol denoting the change (\* for grades changed from INC and # for grades changed from F).

## Academic Performance

### Academic Progress

The Office of Academic Affairs reviews academic performance for all DDS, IDS, and DH students each term. In a course that continues through two or more terms, a grade is awarded each term to indicate interim progress, and the final grade for the entire course is awarded at completion of the last term of the course. However, the Academic Advisory and Student Academic Performance and Promotions

Committees will regard an interim grade in the same manner as a final grade with respect to promotion.

## Academic Good Standing

For DDS, IDS, and DH students academic good standing requires a grade point average (GPA) of at least 2.0 for all didactic courses attempted or completed and for all laboratory and clinic courses attempted and completed, and no permanent D or F grades. In some programs under the authority of the dean of the School of Dentistry, only a single term GPA may be used, in which case a minimum of 2.0 is required to be in good academic standing.

Students who are in good academic standing are automatically recommended to the dean for promotion by the Student Academic Performance and Promotions Committee. The committee may recommend that a student who is not in good academic standing be promoted on academic probation with conditions of the probation clearly outlined (see Academic Probation section below).

## Academic Probation

Academic probation is accorded to a DDS, IDS, or DH student upon receipt of a GPA below 2.0 for all didactic courses attempted and completed OR a GPA below 2.0 for all laboratory and clinic courses attempted and completed OR both; OR to a student with a permanent D or F grade. (Program directors in graduate, postdoctoral, and other first-professional programs under the authority of the dean of the School of Dentistry may adopt these policies or determine an appropriate review process for their respective program, which must be approved by the dean and communicated to students.) The GPAs reflected on the term report card are cumulative and include all courses attempted and completed. Normally, the standard for good academic standing must be met within one term of being placed on academic probation. In circumstances where this time constraint cannot be met, e.g. for laboratory and clinic grades at the beginning of the second year, or when a course is being repeated to remove an F grade, a reasonable time period will be specified.

The committee may recommend that a student who is not in academic good standing be promoted on academic probation with conditions of the probation clearly outlined.

### I. Phase One Academic Probation: Intervention

1. Cumulative didactic and/or lab/clinic GPA below 2.0 if the student was in good academic standing the previous term. (New students are assumed to be in good standing upon matriculation unless otherwise stipulated by the Office of Student Services or the program director.)
2. Repeating students are placed on intervention at the beginning of their repeat year.
3. Examples of interventions include:
  - meetings with advisor
  - assignment of tutors
  - inventory of outside activities, living conditions
  - diagnostic testing for suspected health, psychological, language, or learning problems
  - in-course remediation
  - evaluation by health care professional to determine fitness for student activities
  - alternative career counseling

### II. Phase Two Academic Probation: Contract

1. Second consecutive term of a cumulative didactic and/or lab/clinic GPA below 2.0, or
2. Any permanent D or F grade.

3. Examples of contract conditions include:

- required weekly meetings with faculty member, Group Practice Leader, or advisor
- restrictions on outside activities, living conditions
- required professional assistance with diagnosed health, psychological, or learning problems
- tutors
- assignment to scheduled supplemental courses
- regular meetings with therapist

4. No student on contract is eligible to take National Dental Board Examinations without approval from the Student Academic Performance and Promotions Committee.

## Academic Disqualification

Academic disqualification may be recommended to the dean by the Student Academic Performance and Promotions Committee for a student who has failed to meet any condition of phase two probation (contract). When a student's cumulative academic record meets published criteria for academic disqualification, the SAPPC will provide an opportunity for the student to appear before it to ensure that all pertinent information is available before the committee makes its recommendation to the dean. This is the only opportunity for the student to present relevant information to the committee; if a student fails to provide all pertinent information at this opportunity, the student risks exclusion of information from the committee's deliberations. A student appearing before the committee has the option to: (i) select a faculty advisor; (ii) request and receive assistance from that faculty advisor with preparation of a statement to the committee; and (iii) request the faculty advisor attend the committee meeting with the student as a silent observer. A student may, at their discretion, take advantage of all or none of these opportunities. During the committee meeting, the student is advised to read aloud their prepared statement, but is discouraged from circulating copies or presenting evidence of academic performance.

If, in the judgment of the committee and after consideration of the relevant information available to it, the student has the capacity and commitment to overcome his or her documented deficiencies and reach an acceptable level of patient care, the committee may recommend (i) continuation on academic contract; (ii) extension of the program; or (iii) re-enrollment in a subsequent cohort. The committee may also recommend re-enrollment only through the normal admissions process, after a careful review of the relevant information and as appropriate to the student's potential. If a student is offered and elects to re-enroll in a subsequent cohort, the dean's letter signed by the student electing the re-enrollment option suffices as evidence of readmission.

## Exemption from Courses

If a student or resident has extensive educational preparation in a discipline, the student or resident may petition the appropriate course or program director for exemption from required coursework. Such exemption may be granted at the discretion of the course or program director who will award an appropriate final letter grade (A, B, C, D), or credit (CR) signifying completion of the required course.

## Examination Review Policy

At a minimum, course directors in all programs housed in the School of Dentistry must report to students and residents their individual score, class average, distribution of grades, and the scale used for scoring. Course directors must make this information available to students within 7 calendar days following an examination, quiz, or practical examination.

This may take one of three forms: release of the full examination to students; release of an individual Strength & Opportunities report (DDS,

IDS, DH only); or an exam review session. In accordance with the Family Educational Rights and Privacy Act (FERPA), if a student asks to see an examination at any time, and the examination is in possession of the course director or other administrative person, the examination must be produced.

## Academic Standards for Holding Student Office

In order to run for and/or hold an elected or appointed office in the Associated Student Body or to assume a leadership position in an organization affiliated with and approved by the school, a student must be registered for a full-time course of study, be in good academic and disciplinary standing, and maintain a cumulative combined Grade Point Average of 2.5 or higher during the entire period of time in which he or she holds office. Failure to meet the academic standards outlined by this policy will result in a one quarter probationary period, during which the student is expected to meet the minimum cumulative GPA standard. Failure to do so by the end of the probationary period will lead to automatic resignation from office.

## Repeat

When one course is repeated by a student who remains with the original cohort, BOTH attempts are permanently recorded on the transcript. Repeated courses are identified on the transcript with a "Y" in the repeat column, and the interim, if applicable, and permanent grade earned is INCLUDED in the Grade Point Average calculation ("grade averaging"). The original course remains on the transcript and the repeated course appears in the term(s) it is repeated.

When a student repeats an entire academic year, BOTH attempts are permanently recorded on the transcript. Repeated courses are identified on the transcript with a "Y" in the repeat column, but interim, if applicable, and permanent grades earned in the first attempt are NOT included in the GPA calculation ("grade replacement"). Immediately prior to re-enrollment with a new cohort, the transcript is adjusted such that all courses taken during the original enrollment period are temporarily suppressed from the transcript until such time that grades, interim and permanent, are posted. This process is the responsibility of the Registrar's Office.

In the absence of a written agreement of exemption filed in the Office of Academic Affairs, students who join a subsequent cohort for any reason are governed by the policies, requirements, and curriculum in effect at the time of re-entry.

## Withdrawal

A student who wishes to withdraw must file a written request in the Office of Academic Affairs or with the program director, who will promptly notify the Office of Academic Affairs of a withdrawal. A student's request for withdrawal becomes final only upon completion of the customary check-out process. The student's academic standing at the completion of the check-out process will be recorded on the permanent record (transcript) as a transcript comment. (The dental school does not use the W grade so as not to negatively impact future admission into a health professions program.) The comment contains month and year of withdrawal and reference to academic standing at the time of withdrawal, e.g., Jun 15: student withdrew on academic probation.

The transcript of a student who withdraws without first requesting permission will record a dismissal in the transcript note: e.g. Jun 15: student disqualified for unauthorized LOA. A student who has met the published criteria for disqualification may not elect to voluntarily withdraw until the dean has rendered a final decision regarding promotion or academic standing. In these cases, the Office of Academic Affairs will inform the Registrar's Office of the appropriate transcript designation.

## Leave of Absence

Requests for a leave of absence are submitted to the dean or program director, who will designate the appropriate administrator to evaluate and respond to the request. (A program director must consult with the Dean's Office before granting a leave of absence.) To request a leave of absence, the student must be in good academic standing and must submit a written request identifying persuasive reasons warranting the leave, together with documentation supporting the request. The dean or program director will notify the student in writing of the decision and, if approved, will stipulate the length of the leave and conditions for re-enrollment. The student assumes the responsibility of keeping the dean or program director informed of the intent to re-enroll by the specified date. Students with federally-guaranteed student loans whose leave of absence exceeds 180 days will be reported as withdrawn on the 181st day and federal loans will enter repayment (see Withdrawal process above). A student who does not re-enroll by the specified date will be considered to have withdrawn from the school. The decision to deny, grant, or set conditions for a request for leave of absence shall be in the sole discretion of the dean. Leaves of absence are rarely granted.

The Office of Academic Affairs will notify the Registrar's Office of the details of an approved LOA so that an accurate transcript comment can be posted to the record.

The dean has the authority to unilaterally place a student on interim or indefinite leave of absence after careful review of the facts of a case.

## Graduation

In addition to all other requirements for graduation, the candidate must demonstrate competence to discharge the duties required of a practitioner of general dentistry or a dental speciality (orthodontics, endodontology, oral surgery). In addition to the skills, knowledge, and values expected of a beginning general practitioner, this is interpreted to mean evidence of moral character compatible with the public interest and with the practice of the healing arts, completion of all technical and clinical requirements prescribed in the curriculum, good academic standing, a passing score on the National Board Dental Examination (DDS students only), and compliance with all relevant policies of the School of Dentistry. If, in the opinion of the Student Academic Performance and Promotion Committee or other certifying body, approved by the dean, the candidate for the degree has met all these requirements, it is authorized to recommend to the dean the graduation and conferral of the degree. The committee may also recommend delay in the individual's graduation date and will stipulate conditions necessary to bring the student or resident to a competent level. Students and residents who have met all degree requirements receive their diploma at commencement.

## Graduation Honors

Upon recommendation of the Student Academic Performance and Promotion Committee, students who complete the didactic, clinical, and national board requirements for graduation and whose academic record qualifies them for election to Tau Kappa Omega are graduated with honors. Those who complete graduation requirements and whose record qualifies them for election to Omicron Kappa Upsilon are graduated with high honors. The valedictorian is graduated with highest honors.

## Committees

### ***Student Academic Performance and Promotions Committee (SAPPC)***

Functions: reviews the academic performance and progress of students in the 24- and 36-month DDS program and dental hygiene program every quarter; determines satisfactory progress, overall competency, and eligibility for graduation; recommends to the dean students who are not eligible to graduate or should be dismissed for academic reasons with or without the option of automatic re-enrollment; meets with students who

have met grounds for academic dismissal, and evaluates the student's capacity to continue in the program and likelihood for success; and proposes and causes to be designed and implemented remediation, enrichment opportunities, and assessment methodology geared toward supporting student learning and assessing overall competency. The committee helps ensure enforcement of academic standards described in this catalog.

Membership includes: the associate dean of oral health education (chair), the associate dean for clinical services, the assistant dean for academic affairs, all Group Practice Leaders, and all department chairpersons, and a representative of the DH program. Should a clinical department chair be unable to attend the meeting, a single co- or vice-chair is invited.

#### **Academic Advisory Committee (AAC)**

Functions: reviews report cards of students on academic probation and determines appropriate intervention strategies; devises conditions of academic intervention and contract documents; and, when a student meets the published grounds for academic dismissal, make a recommendation to the Student Academic Performance and Promotion Committee on continued enrollment status.

Membership includes: the associate dean of oral health education, the assistant dean for academic affairs (chair), two Group Practice Leaders, one representative each of the biomedical science courses and preclinical technique courses, a representative of the DH program and one predoctoral student.

#### **Student Appeals Committee**

Functions: Reviews student-initiated challenges to faculty action on grading and promotion decisions. In academic matters related to promotion and dismissal, the Student Appeals Committee's inquiry will be limited to review of compliance with the due process components of policy and will not constitute an attempt to substitute its judgment for the academic judgment of faculty or of the administration.

Membership includes: four elected faculty members and three elected students, one each from the two senior classes and the junior class.

## **Awards**

Awards and prizes are presented annually at the Graduate/Alumni Association banquet honoring the graduating classes or similar venue. A detailed description of each award, including selection criteria, is available in the Office of Academic Affairs.

### **Academic Achievement**

Dean's Valedictorian awards (DDS, IDS)  
Dean's Salutatorian awards (DDS, IDS)  
Dean's Award (third highest GPA)  
Inesi Award in Physiology  
OKU-Sutro Clinical Excellence

### **Leadership, Professionalism, Scholarship, and Service**

Dr. Sigmund Abelson Endowment award Academy of General Dentistry award  
American College of Dentists, Northern California Section award  
American Student Dental Association Award of Excellence  
Dr. Thomas R. Bales Family Endowment Good Samaritan Award  
California Dental Association award  
Delta Dental Plan of California Student Leadership award  
Dr. Deric Desmarteau Endowment award  
Dr. Kevin Campbell Alumni Association Service award  
F. Gene and Rosemary Dixon IDS Endowment award  
Pierre Fauchard Academy awards

Dr. William W.Y. Goon/OKU award  
International College of Dentists Student Leadership award  
San Francisco Dental Society Ethics award  
Dr. Charles, Charles Jr. and Joe Sweet Scholarship awards (for pediatric dentistry)  
Dr. Herbert K. Yee Scholarship award

## **Outstanding Performance**

Academy of Osseointegration award  
Advanced Education in General Dentistry Outstanding Resident award  
Dr. Eric B. Bystrom Memorial award  
Academy of Operative Dentistry award  
American Academy of Implant Dentistry award  
American Academy of Oral and Maxillofacial Radiology award  
American Academy of Oral Medicine award  
American Academy of Oral and Maxillofacial Pathology award  
American Academy of Oral and Maxillofacial Radiology award  
American Academy of Esthetic Dentistry award  
American Academy of Pediatric Dentistry award  
American Academy of Periodontology award  
American Association of Endodontics award  
American Association of Oral and Maxillofacial Surgeons Dental Student awards  
American Association of Oral Biologists award  
American Association of Orthodontics award  
American Association of Public Health Dentistry award  
American College of Prosthodontists award  
American Dental Society of Anesthesiology award  
Oral and Maxillofacial Surgeons of California award  
Dentsply/American Dental Association Student Research Program award  
Dr. Charles A. Ertola award (for removable prosthodontics)  
Dr. Thomas B. Hartzell award (for periodontics)  
International Congress of Oral Implantologist award  
Lasky Family Endowment Pediatric awards  
Oral and Maxillofacial Pathology award  
Quintessence Publishing Co. awards (one each for research achievement, periodontics, and restorative dentistry)  
Warren Family Endowment award (for pediatric dentistry)

## **Honor Societies**

### **Phi Kappa Phi**

Each year DDS, IDS, and DH students who demonstrate the highest academic achievement are inducted into Phi Kappa Phi, a national multi-disciplinary honor society.

### **Omicron Kappa Upsilon**

The Delta Delta chapter of the national dental honor fraternity, Omicron Kappa Upsilon, was organized at the dental school in 1934. Its purpose is to encourage scholarship and to advance ethical standards of the dental profession. Membership is limited to twelve percent of the graduating DDS and IDS classes, selected by a faculty vote on the basis of scholarship and character.

### **Tau Kappa Omega**

In 1927, the Alpha Chapter of an undergraduate honor society, Tau Kappa Omega, was organized for promotion of honor and service to the school. DDS, IDS, and DH students are elected to the fraternity on the basis of ideals and scholarship.

## **Reservation of Powers**

The School of Dentistry reserves the right to modify or change the curriculum, admission standards, course content, degree requirements, regulations, policies, procedures, tuition, and fees at any time without

prior notice and effective immediately. Students who join a subsequent cohort for any reason are governed by the policies, requirements, and curriculum of the catalog in effect at the time of re-entry.

The information in this catalog is not to be regarded as creating an express or implied agreement between the student (or applicant) and the school, nor does its content limit the academic and administrative discretion of the school's administration.

## The Academic Regulations on this page is for the following undergraduate program on the San Francisco campus.

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Dental Hygiene

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All students are urged to read these general regulations carefully. Failure to be familiar with this section does not excuse a student from the obligation to comply with all the described regulations.

Although every effort has been made to ensure the accuracy of this catalog, students are advised that the information contained in it is subject to change. They should therefore consult the Registration Information section of the Office of the Registrar web page for any term to relate these regulations to calendar dates. The University reserves the right to revise its regulations and programs in accord with sound academic standards and requirements.

## Academic Residence Requirement

The minimum residence requirement for a bachelor's degree program requires 32 out of the last 40 units to be earned in residence at University of the Pacific. This means once a student has reached 40 units less than what is required for his/her degree only 8 more units may be accepted from a four year accredited institution. Additional community college or four year institution courses satisfy content requirements only and do not apply to the minimum units required for the degree. Example: If 124 units are required for the degree once a student has reached 84 units, only 8 more units can transfer in (from a four year accredited institution). If 128 units are required for the degree once a student has reached 88 units, only 8 more units can transfer in.

Normally these 32 units must be taken on the Stockton campus, but study in Pacific-affiliated programs elsewhere in the United States or abroad may count toward the residency requirement if the student has taken at least 32 units on the Stockton campus at the time of graduation.

The school or college from which the student is to graduate may stipulate that the units in residence must include certain specific requirements in the major program and/or a certain minimum of units within the school or department of the major.

## Academic Standing

At the end of each semester, an undergraduate or professional pharmacy student's academic standing is designated as one of the following: good standing, good standing with warning, probation, subject to disqualification (temporary status) or disqualification. The criteria for these academic standings are based upon a combination of the cumulative Pacific GPA and the term GPA and vary according to a student's classification. Unless admitted on probation, a student is in good standing during the first semester of attendance. Students who are subject to disqualification are reviewed by an appropriate committee and are either disqualified from further enrollment at the University or are allowed to continue for the next semester on probation. The criteria for the different academic standings are outlined below:

### *Good Standing:*

- term GPA of 2.00 or higher and a cumulative Pacific GPA of 2.00 or higher

### *Good Standing with Warning:*

- term GPA below 2.00 and a cumulative Pacific GPA of 2.00 or higher.

### Probation:

If prior semester is 'Good Standing':

- Freshman-Junior: term GPA is below 2.00 and cumulative Pacific GPA below 2.00

If prior semester is 'Good Standing with Warning' or 'Probation':

- Freshman: term GPA is below 2.00 and cumulative Pacific GPA between 1.50 and 1.99
- Sophomores: term GPA below 2.00 and cumulative Pacific GPA between 1.80 and 1.99
- Juniors: term GPA below 2.00 and cumulative Pacific GPA between 1.95 and 1.99
- All undergraduates: term GPA of 2.00 or higher and cumulative Pacific GPA below 2.00

### Subject to Disqualification (temporary status):

If prior semester is 'Good Standing':

- Seniors: term GPA below 2.00 and cumulative Pacific GPA below 2.00

If prior semester is 'Good Standing with Warning' or 'Probation':

- Freshmen: term GPA below 2.00 and cumulative Pacific GPA below 1.50
- Sophomores: term GPA below 2.00 and cumulative Pacific GPA below 1.80
- Juniors: term GPA below 2.00 and cumulative Pacific GPA below 1.95
- Seniors: term GPA below 2.00 and cumulative Pacific GPA below 2.00

### Disqualified:

Each school determines whether a student subject to disqualification is disqualified. If not disqualified, a student subject to disqualification is placed on probation for the following term. If disqualified, a student is not allowed to register for further study at the University during a regular term while disqualified, but may attend the "open enrollment" summer sessions.

A student who has been disqualified may appeal immediately for reconsideration and possible reinstatement on probation within the same school or college or in another school or college of the University. A disqualified student who has been out of the University for one semester or more, excluding summer terms, may apply for readmission to the University through the Office of Admission. If readmitted, such a student enters on probation and needs to make up the earlier deficiency in order to attain good academic standing.

## Acquisition of Graduate Credit as an Undergraduate

Undergraduate students meeting all of the following requirements may petition the Dean of the Graduate School by submitting the *Application to Receive Graduate Credit as an Undergraduate Student* to open a graduate transcript (i.e., receive credit in graduate-level courses toward a graduate degree) before the last day to add classes of the last semester as an undergraduate:

- The student must be within 9 units of completing the baccalaureate degree.
- The student must be in the last two semesters of the baccalaureate degree at University of the Pacific.

- An *Evaluation of Degree Requirements* form has been submitted to the Office of the Registrar prior to the last day to add classes. This must be submitted before or with the *Graduate Credit as Undergraduate* application. (This serves as permission by the undergraduate advisor for the student to take graduate-level coursework.)
- The student has been accepted into a graduate or credential program.

*Graduate credit can be received under the following guidelines:*

- The total number of graduate credits for the semester, including coursework completed at other schools, cannot exceed the maximum graduate course load for the department providing the graduate coursework.
- The tuition rate for the entire semester is at the undergraduate rate.
- No more than 12 units (16 units for student teachers) can be transferred from an undergraduate transcript into a graduate degree program.
- Graduate credit will only be granted for graduate-level (200 numbered) courses and above.
- Units cannot be retroactively transferred from an undergraduate transcript to a graduate program. Approvals for graduate credit must be obtained prior to the last day to add classes of the student's last semester.
- Coursework will not count toward graduate credit if the student fails to complete the bachelor's degree by the second semester of taking graduate courses.
- Graduate courses completed under this agreement will not be recorded by the Registrar as graduate coursework until the baccalaureate degree has been completed and matriculation into the graduate program has commenced. Grades from these courses will not be accounted in the undergraduate grade point average, unless the bachelor's degree is not completed.
- Students who do not complete the bachelor's degree by the second term when graduate courses are taken cannot start a graduate program and cannot take additional graduate coursework until the bachelor's degree has been awarded.
- Students bear the responsibility of assuring graduate credits earned as an undergraduate student will transfer to or be counted as post-baccalaureate units by other universities or school districts.

Students are not classified as graduate students until they register for and begin graduate courses following the receipt of their bachelor's degree.

## Auditing a Class

Auditing of a course is an option that allows exposure to a course with no course credit awarded. To audit a course, approval must be granted by both the instructor and the chair of the department in which the course is offered via an add/drop form. Auditing is not available in participation courses such as applied music, physical education, art courses of an applied nature, etc. Students auditing a course must pay an auditing fee. Courses taken through auditing may not subsequently be converted to a course credit or grade. The student must indicate at the time of registration if they wish to audit a course, and pay the appropriate fee. An audited course and grade AU (Audit) may not be used to fulfill or waive any degree requirements. An AW (Audit Withdrawal) grade will be assigned for withdrawals.

## Cancellation

If you are a newly admitted and confirmed student and do not wish to attend Pacific for a semester and instruction has not yet begun, you must formally request a cancellation of your registration from the university.

To cancel your registration (prior to the start of the term) contact the Office of Admission. If you are a continuing student and need to drop your last class after the add/drop deadline you must visit the Office of the Registrar and obtain a date of notification recorded on the Withdrawal form. The notification date is your official withdrawal date used by Financial Aid in the Return of Title IV Aid calculation and the effective date used by Student Accounts for tuition refunds.

## Catalog Expiration and Requirements Policy

The catalog lists requirements for active degrees offered by the university. Each catalog goes into effect at the beginning of the fall term the academic year of issue. It expires at the end of summer session the seventh academic year after publication for students maintaining attendance. Advisors and other university employees are available to help, but students have final responsibility for satisfying degree requirements for graduation.

Students are held to program requirements (general education and major/minor) in effect at the time of first enrollment. Students who change their program/major are held to degree requirements in effect at the time of the change of program. Students may, using a Change of Program form, elect to graduate under degree requirements specified in subsequent catalogs; under no circumstances are the requirements from an earlier catalog applied.

## Change of Address

All students must notify the Office of the Registrar immediately of any change in their addresses or those of their parents or guardians. The University assumes no responsibility for materials sent through the mail not received.

## Change of Program Objectives

A student who has been admitted to one degree program and who later desires to change to another degree, major, concentration, or subsequent catalog must submit an approved Change of Program form with the Office of the Registrar.

## Class Attendance

Students are expected to attend classes regularly. Specific attendance policies are determined and provided by individual instructors in their course syllabus at the beginning of the semester.

## Class Standing

Undergraduate students are designated freshmen, sophomores, juniors or seniors by the number of units which have been completed toward graduation as follows:

1 – 27.99 units designates a freshman.

28 – 55.99 units designates a sophomore.

56 – 91.99 units designates a junior.

92 – up units designates a senior.

Post Baccalaureate

Other students are classified as Undergraduate Unclassified. See the Undergraduate Unclassified section of this catalog.

## Commencement

Commencement exercises to honor students who have earned baccalaureate and professional pharmacy degrees are held each year in May. Students who have earned their degrees in the previous Fall or Summer terms are welcome to participate.

Undergraduate students who have not completed all their degree requirements may participate in commencement if they have accumulated 92 units by the end of the Fall semester prior to May commencement. Students with deficiencies who plan to participate in the May commencement ceremony must apply for graduation by the April deadline.

## Course Loads

Fall and Spring Semesters (Undergraduate and Professional Pharmacy students)

Full Time: 12 or more units a semester

Half Time: 6 -11.9 units a semester

Less than Half Time: 5.9 or less a semester

Twelve units constitute a minimum full-time program of studies during a semester for the regular undergraduate and first professional level student and is the minimum required for participation in intercollegiate activities. If a student registers for fewer than 12 units or drops below 12 units financial aid may be reduced. (Students who are less than half-time are not eligible for financial aid.)

The maximum study load during a semester for undergraduates without special permission is 18 units and 19 units for first professional level students. Students who wish to enroll for units in excess of the maximum study load must petition their school/college in advance. Approval is based to a great extent upon the student's past academic record and results in additional tuition charges. If a student is approved to take courses concurrently at another institution, the units at Pacific and the other institution may not exceed 18 units during Fall and Spring or 8 units during each Summer Sessions.

Minimum and maximum study loads for graduate students are defined in the Graduate Catalog.

## Course Numbering System

*Undergraduate Courses:*

Lower Division courses. Courses, numbered 001 – 099, are primarily designed for freshmen and sophomores.

Upper Division courses. Courses, numbered 100 – 199, are typically open to students who have met the necessary prerequisites as indicated in the catalog course description. These courses are designed primarily for juniors and seniors but exceptions may be appropriate for qualified sophomores.

*Graduate Courses:*

Courses numbered 200 – 399 are primarily designated for graduate students. 300 and above are primarily for students admitted to a doctoral program.

Courses numbered in the 9000 series are used for specific professional development courses that are graduate level, non-degree courses in the Center for Professional and Continuing Education.



## Credit by Examination

An undergraduate student in good standing and currently enrolled for four or more units may “challenge” by examination certain courses offered in the current term by the University. Departments have the right to designate which of their courses are appropriate for credit by examination. This policy is subject to the following restrictions:

1. A student may challenge a course covering material in which, because of independent study since high school graduation, or because of work at another college or university which was not accepted for transfer credit, the student feels prepared. It is the responsibility of the student to explain how the material was mastered.
2. A student who wishes to challenge a course should not expect the instructor of the course to provide assistance beyond an explanation of the scope of the examination.
3. A student who wishes to challenge a course may not attend the class meetings of the course.
4. A student may not receive credit by examination in the semester in which the student intends to receive his or her baccalaureate degree.
5. A student may not get credit by examination for a course which the student has already audited or failed with a grade of F or NC.
6. A student may not get credit by examination for a course in a structured sequence if the student has received credit for a higher level course in the sequence.
7. Credit earned by a challenge examination may not be used to meet the University residency requirement.

A student pursues the credit by examination option must obtain a Credit by Examination form from the Office of the Registrar and pay the scheduled \$50.00 service fee (non-refundable).

Successful completion of the examination is then recorded on the transcript with a grade of pass and is made a part of the student's academic record in the term in which the examination is requested. Students who pass the exam are charged an additional \$200.00 for the course credit. Such credit is not considered to generate an overload.

## Credit Limitations

Undergraduate students can apply a combined total of eight units of ACTY 002-049 General Activity, ACTY 050-099 - Intercollegiate Sports and THEA 005 in the Theatre Arts Department toward graduation. Up to 8 units of activity and intercollegiate sports classes may count toward the COP breadth requirement.

A total of no more than 20 units may be applied toward a degree from any or all of the following: courses taken in accredited correspondence schools, extension correspondence schools, extension courses, and/or courses taken credit by examination. None of these credits, except extension courses taken at the University, is accepted during the term in which the student is completing requirements for graduation in this University.

A total of no more than 30 units of coursework in business administration may be applied toward a degree, except in the case of students majoring in business administration.

A total of no more than 28 units may be applied towards a degree from Advanced Placement (AP), International Baccalaureate (IB), DANTES and/or CLEP tests.

## Cross Listed Courses

A cross-listed course is one that carries credit in more than one department or program.

## Dean's Honor Roll

Each undergraduate student currently enrolled in the University who achieves a 3.5 grade point average or above at the close of a term in which twelve or more units of letter-graded (A through F) work have been completed is designated as being on the Dean's Honor Roll for that term. A notation is indicated on the student's academic record of this achievement.

## Degree Types

*Second Bachelor's Degree (consecutively or concurrent):*

Second Bachelor's degrees are awarded under the following conditions:

1. The student does complete 32 units beyond those required for the degree that has the highest credit requirement. These units must be completed in residence at Pacific.
2. The student does complete all specific requirements of both programs (both general educations and majors).
3. Both degrees must be completed at the same time under the same catalog requirements when earned concurrently.

*Multiple Majors:*

Students may obtain a baccalaureate degree with multiple majors by completing the requirements for all majors under the same catalog requirements. Majors may consist of departmental majors, interdepartmental majors or majors in different schools. Multiple majors are recorded on the student's permanent record, but only one degree is awarded. The degree is issued by the student's primary declared school.

## Diplomas

Diplomas are not awarded at Commencement but are available approximately three to four months afterward. Diplomas are mailed to the permanent address on file. Diplomas are not issued if you have outstanding financial obligations to the University. Diplomas left unclaimed are destroyed after five years. Students must re-order and pay for new or replacement diplomas.

The student's diploma lists the degree, the school/college, and, if applicable, major and academic honors. The official academic transcript also lists the major(s), concentration(s) minor(s) and academic honors. Graduation dates posted on the diploma coincide with the last day of the semester. Degrees are posted Fall, Spring and Summer I, II and III. The official graduation date reflects the completion of all academic requirements for the degree and not necessarily the last term of enrollment.

## Enrollment Verification

Students who need enrollment verification from the Office of the Registrar must be registered in the term to be verified. Students should print enrollment verifications by logging onto insidePacific, then selecting the National Student Clearinghouse (NSC) Link and print Enrollment verification. Students can also obtain their good student standing certificate here.

## Final Examinations

Students are required to take all scheduled exams. Matters of grading and testing procedures are the responsibility of individual instructors. If the instructor chooses to give a final examination, it must be scheduled during the time specified by the University Registrar for the final examination for that course. No student is allowed to take a final examination before the scheduled time.

## Grade Point Average

The Pacific grade point average is determined by adding the total quality points and by dividing the resultant sum by the total number of quality hours. As a general rule, the ratio is based on the number of letter graded units completed; e.g., if a student repeats a course both courses will be considered in the overall grade point average.

## Grading Policies

*Symbols and Definitions:*

Undergraduate and first professional level students are assigned grades in keeping with the following provisions. (Grading policies for graduate students are defined in the Graduate Catalog.)

Symbo	GPA	Definition
A	4.0	Outstanding work, highly meritorious
A-	3.7	
B+	3.3	
B	3.0	Very good but not outstanding
B-	2.7	
C+	2.3	
C	2.0	Satisfactory
C-	1.7	
D+	1.3	
D	1.0	Barely passing but counts toward graduation
F	0.0	Failure. Grade count in the grade point average must be repeated with a satisfactory grade to receive credit toward graduation. Also, an F is a default grade given when an instructor does not report a grade.
AU/ AW		Audit/Audit Withdrawal
I		Incomplete work is work not complete due to extenuating and hardship circumstances which prevent the completion of the work assigned within the regular time of the term. Each incomplete grade assigned must be accompanied with a contract statement agreed to by both instructor and student as to: a.) what work remains to be completed, b.) how it is to be evaluated, and c.) a time indicated for completion within but no later than the following deadlines: for fall semester, by July 1 following; for spring semester, by November 1 following; for summer term, by January 1 following. If work is not completed within these stipulated times, the instructor can indicate a grade in lieu of the F/NC which automatically would be imposed with failure to complete the work. All incompletes must be made up before the last day of the semester in which the student intends to graduate.
N		Deferred grading

NC	No credit recognition. Represents unsatisfactory work under pass/no credit option. It is not assignable in the Conservatory of Music.
NG	No credit recognition. Represents unsatisfactory work under pass/no credit option. It is not assignable in the Conservatory of Music.
P	Passing work on the pass/no credit system. P grade is approved only for certain courses and programs of a college or school. Beginning Fall 2016, the University requires a minimum of C- or better to pass a course with a 'Pass/No Credit Grading Option'.
W	Authorized withdrawal from courses after the prescribed period.

## Graduation Requirements for Bachelor's Degrees

Candidates for undergraduate degrees must adhere to all of the University's regulations. In particular they must have:

1. Completed the major requirements specified by the school/college/department with a minimum grade point average of 2.0. At least 16 units of the major requirements must be completed at Pacific;
2. Completed a minimum of 30 units in general education including Pacific Seminars 1, 2 and 3 and a path of six or nine courses as specified by the school or college (transfer students should refer to the General Education section for GE requirements);
3. Met Fundamental skills requirements;
4. Achieved a grade point average of at least 2.0 on all letter-graded work completed at Pacific. On non-letter-graded work, the faculty will determine the equivalency;
5. Fulfilled the minimum residence requirement of 32 out of the last 40 semester units prior to receiving the degree; and
6. Accumulated the appropriate number of program units specified by the particular school or college.

## Filing for Graduation

*Application for Graduation:* An Application for Graduation must be filed with the Office of the Registrar as an indication of intent to graduate at a specific term by the April deadline. For undergraduate students, it should be filed upon completion of 92 units (senior standing) and for professional pharmacy students who expect to fulfill degree requirements during the next academic year. This allows time for a review of studies completed and to enable the students to enroll for any requirements not yet completed.

*Degree Check:* After a student files their Application for Graduation both the program and Office of the Registrar check for the fulfillment of course and GPA requirements, i.e. university wide, major, department, college/school, general education.

## Honors at Graduation

University wide honors at graduation for undergraduates and professional pharmacy are awarded on the following criteria. The student must have completed a minimum of 54 letter-graded units at Pacific and will be based on the student's final overall institutional (Pacific) grade point average. The requirements are: Cum Laude (honors) 3.5, Magna Cum Laude (high honors) 3.7, and Summa Cum Laude (Highest Honors) 3.9.

Because Commencement occurs prior to spring semester grading, the commencement program indicates honors as of fall semester grades.

The student must have completed a minimum of 36 letter graded units at Pacific at this time. Actual honors confirmed, as shown on diplomas and transcripts, is determined once all coursework has been completed and graded.

## Major

A major represents the area of study a student has chosen to pursue for a degree. Students who have not chosen a major are designated as 'exploratory'. A student who decides to change a major or to declare one must submit an approved Change of Program form with the Office of the Registrar. Course and unit requirements for each of the majors offered are in the department's section of the General Catalog.

## Minor

A minor represents a prescribed group of courses in a subject area other than the major. A minor is not required for a degree, but may be elected to strengthen preparation in areas related to the major. To earn a minor a minimum of five courses and 20 units and a minor GPA of 2.00 is required. At least a minimum of 10 units must be taken at Pacific. Course requirements for each of the minors offered are in the department's section of the General Catalog. Students who wish to have a minor posted to their academic record must submit an approved Change of Program form with the Office of the Registrar.

## Official Grades

Official grades are available to students via insidePacific approximately two weeks after the end of the term. Unofficial grades are available on insidePacific after the end of the faculty grade deadline. The grades posted at that time are merely an indication of grades submitted, and grades still missing. They do not show a GPA, or academic standing.

## Pass/No Credit Grading System

Depending upon the regulation of a particular college or school, students may request to receive pass or no credit grades rather than the traditional letter grades. This is available to encourage enrollments in courses outside the student's area of major or specialization and thus to help broaden the student's general education.

Normally this freedom is limited to one course per student per term and does not include courses within a student's major field. Students must submit an approved Add/Drop form to the Office of the Registrar prior to the add/drop deadline. Beginning Fall 2016, the University requires a minimum grade of C- or better to pass a course with a 'Pass/No Credit Grading Option'.

## Prerequisites

Prerequisites for courses are listed in each course description; the responsibility for meeting these requirements rests on the student. The instructor, chair or dean's office may request that a student who has not completed the prerequisites be dropped from the course.

## Regression Rule

Students who complete coursework at an intermediate or advanced level without first completing the lower level introductory courses may not then go back and take the lower level courses for credit. This rule applies primarily to coursework in mathematics, the sciences, and foreign language. It may also apply in other departments in which there is a clear content sequence between courses.

## Returning to Pacific

### *After Cancellation*

*New Students:* If new students cancel their registration and wish to attend Pacific in a future term, they must submit a new application for admission. Previous admission status has no bearing on the decision for admission in the future.

*Continuing Students:* If continuing students cancel their registration, have been gone from the university for two or more consecutive semesters (excluding summer) and wish to attend Pacific in a future term, they must submit an Application for Return to Active Status (Re-admission), available through the Office of Admission.

*After Withdrawal:* If students completely withdrew from the University and wish to return in a future semester, they must submit an Application for Return to Active Status (Re-admission).

## Registration

Registration is the means by which an individual officially becomes a student at Pacific. Registrants are further identified by school/college of the University, degree status, classification and major.

All students must complete registration activity by the add/drop or withdrawal dates published in the University Academic Calendar and Term Calendars (<http://www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-the-Registrar/Calendars/Academic-Calendar.html>). Students are held accountable to complete every course for which they are registered.

Additional registration activity past these deadlines must be requested by the student and approved through a petition. Petitions may include a service fee. Petitions are normally approved only if it can be shown that the request is warranted due to some special situation or hardship. Approved late withdrawals appear on the student's transcript with the notation "W" but do not count in the units earned or in the GPA.

## Registration - Individualized Study

Individualized study courses are designed for special educational needs which are not met by the available curriculum. Students must submit and approved Individualized Study Request form with the Office of the Registrar. *Note: Students on academic probation may not register for Individualized Study. Unclassified students must obtain special permission from the school/college dean's office of which the course is housed.*

## Repetition of a Course

In order to repeat a course at the undergraduate or first professional (PharmD) level, students must have received a C- or lower the first time the class was taken. Once a course is completed (with a grade of C or higher) the student may not repeat any prerequisites for that course. The grading option, when repeating a course, must be the same as the one used originally. Any given course can be repeated one time only. Fundamental Skills courses are exempt from the one time repeat rule.

Students must have both a 2.00 cumulative Pacific GPA and a 2.00 major/minor/program Pacific GPA to graduate. Prior to Fall Semester 2015, the grades received for courses repeated were averaged. Beginning Fall Semester 2015, the best institutional grade attempted when repeating a course is used to calculate the cumulative Pacific GPA and the major/minor/program GPA. Both the initial and subsequent repeat grade will remain on the academic record.

Students may exercise their grade replacement rights up to a maximum of the first three repeated courses, while enrolled in undergraduate degree programs at Pacific. Any additional course repeats will be 'grade averaged' for the cumulative Pacific GPA and the major/minor/program GPA. Basic skills are exempt from the three times rule.

A student's Major/Minor/Program GPA is calculated in the following manner:

- When multiple courses can be used to complete a particular requirement, the course with the best grade will be used in the calculation.
- Transfer/Test articulated work will not be used in the calculation.

Additionally for Major and Minor GPA calculations:

- Only courses currently completing the requirements up to the total number of units required for that particular major or minor are used.
- Successfully completed major and minor courses in excess of what is required to complete it are not used in the calculation.

## Transcripts

Upon request by the student to the Office of the Registrar, an official transcript of his or her academic record is issued to whomever he or she designates. A service fee per transcript is charged for processing the record. Students can request a transcript online, in person or by mail.

Official transcripts from other institutions become the property of the University and are not reissued or copied for distribution to other institutions. Copies of transcripts of work completed at other institutions must be obtained from the originating institution.

## Transfer College Credit Limitations

The complete Transfer Credit Policy can be found on the Office of the Registrar website (<http://www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-the-Registrar/Undergraduate-Transfer-Credit-Policy.html>).

Units are granted in chronological order of when courses were taken. The maximum number of combined units acceptable from community colleges is 70 semester units. After a student has a total of 70 units, including those from Pacific, those accepted in transfer, AP, IB, or CLEP exam scores and additional lower level military course work, no additional units can be earned and applied to the minimum units required for graduation. Once a student has reached 40 units less than what is required for his/her degree, only 8 more units may be accepted from a four year institution. Courses taken after these limits are reached do not have to be repeated at Pacific since the content of the course may fulfill a requirement, even though no units are allowed in transfer.

Courses that a student takes at other colleges or universities in programs not affiliated with Pacific are not counted in the student's cumulative grade point average.

A current student who is working toward a degree at Pacific and who wants to take a course or courses at another college or university must obtain approval prior to enrolling in such courses. In addition, students must be approved by the deans designee of their school/college to take units at other institutions if those outside units, when combined with Pacific courses in a semester, exceed 18 units.

The Transfer Course Approval form is available on the Office of the Registrar's web site and must be completed to obtain the necessary approval to transfer course units back to Pacific. It is the student's

responsibility to have an official transcript sent to the Office of Admission once courses are completed.

## Undergraduate Unclassified Students

Undergraduate Unclassified students, who do not hold a Bachelor's degree, may complete up to 27.9 units prior to being required to formally apply for admission to the university. Upon admittance to the university, resident and transfer coursework will be evaluated.

## University of the Pacific's Four-Year Guarantee

The purpose of the Four-Year Graduation Guarantee ("Guarantee") is to facilitate a student's goal to graduate in four years with a Bachelors degree. To be eligible for the Guarantee, a student must satisfy each of the following conditions:

1. Declare and be admitted to a major by the beginning of the sophomore year by filing a Change of Program form. You may change majors if, at the time you make a change, you can still meet the requirements of the new major and graduate within four calendar years.
2. Remain in good academic standing (2.00 GPA - major and institutional) at the University.
3. Complete 32 semester hours of units each year for four years as required by the college and major, and meet all degree progress checkpoints.
4. Meet with your faculty advisor prior to registration each term to review your course plan and monitor progress.
5. Register for courses within **two days** of the assigned early registration appointment. Enroll in available courses needed for the program of study; accept any available section that can be accommodated in your course schedule. Sole exceptions: Students who are on Study Abroad or off campus participating in a full-time co-op may require a few additional days to register.
6. Make timely annual application for all necessary financial assistance, to avoid registration problems.
7. Apply for graduation by the stated deadline published in the academic and/or term calendars.
8. Monitor your own progress toward degree using the electronic degree check audit system (DegreeWorks) and ROAR (Roam On Line Articulation Reports) regarding transfer work to help you stay on track.
9. Notify faculty advisor if unable to register for a required course needed in the major or for graduation.

•**Special exclusions:** Five year programs and students following individualized learning programs.

If the student satisfies all of the foregoing conditions, but is unable to graduate due to unavailability of a course, the University will offer one of the following remedies:

1. Enable the student to graduate in four years by substituting a different course or an independent study assignment, as determined by the department and the college offering the student's major.
2. Allow the unavailability of the course to delay the student from graduating in four years, in which case the University will waive Pacific tuition and mandatory fees in order for the student to graduate within the next academic year.

The University may choose, in its sole discretion, which of the two foregoing remedies it will offer the student under this Guarantee, and the

remedy chosen by the University will be the student's sole remedy under this Guarantee. The University is under no obligation to provide one of the foregoing remedies unless the student submits a written request for an accommodation to the Provost prior to beginning of classes in the last term of the student's four year plan.

## U.S. Military Mobilization

All students who are called to active duty must start the process by providing a copy of the military summons to the Office of the Registrar's Veterans Affairs (VA) Coordinator, Knoles Hall, first floor, 209-946-2135. Cancellations processed during the first twelve weeks receive a 100% refund and all course sections are dropped before the student leaves for active duty. It is essential that a copy of the military summons be delivered to the Office of the Registrar before departure from campus. This ensures that classes are dropped and that grades of 'F' are not issued.

Students called to active duty toward the end of the semester, who are short submitting final papers or cannot take final examinations, are entitled to receive Incompletes (I) for the semester. Arrangements to receive Incompletes must be made with each instructor and copies of the military summons must be left with the Office of the Registrar. Students receiving Incompletes under these conditions are given four semesters to complete the work and remove the marks of 'I'. If the work is not completed during this special four semester period, the marks of I are automatically converted to marks of W. If the military service period extends beyond the special four semester period, students can file an Academic Regulations Committee (ARC) petition for extension of this special incomplete time period.

Students who leave the University for U.S. military service and follow the procedures outlined above are eligible to re-enroll as returning students. Returning students must file a 'Return to Active Status' application with the Office of Admission. Returning students who have questions about Veterans Affairs benefits should contact the VA Coordinator in the Office of the Registrar at 209-946-2135.

## Variable Unit Courses

Some course numbers are used to describe specific types of courses, as follows:

- 087/187/287 – Internship study. Work experience conducted off campus, under the supervision of a non-full time Pacific faculty member.
- 089/189/289 – Practicum. Work experience conducted on campus, under the direction of a faculty member.
- 092/192/292 – Cooperative education. Work experience on a full-time or part-time basis. The Cooperative Education Program in each school or college differs in unit allowance. See the appropriate school for unit specifics in the general catalog.
- 093/193/293/393 – Special Topics. Departments may offer, on occasion, special topic courses. Courses may reflect the current research of the instructor or the needs and interests of a group of students. Detailed descriptions can be obtained from the chair in which the courses are being offered.
- 191/291/391 – Independent Study
- 195/295/395 – Seminar. Undergraduate/Graduate/doctoral
- 197/297/397 – Independent Research.

Graduate/Doctoral

- 299 – Master's Thesis
- 399 – Doctoral Dissertation

*Note: These numbering standards are general standards and reflect current practice among most units. Some units may have exceptions to these. Students should check for these within their majors for individual unit standards that may differ from these general numbering standards.*

## Withdrawal From a Semester or the University

Students who intend to completely withdraw from a semester or from the university have to initiate the process in the Office of the Registrar. The withdrawal date used by Financial Aid for the Return of Title IV Aid calculation and the effective date used by Student Accounts for tuition refunds are based on the date of your notification to the Office of the Registrar. If a student intends to withdraw from a semester after the last day to withdraw, it must be approved by the Academic Regulations Committee. Courses the student was registered for after the last day to drop appear on that student's transcript with the notation "W" but do not count in the units earned or in the calculation of the grade point average. If a student only withdraws from a semester, he/she has one more semester to keep his/her continuing active status. If the students has completely withdrawn from the University, he/she must file a Return to Active Status application with the Office of Admission.

An official withdrawal from the University is the termination of rights and privileges offered to currently enrolled students which includes, but not limited to, early registration.

## Academic Units

### Arthur A. Dugoni School of Dentistry

The Arthur A. Dugoni School of Dentistry has an annual enrollment of approximately 470 predoctoral and international students enrolled in DDS degree programs and about 50 post-doctoral residents enrolled in Master's degree and certificate programs.

### Benerd College

Benerd College (BC) offers a full spectrum of educational opportunities for students from traditional undergraduates to returning adult students to members of the community seeking opportunities for professional and personal development. The Education Division of the College prepares students for careers in teaching, school psychology and educational administration, offering bachelor's degrees, teaching credentials and doctoral degrees. The Innovative Academic Programs Division offers degree and certificate programs designed to meet the ever-evolving needs of the regional workforce, including Bachelor's degree completion programs in hybrid formats to allow students to earn a bachelor's degree while working full-time. The Professional and Continuing Education Division serves as a major regional center for continuing education units, professional development and customized workforce training. Benerd College is also home to the Osher Lifelong Learning Institute (OLLI) providing intellectual engagement for older community members, and to Pacific's International Programs and Services, which includes administering the UOP International partnership designed to help develop a vibrant international student presence at Pacific.

### College of the Pacific (Liberal Arts and Sciences)

At the center of the broad range of educational opportunities open to students on the Stockton campus is the College of the Pacific, the core division of arts and sciences. Some 1,400 students pursue at least one of the more than 50 major and minor programs offered by the College, and

most students in the professional schools also take varying amounts of work within the college of arts and sciences. College of the Pacific offers majors in most of the traditional areas of the physical and life sciences, the humanities and arts and the social and behavioral sciences, as well as a number of inter-disciplinary programs which cut across traditional fields of knowledge.

## Conservatory of Music

The Conservatory of Music offers undergraduate degrees in composition, jazz studies, music education, music history, music industry studies, music management, music therapy, and performance, and graduate degrees in music therapy and music education. In addition to these majors, the Conservatory offers minors in jazz studies, music, and music management. Additionally, the Conservatory provides opportunities for students throughout the University via participation in ensembles and in general education courses.

## Eberhardt School of Business

Students in the Eberhardt School of Business are educated for management positions in business, government and not-for-profit organizations. Approximately 600 students are enrolled in the School's undergraduate and graduate programs in accounting and business administration.

## Graduate School

The Graduate School supports and oversees Pacific's approximately 1150 graduate students pursuing Master's and doctoral degrees in more than 30 graduate programs on all three campuses. Areas of responsibility include graduate admission processing, graduate student support services, recruitment and marketing strategies, review of graduate policies, and new program development. In addition, the Graduate School provides financial assistance to qualified students through its graduate assistantship program.

## McGeorge School of Law

The McGeorge School of Law, located in Sacramento, has nearly 550 students who are enrolled in the full-time and part-time J.D. programs and graduate programs.

## School of Engineering and Computer Science

The School of Engineering and Computer Science, with some 650 students, offers eight baccalaureate programs: bioengineering, civil engineering, computer engineering, electrical engineering, mechanical engineering, engineering physics, engineering management, and computer science. All engineering degree programs combine academic and practical training with the engineering curricula that require a minimum of seven months of paid engineering related work experience. The school also offers a Master of Science in Engineering Science degree with four different concentrations: civil engineering, computer & electrical engineering/computer science, engineering management or mechanical engineering. A Masters of Science degree is also offered in Data Science.

## School of Health Sciences

The School of Health Sciences prepares students for patient care across the lifespan. The School has innovative, accelerated curriculums, empowering students to contribute to the lifelong wellness of the communities it serves through their professional practice. The School is administratively located on the Sacramento campus with academic

programs on all three of Pacific's campuses. The academic programs include: Audiology (San Francisco); Athletic Training, Physical Therapy, and Speech-Language Pathology (Stockton); and Clinical Nutrition, Nursing, Occupational Therapy, Physician Assistant Studies and Social Work (Sacramento). The intentional emphasis on interprofessional education and practice emphasis in all programs in the School prepares graduates to provide patient care as integral members of the health care team.

## School of International Studies

The School of International Studies is devoted to the interdisciplinary study of international affairs and offers students a BA in International Relations and minors in International Studies and Anthropology. Study abroad and competency in at least one second language are central to the curriculum. Students benefit from the school's internationally recognized cross-cultural training program. Graduates pursue a wide range of careers that includes positions in government, business, non-governmental organizations, and academe.

## Thomas J. Long School of Pharmacy

The School of Pharmacy offers the Doctor of Pharmacy degree. Some 1,025 students are enrolled in the School, including about 350 undergraduates who pursue pre-pharmacy studies in preparation for beginning the professional program.

## Admission Requirements

### Graduate

#### Conservatory of Music

Music Therapy

#### School of Engineering and Computer Science

Data Science

#### School of Health Sciences

Audiology

### Professional

#### Arthur A. Dugoni School of Dentistry

Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

### Undergraduate

#### Arthur A. Dugoni School of Dentistry

Dental Hygiene

## The Admissions Requirements on this page are for the following graduate programs on the San Francisco campus.

#### Conservatory of Music

Music Therapy

#### School of Engineering and Computer Science

Data Science

#### School of Health Sciences

Audiology

University of the Pacific believes in giving a high priority to the enrollment of students from different backgrounds and demographic groups.

Admission decisions are based on the quality of the applicant's academic degrees and record, the personal statement of purpose, letters of recommendation from professors or others familiar with the applicant's academic work, performance in aptitude and achievement tests, relevant work experience, preparation in the proposed field of study, and on the appropriateness of the applicant's goals to the graduate program and of the applicant's research interests to those of its faculty. Some graduate programs have additional admission criteria that applicants must meet; visit the individual program catalog pages for program admission requirements. Satisfaction of minimal standards does not, however, guarantee admission.

International applicants or non-U.S. citizens who did not receive their bachelor's degree in the United States, should consult the information for international students at the end of this section regarding additional admission.

An application for admission made through the Office of Graduate Admission implies a student's intention to work toward an advanced degree. An applicant may apply to more than one graduate program; however, they must choose only one program upon confirmation of their intent to attend Pacific.

### **Types of Admission**

#### **Full Admission**

A student that meets all the admission criteria of a program will be classified as a student in full standing. Students are advanced from this classification to candidacy for advanced degree upon formal notification from the department.

#### **Conditional Admission**

This classification includes students who have been admitted into a particular degree program but have not yet met all admission requirements. Reasons for conditional status may include:

- Incomplete application materials
- Bachelor's degree not posted at time of admission

All conditions will be listed on an applicant's decision letter. A student will have no more than one term to meet all conditions. If conditions are not met by the end of the first term enrolled, the student will be subject to disqualification. Once all conditions are met, the student will be classified as full standing.

#### **Unclassified Student Admission**

Students who have a bachelor's degree but do not plan to work for an advanced degree may take classes as an unclassified student. No more than 12 credits earned as an unclassified student may be applied toward an advanced degree. Unclassified students are required to meet the same academic standards as other graduate students. Unclassified students who later wish to work toward an advanced degree must make a formal application to the appropriate department or interdepartmental program and be formally admitted by the Office of Graduate Admission as a student with full admission status.

### **General Admission Requirements for All Applicants**

**To be considered for admission with full standing, applicants must have:**

- a bachelor's degree or the equivalent from a regionally accredited institution of higher education in the United States, or an foreign institution of acceptable standing,
- adequate undergraduate preparation in the proposed major field or equivalent evidence of an appropriate background for undertaking as an advanced degree program, and
- a cumulative GPA of 2.65 or better in all post-secondary coursework **or** in the last 60 units of baccalaureate and/or post-baccalaureate work.

Some programs may have higher GPA requirements; review specific program information in the catalog for additional GPA requirements.

Applicants must complete a University of the Pacific Graduate Admission application. All applications must be complete, which typically includes: the online application, essay, official transcripts from each college or university attended, letters of recommendation, and test scores appropriate to the program. For transcripts to be considered official, they must be in an envelope that has been sealed by the issuing institution. Recommendations must be written within the last year. For detailed information on required graduate entrance examinations and recommendations, see the program-specific pages.

#### **Note:**

- Applications submitted or completed after the posted deadlines may be evaluated and students will be admitted on a space-available basis (depending upon the program).
- Students are not permitted to register until they have submitted their confirmation of enrollment, and have satisfied all admission requirements.
- Admission will be denied to applicants possessing bachelor's degrees with a significant amount of credit awarded for work experience that was not supervised by a faculty member of an accredited university nor evaluated in units which identify the academic content.

#### **Application Fee**

Each applicant must submit the appropriate application fee in U.S. dollars; the application fee is submitted as part of the online graduate application. Application fees vary by program.

#### **Testing Requirements**

Some programs may require a graduate entrance examination as part of the application requirements; refer to the relevant program pages for more information. All test scores must be official, less than five years old, and received by the Office of Graduate Admission prior to an admission decision.

#### **Deferral of admission**

Students who wish to enroll in a different semester from which they were admitted, must contact the Office of Graduate Admission to defer their application. Deferral of application is subject to program approval. Applications will only be deferred for up to one academic year. If a student does not begin coursework within one year of your original application for admission, they must submit a new graduate application for admission. Previous admission status has no bearing on the decision for admission in the future.

#### **GPA Waiver Policy**

Students who do not meet the GPA requirement for admission to a graduate program at University of the Pacific may petition for admission

by submitting the GPA Forgiveness Form to the Graduate School. In order to qualify, applicants must meet the following:

- Have a minimum of five (5) years of professional experience after completion of the baccalaureate degree
- Have the support of the Program Director and the Dean of the school in which the degree program is housed
- Submit a letter of recommendation addressing their potential for success as a graduate student from their current or most recent supervisor

Submission of this form does not guarantee approval. Final approval is granted by the Dean of the Graduate School.

#### International Applicants

In addition to the application materials required for domestic students, international applicants must supply the following information to be considered for admission to University of the Pacific graduate programs six weeks prior to the program admission deadline:

**Transcript Evaluation:** A course-by-course foreign transcript evaluation is required for all institutions attended outside of the United States. Transcripts must be reviewed by one of the following approved foreign credential evaluation services:

- World Education Services (<https://www.wes.org/>), Inc. (WES)
- Educational Credential Evaluators (<https://www.ece.org/ECE/>), Inc. (ECE)
- Foundation for International Services (<https://www.fis-web.com/>), Inc. (FIS) Note: We will only allow evaluations done on photocopied transcripts on a case-by-case basis.
- International Education Research Foundation (<http://www.ierf.org/>), Inc. (IERF)
- Transcript Research (<https://transcriptresearch.com/>)
- Josef Silny & Associates (<http://www.jsilny.com/>)

**Certification of Finances:** Government regulations require that international students provide evidence that they are able to meet the financial requirements of their education, living expenses, and miscellaneous costs. This requires the submission of the "Certification of Finances" form (found here ([http://www.pacific.edu/Documents/school-graduate/acrobat/Certification\\_of\\_Finances2.pdf](http://www.pacific.edu/Documents/school-graduate/acrobat/Certification_of_Finances2.pdf))) in the amount to cover all of the aforementioned costs for one year.

**English Proficiency Examination Results:** Applicants whose native language is not English must submit official results (taken within the last two years) of one of the following in order to receive consideration for admission:

- Test of English as a Foreign Language (TOEFL)
- International English Language Testing System (IELTS)

Information about TOEFL can be located online at <http://www.ets.org/toefl> (<http://www.ets.org/toefl/>); information about IELTS can be located at <http://www.ielts.org>. The University of the Pacific's TOEFL Code is 4065.

#### Minimum Score for Admission:

- Internet-based TOEFL: 80
- Paper-based TOEFL: 550
- IELTS score: 6.5

Some programs require higher scores; please contact specific departments for further information.

#### Minimum Score for Teaching Assistants:

- Internet-based TOEFL: 90
- Paper-based TOEFL: 577
- IELTS score: 7.0

Some programs require higher scores; please contact specific departments for further information.

## The Admission Requirements on this page are for the following professional programs on the San Francisco campus.

### Professional

#### Arthur A. Dugoni School of Dentistry

Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

- Accelerated Programs (p. 32)
- Admission with Advanced Standing (p. 32)
- Advanced Education in General Dentistry (p. 35)
- Application Materials (p. 32)
- Bachelor of Arts in Applied Sciences (p. 31)
- Dental Shadowing and Research Experience (p. 32)
- Doctor of Dental Surgery (p. 32)
- Doctor of Dental Surgery Requirements (p. 31)
- Endodontics (p. 34)
- Five-Year Program Leading to a DDS Degree (2+3) (p. 33)
- International Dental Studies (p. )
- Number of Required Pre-Dental Courses (p. )
- Orthodontics (p. 34)
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- Selection Factors (p. 33)
- Seven-Year Program Leading to a BA or BS Degree and a DDS Degree (4+3) (p. 33)
- Six-Year Program Leading to a BA or BS Degree and a DDS Degree (3+3) (p. 33)
- The Dental Admission Test (p. 32)

### Admission Requirements

#### Doctor of Dental Surgery Requirements

Details on admissions requirements for the Doctor of Dental Surgery degree are found here (<http://dental.pacific.edu/academic-programs/doctor-of-dental-surgery/dds-admissions-requirements/>). From here (<http://dental.pacific.edu/academic-programs/>) you can navigate to admissions requirements for all degrees offered at the School of Dentistry.

#### Bachelor of Arts in Applied Sciences

In conjunction with the School of Pharmacy, students who matriculate at the School of Dentistry without a baccalaureate degree can apply for the degree of Bachelor of Arts in Applied Sciences. Transcripts of interested students are sent to the associate dean in PHS for evaluation. Students



who meet the requirements for the BAAS will be notified and are eligible to receive the diploma upon successful completion of dental school.

## Admission with Advanced Standing

Only under unusual and compelling circumstances does the School of Dentistry accept transfer students. Incompatibility of dental education programs generally inhibits transition from another dental school to the University of the Pacific's program. Students requesting such classification must reapply and resubmit an application through the American Dental Education Association's Application Service (AADSAS) to join the first-year class if a transfer is approved and granted. No student will be admitted to advanced standing beyond the second year. Special action regarding transfer is required.

## Doctor of Dental Surgery

Basic requirements for admission to the course of study that leads to the degree of Doctor of Dental Surgery: completion of required pre-dental education, minimum 40 hours of dental shadowing experience, completion of the Dental Admission Test (DAT), submission of complete application materials through the American Dental Education Association's Application Service (AADSAS), and appearance at the school for a personal interview.

The Dugoni School utilizes a holistic application review process where it considers not only an applicant's academic performance, GPA and DAT scores, but also personal characteristics, leadership/life experiences, extra-curricular activities, and potential for academic, clinical, and professional success as determined by the admissions interview and information provided in the AADSAS application.

Pre-dental education must be completed at a college or university from which subject matter is accepted for credit toward advanced standing at University of the Pacific or universities with equal standing. At least three years of collegiate work, including 135 quarter or 90 semester units, is recommended. Courses from a community college are acceptable if they are transferable as equivalent to pre-dental courses at a four-year college.

Students are encouraged to develop their course of study with the assistance of a pre-dental advisor. Pre-dental advisors can identify courses that meet School of Dentistry requirements and help prepare individuals for the rigors of professional education and practice. They are also aware of courses that would best prepare a student for competitive scores on the Dental Admission Test (DAT).

## Number of Required Pre-dental Courses

Biological Sciences with Laboratory*	4
General Physics with Laboratory	2
Inorganic Chemistry with Laboratory	2
Organic Chemistry*	2
English Composition, Communication or Speech **	2

\* Predental students are strongly advised to complete one course in anatomy and physiology as part of the biological sciences requirement. The admissions committee requires applicants to complete two semesters of organic chemistry or, upon direction of the predental advisor, one semester each of organic chemistry and biochemistry. In addition to the aforementioned recommended courses, students are highly encouraged to take histology / cell biology and microbiology.

\*\* One course in composition or technical writing is required. Other courses should develop written or verbal communication skills. Courses in English as a Second Language (ESL) do not meet this requirement.

Pass/Fail evaluations in required subjects are unacceptable unless accompanied by a narrative transcript provided by the awarding school.

Although it is recommended that applicants have a baccalaureate degree, no specific major is required or preferred. Upper-division courses that extend knowledge of required subjects and/or those in areas such as statistics, economics, computer science, business administration and the humanities are recommended.

## The Dental Admission Test

The DAT is available year round at testing centers around the country. To be considered for admissions, the exam must have been taken within 24 months of the date of the application. Information and applications are available from the Dental Admission Test Program, Division of Education, American Dental Association at 800-621-8099 or online at [www.ada.org](http://www.ada.org) (<http://www.ada.org/>).

## Dental Shadowing and Research Experience

Applicants are required to have a minimum of 40 hours of dental shadowing experience. Research is not required for admission, but strongly recommended.

## Application Materials

The School of Dentistry participates in the American Association of Dental Schools Application Service (AADSAS). AADSAS is an information clearinghouse which transmits to a dental school the biographical and academic data required by admission committees, thereby relieving the applicant of the burden of completing multiple and repetitious individual applications. All AADSAS applicants must submit an online application at the ADEA web site, [www.adea.org/aadsas](http://www.adea.org/aadsas) (<http://www.adea.org/aadsas/>).

You will need to read/complete the following sections of the AADSAS application:

1. Fee Assistance Program (optional),
2. Add Programs, Submit Application and Check Status tabs,
3. Personal Information,
4. Academic History,
5. Supporting Information, and
6. Program Materials.

You will need to submit the following documents:

1. Official transcripts from each college and university attended
2. Three letters of evaluation or committee letter\*

Payment for the ADEA AADSAS application is by credit card (VISA, MasterCard, American Express or Discover) only.

Completed application materials must be received by AADSAS no later than February 1 for an applicant to be considered for the class entering in July; however, it is recommended that students apply as early as June. A nonrefundable online payment (<https://sfdental.pacific.edu/admissions1/DDS/secure/appFee.aspx>) of \$75 is required by the school before the processing of an application is initiated. The University of the Pacific does not require any secondary application.

- \* If the applicant's undergraduate institution has a pre-health science advisory committee, a committee evaluation is recommended. Otherwise, three letters of evaluation are required, two of which should come from pre-dental or upper division science course professors. At the applicant's discretion, up to two additional letters may be submitted if these provide supplemental information regarding the applicant's character, special abilities, and professional motivation. Evaluations from health care professionals who know the applicant well are encouraged.

## Personal Interview

Applicants whose credentials appear to meet pre-dental requirements may be invited to the school for an interview with one or more members of the Admissions Committee and a current dental student. Applicants selected for interview are notified by phone (or email) of available dates for the interview. During the interview the applicant's interest in dentistry, future plans, maturity, critical thinking, emotional intelligence and personal qualities needed for successful work with patients are assessed. In addition, applicants participate in an orientation seminar, meet informally with current students and tour the school.

## Selection Factors

The Admissions Committee carefully considers each applicant's scholastic record, scores on the DAT, personal statement, letters of evaluation, evidence of manual dexterity (including the perceptual ability portion of the DAT), other personal attributes and qualities as well as demonstration of his or her understanding about a career in the dental profession. Applicants who are offered the opportunity to enroll must complete planned coursework at a specified performance level.

The Admissions Committee has a firm policy of not discriminating against any applicant because of age, creed, national or ethnic origin, marital status, race, color, gender or sexual orientation. Established review procedures ensure applicants an equal opportunity to be considered for admission.

## Accelerated Programs

In cooperation with College of the Pacific, the School of Dentistry offers three accelerated programs for incoming university freshmen. The programs were initiated in 1984 and have been refined over the years.

### Five-Year Program Leading to a DDS Degree (2+3)

This program provides the minimum foundation in pre-dental education through two years of study on the Stockton campus for a select group of highly qualified students. Students admitted to the program take a prescribed list of general education and science courses as undergraduates in College of the Pacific. After two years of study, students are evaluated for admission to the School of Dentistry. Freshmen who meet the following criteria will be considered for admission to this highly selective program.

1. An ACT composite score of 31 or a combined SAT Critical Reading and Math score of 1350 with a minimum Critical Reading score of 630.
2. A minimum 3.7 grade point average (on a 4.0 scale) based on a substantial number of math and science courses in a college preparatory program.
3. Acceptable scores on the Pacific fundamental skills tests in reading, writing, and quantitative analysis administered upon entering the University.

### Six Year Program Leading to a BA or BS Degree and a DDS Degree (3+3)

Students may be admitted into a selective six year program of study. Those accepted into the program major in biological sciences or chemistry and obtain a Bachelor of Science or Arts in Biological Sciences or a Bachelor of Arts in Chemistry from College of the Pacific after three years on the Stockton campus and one year at the School of Dentistry. This special opportunity, combined with the 36-month accelerated program of the School of Dentistry, makes possible the completion of all requirements for both the Bachelor of Science or Arts degree and the Doctor of Dental Surgery degree in a total of six years. Students must meet the following criteria in order to be considered for the program.

1. An ACT composite score of 31 or a combined SAT Critical Reading and Math score of 1350 with a minimum Critical Reading score of 630.
2. A minimum 3.6 grade point average (on a 4.0 scale) in a solid college preparatory program.
3. Substantial coursework in English, sciences and mathematics.

### Seven-Year Program Leading to a BA or BS Degree and a DDS Degree (4+3)

This program is designed to provide students with the opportunity to spend four years earning a bachelor's degree in any discipline, and then complete their dental education at the School of Dentistry. Students benefit by knowing early in their careers that they are granted an interview to the School of Dentistry provided they meet the requirements outlined in their pre-dental program acceptance letter. Students admitted to this program can major in any subject, but must complete a series of science courses as prescribed by a pre-dental advisor. Freshmen applying for the program should meet the following guidelines:

1. An ACT composite score of 27 or a combined SAT Critical Reading and Math of 1210 with a minimum Critical Reading score of 600.
2. A minimum 3.5 grade point average (on a 4.0 scale) in a solid college preparatory program.
3. Substantial coursework in English, sciences, and mathematics.

## School of Dentistry Expectations for Admission

To be admitted to the School of Dentistry, accelerated students must:

1. meet all course requirements for the pre-dental programs, including Grade Point Average standards;
2. achieve scores of 18 or above in all categories on the Dental Admission Test (DAT);
3. successfully complete an interview at the School of Dentistry;
4. file a competitive and complete AADSAS application by September 1;
5. submit the \$75 application fee; and
6. obtain at least three letters of evaluation from science faculty, including one from a pre-dental faculty advisor.

## International Dental Studies

Through the Division of International Dental Studies (IDS), qualified internationally-educated dentists will have the opportunity to earn the Doctor of Dental Surgery degree from this 24-month, eight-quarter program that provides practical and comprehensive training in dental technique as practiced in the United States. The program's admission process is described more fully on the school website. For additional information you may also contact the IDS program at:

University of the Pacific, Arthur A. Dugoni School of Dentistry

155 Fifth Street  
San Francisco, CA 94103, U.S.A.  
Phone: (415) 929-6428  
Email: IDS@pacific.edu

The IDS curriculum includes pre-clinical and clinical instruction in dental subjects presented in the traditional DDS program, as well as instruction in clinical pharmacology and pathology, differential diagnosis of oral diseases, facial pain, special needs patients, hospital dentistry, and preparation for regional and state licensure; the behavioral sciences include basic management science, introduction to geriatric dentistry, fundamentals of dental practice, and jurisprudence. IDS students begin clinical patient care in the second quarter and spend the greater portion of their second year in clinical practice.

### Required documentation for admission consideration:

1. copy of a dental diploma (any degree in a language other than English must be accompanied by a certified translation from a bona fide translator);
2. copy of successful completion of Parts I & 2 of the National Dental Board Examination (NBDE-1, NBDE-2);
3. copy of a score of 92 or above on the internet-based version of the Test of English as Foreign Language (TOEFL); and if applicable, an English proficiency examination will be administered at the School of Dentistry;
4. copy of a course-by-course transcript evaluation from Educational Credential Evaluators (ECE) with a minimum U.S. grade point average of 2.0;
5. copies of two recent letters of recommendation written in English by U.S. or international dental professionals (dentists, dental school faculty);
6. copy of a curriculum vitae (CV) that describes the applicant's dental experience and additional academic accomplishments since receiving the initial dental degree.

Provisional degrees are not accepted.

The IDS admissions committee considers the following factors in selecting applicants for admission: dental school achievement, pass results on the National Dental Board Examination Parts-1 & 2, English language proficiency, professional experience and advanced degrees. Applicants invited to the technique exam and interview are selected from those who meet preliminary admissions requirements.

Applications must be made through the American Dental Education Association (ADEA) Centralized Application for Advanced Placement for International Dentists (CAAPID) at <http://www.adea.org/caapidapp/>.

## Endodontics

### How to Apply

The Department of Endodontics participates in the American Dental Education Association's Postdoctoral Application Support Service (PASS), a centralized application service for more than 400 participating postdoctoral dental education programs. Applicants can complete an online application or download a copy of the application form from the PASS website ([http://www.adea.org/dental\\_education\\_pathways/pass/Applicants/Pages/default.aspx](http://www.adea.org/dental_education_pathways/pass/Applicants/Pages/default.aspx)).

- Completed application materials must be received by PASS prior to their deadline. Check their website for the application deadline.

- The completed PASS application and all supporting documents must be received by the admissions committee for the Advanced Education Program in Endodontology before August 1, 2020
- A non-refundable fee of \$75 must be submitted along with your application. Pay application fee here › (<https://sfdental.pacific.edu/secure/EndoAppFee.aspx>)

### Factors considered for possible admission include:

- Possession of a doctoral degree in dentistry (DMD, DDS, BDS);
- Excellence in pre-dental and dental school academic achievement;
- Dental class standing;
- Advanced Dental Admissions Test (ADAT);
- Practice, teaching and research experience;
- Possession of advanced academic degree(s);
- Dental National Board Examination scores; and
- Letters of recommendation.

### Disclaimer

The school reserves the right to modify or change admission standards or requirements at any time without prior notice and effective immediately. The information provided on this site cannot be regarded as creating a binding contract between the student and the school.

### Contact:

Gloria Sue, Admissions Coordinator  
415.929.6677 / [gsue@pacific.edu](mailto:gsue@pacific.edu)

## Orthodontics

### How to Apply

The Department of Orthodontics participates in the American Dental Education Association's Postdoctoral Application Support Service (PASS), a centralized application service for more than 400 participating postdoctoral dental education programs. Applicants can complete an online application or download a copy of the application form from the PASS Web site ([https://www.adea.org/dental\\_education\\_pathways/pass/Applicants/Pages/default.aspx](https://www.adea.org/dental_education_pathways/pass/Applicants/Pages/default.aspx)).

- Completed application materials must be received by PASS prior to their deadline. Check their Web site for the application deadline.
- The completed PASS application and all supporting documents must be received by the admissions committee for the Graduate Orthodontics Program by August 14, 2020.
- A non-refundable fee of \$75 must be submitted along with your application. Pay application fee here › (<https://sfdental.pacific.edu/secure/OrthoAppFee.aspx>)

### Factors considered by the Graduate Orthodontics Program Admissions Committee include:

- Possession of the doctoral degree in dentistry;
- Excellence in pre-dental and dental school academic achievement;
- Dental class standing;
- Graduate Record Examination (GRE) score (Institutional Code 4065 / Department Code 0604);
- Advanced Dental Admissions Test Scores will be accepted but not required;
- Dental Match Program code;
- Practice, teaching and research experience;
- Possession of advanced academic degree(s);

- TOEFL scores (for international students only – Institutional code 4892 / Department Code 38)
- Dental National Board Examination scores;
- Letters of recommendation; and
- *Course by Course evaluation* of dental school transcripts – for international applicants (only evaluations by ECE will be accepted).

## Disclaimer

The school reserves the right to modify or change admission standards or requirements at any time without prior notice and effective immediately. The information provided on this site cannot be regarded as creating a binding contract between the student and the school.

## Contact:

Gloria Sue, Admissions Coordinator  
415.929.6677 / gsue@pacific.edu

## Advanced Education in General Dentistry

Applicants must show record they have graduated from North American dental school. There is no tuition to participate in the program; residents receive an educational stipend. The program uses the American Dental Education Association's PASS/MATCH application service to receive application materials. For further information on the Pacific AEGD program application process, please click here (<http://dental.pacific.edu/academic-programs/residency-and-graduate-programs/advanced-education-in-general-dentistry/application-process/>). To learn more about the Union City Dental Care Center, please click here (<http://www.unioncitydentalcare.com/>).

## The Admission Requirements on this page is for the following undergraduate program on the San Francisco campus.

### Arthur A. Dugoni School of Dentistry

Dental Hygiene

University of the Pacific seeks applications from students who have shown by past achievement that they have attained a high level of scholarship, initiative and maturity, possess good character, and have a serious interest in learning. Admission is selective and each applicant is considered on the basis of a variety of factors which are evaluated through a very personalized review. The University is interested in a student body characterized by diverse ethnic, religious, economic and geographic backgrounds.

Please refer to the Office of Admission website for the most current policies regarding all subjects in the following section of this catalog. The website address is [www.pacific.edu/admission.html](http://www.pacific.edu/admission.html) (<http://www.pacific.edu/Admission.html>).

## Undergraduate Admission

[www.pacific.edu/admission.html](http://www.pacific.edu/admission.html) (<http://www.pacific.edu/Admission.html>)

Application Priority Dates

[www.pacific.edu/admission/important-dates.html](http://www.pacific.edu/admission/important-dates.html) (<http://www.pacific.edu/Admission/Important-Dates.html>)

## Fall Freshman Applicants

November 15 Application Priority Date

- All Pre-Pharmacy Applicants/Notification: January 15
- All Pre-Dental Applicants/Notification: January 15
- All Powell Scholarship Applicants/Notification : March 15
- All Early Action Admission Program Applicants /Notification: January 15

January 15 Application Priority Date

- Regular Admission Program (all majors not listed above)/Notification: March 15

Applications are reviewed once they are complete. Most students are mailed notification in mid-March. The University of the Pacific adheres to the May 1 national candidates reply date. It is on or before this date that the University expects a reply to its offer of admission for the fall semester.

## Fall Transfer Applicants

February 15

Priority Admission and Financial Aid Application Date to Receive the Best Possible Financial Aid Package (based on individual circumstances and financial aid eligibility)

June 1

- Deadline for All Transfer Applicants and outstanding documents

## Spring Freshman & Transfer Applicants

August 1

- Dental Hygiene Transfer Applicants

November 15

- All applicants (excluding Dental Hygiene applicants)/Notification: Rolling

Applications may be considered after these dates but space may be limited. Because of certain special procedures in the handling of applications for international students, these applications should be completed earlier than U.S. applications. Candidates for the Doctor of Pharmacy program should refer to the PharmD website: [www.pacific.edu/pharmd](http://www.pacific.edu/pharmd) (<http://www.pacific.edu/pharmd/>) for deadline information.

## Early Action Admission Option

University of the Pacific offers a non-binding Early Action plan for high school students with exceptionally strong high school records, test scores and recommendations. Applicants who wish to be considered for Early Action must have a completed application on file with the Office of Admission postmarked by November 15. Early Action applicants are notified in mid-January. Those admitted under this plan have the same National Candidates Reply Date of May 1 as all other admitted students.

## Interviews

Prospective students are encouraged to visit the campus, but formal interviews are not usually required for freshman or transfer applicants (except Powell Scholars, Pacific Humanities, Pacific Legal Scholars, and Organizational Behavior). The University reserves the right to ask prospective students to appear for an interview as part of the admissions

procedure when such an interview appears appropriate and would assist in determining the applicant's qualifications for admission.

## Campus Visits

[www.pacific.edu/visitus](http://www.pacific.edu/visitus) (<http://www.pacific.edu/visitus/>)

Prospective students are invited to visit the campus as guests of the University. It is recommended that prospective students visit the campus when classes are in session, avoiding weekends or University vacation periods. (See Academic Calendar).

For individuals or small groups, student-led tours are available most days, Monday through Friday, morning and afternoon as well as some Saturday mornings. Tours and informational sessions for larger groups are also available, but must be planned at least two weeks in advance with the Office of Admission. During the academic year the Office of Admission is open most days Monday through Friday from 8:30 a.m. to 5:00 p.m. and on selected Saturdays from 9:00 a.m. to noon. Summer hours may differ. Saturday visits and tours are by appointment only. Please go to [www.pacific.edu/visitus](http://www.pacific.edu/visitus) (<http://www.pacific.edu/visitus/>) or call the Office of Admission to schedule a visit to campus.

## Appointments, Information and Forms

For information on an area of specific interest, for application forms, or for an admissions appointment, use any of the following information to reach the Office of Admission:

Office of Admission  
University of the Pacific  
3601 Pacific Avenue  
Stockton, CA 95211

Telephone: (209) 946-2211

Fax: (209) 946-2413

Website: [www.pacific.edu/admission](http://www.pacific.edu/admission) (<http://www.pacific.edu/admission/>)

E-mail: [admission@pacific.edu](mailto:admission@pacific.edu)

## Admission of Freshman Students

### Regular Admission

Freshman applicants are those who are either applying while seniors in high school or those who have not taken any college courses since earning their high school diploma or its equivalent. Verification of graduation from an accredited secondary school is required prior to the beginning of the first term of attendance. Exceptions may be made for those who have passed either the General Education Development (GED) Test or the High School Proficiency Exam.

Special emphasis is placed on the coursework selected, the grades achieved in those courses, and the cumulative grade point average. Supporting recommendation from a school counselor or teacher is also important. In addition, the Admission Committee reviews the results of either the SAT or the ACT.

The essay submitted with the University of the Pacific Application is carefully read, and the committee looks at co-curricular activities. Applicants are selected for admission only after a careful review of the entire application file.

### A Completed Freshman Application Includes:

1. Form and Fee: [www.pacific.edu/apply](http://www.pacific.edu/apply) (<http://www.pacific.edu/apply/>)  
On-line application. The application must be filled out and submitted by the applicant.

2. Transcripts: An official copy of transcripts for all high school and/or college coursework including courses offered by extension or correspondence, is required. Failure to acknowledge and submit all records is grounds to deny or revoke admission, or for dismissal from the University or revocation of degrees earned. Applicants must also submit transcripts for any college work taken while still in high school. Transfer applicants do not need to have high school transcripts sent, unless requested. Final official transcripts must be submitted prior to the first day of classes, and must show satisfactory work or the University has the right to revoke the offer of admission.
3. Test Score Policies for Applicants
4. Freshman applicants must submit scores from the SAT and/or ACT. If the applicant has taken the SAT or ACT multiple times, Pacific accepts the highest combination of sub scores from all SAT attempts and highest combination of all sub scores from all ACT attempts.
5. Scores received in January from the December SAT or ACT tests are the last scores that are used for admission or scholarship consideration for fall applicants, except Pre-Dentistry and Pre-Pharmacy applicants for whom the November test scores will be accepted. Students for whom later tests are the first and only test taken are exempt from this policy.

Optional:

- Recommendation: [www.pacific.edu/recommendation](http://www.pacific.edu/recommendation) (<http://www.pacific.edu/recommendation/>). One academic recommendation from an academic teacher, counselor or advisor is recommended. Those recommending an applicant may use the online form at [www.pacific.edu/recommendation](http://www.pacific.edu/recommendation) (<http://www.pacific.edu/recommendation/>) or send a written recommendation on official letterhead.
- Essay: A personal statement as part of the application.

## Special Admission Requirements

- Music Applicants: [www.pacific.edu/music](http://www.pacific.edu/music) (<http://www.pacific.edu/music/>) In addition to academic requirements, who apply for admission to the Conservatory of Music must present evidence of music talent and achievement by performing an audition on the principal performing medium. Those who plan to major in composition must also submit an original composition. Auditions are held at the Conservatory at regular intervals throughout the academic year. Students unable to appear in person may substitute a recorded audition. Audition information is available at [www.pacific.edu/music](http://www.pacific.edu/music) (<http://www.pacific.edu/music/>) or by calling the Conservatory of Music at (209) 946-2418.

## Recommended High School Preparation

Although University of the Pacific does not require a fixed pattern of secondary school courses, applicants are expected to complete a solid college preparatory program. Generally speaking, preparatory courses are those in the fields of English, social sciences, foreign languages, laboratory sciences and mathematics.

It is strongly recommended that the following be included in the secondary school program: four years of English; three years of mathematics including algebra I, II and geometry; at least two years of laboratory science in at least two disciplines (biology, chemistry, earth science or physics); at least two years of the same foreign language; three years of social science; one year of fine or performing arts; and

additional academic courses – all aimed at improving analytical abilities, promoting artistic development and strengthening written and oral skills.

Students interested in economics or business administration should take advanced mathematics in high school. Students interested in mathematics, science, engineering, dentistry or pharmacy should include biology, chemistry and physics as well as advanced mathematics in their secondary school program. (See chart for recommended course of study.)

## Recommended Courses

Course Others	Science & Technical	All Majors
English	4 years	4 years
Fine Arts/Performing Arts	1 year	1 year
Foreign Language (one)	2 units	2 years
Social Science	2 years	3 years
Mathematics*	4 years	3 years
Laboratory Science**	3 years	2 years
Academic Electives***	1 year	1 year

\* Suggested math sequence for science and technical majors: algebra, geometry, algebra II, trigonometry or calculus. Minimum suggest math sequence for all other majors: algebra, geometry, algebra II.

\*\* Biology, chemistry and physics are recommended for all students pursuing science and technical disciplines.

\*\*\* Academic elective courses should be in advanced foreign languages, mathematics, laboratory sciences or other solid preparatory courses.

Since the senior year in high school is perhaps the most important in preparing for college, a minimum program of four academic courses per semester is particularly recommended for that year.

Students are also encouraged to take honors and advanced placement courses whenever possible. In reviewing applications, the Office of Admission gives favorable consideration, not only to the overall strength of the academic program, but to the fact that honors and advanced placement courses have been taken.

## Advanced Placement, International Baccalaureate and College Credits Earned While In High School

Please see [www.pacific.edu/advancedcredit](http://www.pacific.edu/advancedcredit) (<http://www.pacific.edu/advancedcredit/>) for the latest policies regarding granting of advance credit. College credit (four units per examination) may be granted to students who achieve scores of a four and five on Advanced Placement examinations and/or scores of five through seven on International Baccalaureate exams taken at the higher level. A maximum of 28 units total from Advanced Placement, International Baccalaureate, DANTES and/or CLEP test results may be applied toward a Pacific degree including General Education and major requirements.

In addition, students who have taken college courses prior to high school graduation receive credit toward University of the Pacific graduation, as long as the credit is transferable, is earned at an accredited college and is awarded college credit on a transcript generated by that college. The purpose is to recognize advanced work of quality already accomplished by certain students, to preclude duplication of courses, and to provide increased opportunity for exceptional students to take elective work in their undergraduate programs. (See also the CLEP information below.)

## College-Level Examination Program (CLEP)

College credit may be granted, within certain limitations, for the General and Subject Examinations offered through the College-Level Examination

Program (CLEP) of the College Board when satisfactory scores have been earned. This program may be utilized by entering freshmen who take the tests prior to matriculation for the purpose of earning advanced standing credit, by regularly enrolled students for accelerating their programs or demonstrating competency in certain subjects, or by candidates for transfer who desire advanced credit or present the tests in support of applications for admission. Further details can be obtained from the Office of Admission.

A total of no more than 20 units may be applied toward a degree from any or all of the following: courses taken in accredited correspondence schools, extension correspondence schools, extension courses, and/or courses taken credit by examination. None of these credits, except extension courses taken at the University, is accepted during the term in which the student is completing requirements for graduation in this University.

A total of no more than 28 units may be applied towards a degree from Advanced Placement (AP), International Baccalaureate (IB), DANTES and/or CLEP tests.

## Admission of Undergraduate Transfers

[www.pacific.edu/transfer](http://www.pacific.edu/transfer) (<http://www.pacific.edu/transfer/>)

To be considered for admission a transfer applicant must:

- Be in good academic standing at the college in which he/she/they are currently enrolled
- Have demonstrated academic ability in his/her/their selected major

## A Completed Transfer Application Includes:

1. Form and Fee: [www.pacific.edu/apply](http://www.pacific.edu/apply) (<http://www.pacific.edu/apply/>)  
On-line application. The application must be filled out and submitted by the applicant.

2. Official Transcripts from all colleges attended

If transferable credits are less than 30 semester units:

1. High School Transcripts
2. SAT-I or ACT scores

Optional:

- Recommendation: [www.pacific.edu/recommendation](http://www.pacific.edu/recommendation) (<http://www.pacific.edu/recommendation/>). One academic recommendation from an academic teacher, counselor or advisor is required. Those recommending an applicant may use the online form at [www.pacific.edu/recommendation](http://www.pacific.edu/recommendation) (<http://www.pacific.edu/recommendation/>) or send a written recommendation on official letterhead.
- Essay: A personal statement as part of the application.

## Special Admission Requirements

- Music Applicants: [www.pacific.edu/music](http://www.pacific.edu/music) (<http://www.pacific.edu/music/>) In addition to academic requirements, who apply for admission to the Conservatory of Music must present evidence of music talent and achievement by performing an audition on the principal performing medium. Those who plan to major in composition must also submit an original composition. Auditions are held at the Conservatory at regular intervals throughout the academic year. Students unable to appear in person may substitute a recorded audition. Audition information is available at [www.pacific.edu/music](http://www.pacific.edu/music)

(<http://www.pacific.edu/music/>) or by calling the Conservatory of Music at (209) 946-2418.

- Dental Hygiene Applicants: [www.pacific.edu/dentalhygiene](http://www.pacific.edu/dentalhygiene) (<http://www.pacific.edu/dentalhygiene/>) Strong candidates who apply for the dental hygiene program are invited to campus for an interview after items one through five (above) have been received. Dental Hygiene applicants have separate application deadlines (September 1 for Spring). After an initial review, strong dental hygiene candidates are invited for interviews that are required for admission into the program.

## Transferable Courses and Unit Limitations

The complete Transfer Credit Policy can be found on the Office of the Registrar website (<http://www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-the-Registrar/Undergraduate-Transfer-Credit-Policy.html>).

- In interpreting transfer credit, University of the Pacific generally accepts those courses which are of the same quality and equivalency as courses offered on this campus.
- Courses taught at a community college are not acceptable to replace upper division courses at Pacific.
- The maximum number of units that is accepted from a community college is 70 and no community college credit is accepted after a student has completed 70 units from all institutions attended. Courses are accepted in chronological order.
- A course with a grade of C- or below does not transfer to Pacific. No units are awarded for that course and it does not fulfill any requirements towards a degree.
- If a student repeats a course in which a C- or below was earned, the most recent grade is used and a new GPA for the course is calculated for the transfer admission grade point average only. *Note: Only course content and credit are accepted in transfer; the associated grades do not become a part of the Pacific record.*
- If a student repeats a course in which a C or higher is earned, the second attempt is calculated in the GPA. No units are awarded for the repeated course.
- Transfer applicants who attended universities outside of the United States **must** submit an evaluation of their academic records. Transcripts must be reviewed by one of the articulation review companies listed online at <http://go.pacific.edu/international> (<http://go.pacific.edu/international/>) evaluation and have an official copy sent directly to University of the Pacific. Students who attended universities outside of the United States **must also** submit course descriptions in English of their completed university work. The course descriptions must come from either the school's website or official catalog. Please send the course descriptions to University of the Pacific's Office of Admission.

## Special Admission

Certain transfer applicants, such as veterans, or adult re-entry students and others with special circumstances, are given special consideration for admission when it is determined that they have the potential for satisfactory college work.

## Admission of International Students

[www.pacific.edu/international](http://www.pacific.edu/international) (<http://www.pacific.edu/international/>)

University of the Pacific welcomes applications from international students and provides complete support services for them through International Programs and Services. The University is authorized to

issue appropriate immigration documents to international students for immigration purposes and provides immigration services to enrolled students.

In order to comply with regulations of the United States Citizenship and Immigration Service, University of the Pacific requires international applicants who are not citizens or permanent residents of the United States to submit a detailed Certification of Finances showing sufficient financial resources for study at the University. Other special information and instructions regarding the admission of international students is provided upon request.

## Special Requirements for Non-Native Speakers of English

Applicants who are not native speakers of English are expected to provide evidence of proficiency in the English language. Such proficiency may be demonstrated through the academic record, or by means of an English Language Proficiency Exam like the IETLS or TOEFL. For the most current English Proficiency review criteria please visit <http://go.pacific.edu/international> (<http://go.pacific.edu/international/>) The University reserves the right to administer its own English language test to new students and to adjust a student's academic program on the basis of test results.

## Admission of Veterans

University of the Pacific encourages veterans to apply for admission and is approved under Federal and State laws for the training of veterans. Satisfactory completion of a period of military service is taken into consideration in the evaluation for admission.

## Accelerated Programs

### Pre-Pharmacy Advantage Programs

[www.pacific.edu/prepharm](http://www.pacific.edu/prepharm) (<http://www.pacific.edu/prepharm/>)

Pacific offers three options which provide for guaranteed admission into our Professional Pharmacy (PharmD) Program, if all pre-pharmacy advantage requirements, which include courses taken in sequence at Pacific and minimum GPAs, are met and the formal pharmacy interview (which includes a writing sample) is passed. The current university minimum GPA requirement needed as one part of advancing from any of these Pre-Pharmacy Advantage Programs into our Professional Pharmacy Program is 3.00 overall and 2.70 in selected math/science courses.

The implementation of specific admission criteria for the Pre-Pharmacy Advantage Program are meant to ensure that students have the appropriate time to successfully prepare for advancement into the Professional Pharmacy Program.

### Five-Year (2+3) Pre-Pharmacy/PharmD Option

Freshmen are admitted directly into the Pre-Pharmacy Program in the School of Pharmacy. After two years, they advance into the PharmD Program if they have fulfilled all pre-pharmacy advantage requirements.

### Six-Year (3+3) Pre-Pharmacy/PharmD Option

Freshmen are admitted directly into the Pre-Pharmacy Program in the School of Pharmacy. After three years, they advance into the PharmD Program if they have fulfilled all pre-pharmacy advantage requirements.

### Seven-Year (4+3) Bachelor's/PharmD Option

These Pre-Pharmacy applicants are admitted to any major at Pacific and pursue a Bachelor's degree, while also completing the pre-requisites

for the Doctor of Pharmacy Program. If they complete their Bachelor's degree in four years (but no more than five years) they are eligible to advance into the PharmD Program if they have fulfilled all of the same Pre-Pharmacy advantage requirements. This option ensures that these students are on track from the beginning of their college careers to earn, at least, a Bachelor's degree.

*Please note: There is no formal Pre-Pharmacy Advantage available to a student who attends another institution for a semester or a year or two and then transfers as a science major into Pacific's Arts and Sciences division. We have excellent undergraduate programs to which transfers are welcome to apply, but once here, these students compete with those who apply from other institutions for space in the PharmD Program.*

## Accelerated Dental Programs

[www.pacific.edu/preident](http://www.pacific.edu/preident) (<http://www.pacific.edu/preident/>)

Pacific offers three accelerated dental programs to first-time freshmen which combine undergraduate preparation with the only three-year DDS program in the country. Students admitted to any of these programs are admitted to Pacific's Arthur A. Dugoni School of Dentistry if they meet the requirements outlined on the Pre-Dental Advantage website. Students complete their pre-dental courses at Pacific's main campus in Stockton and their professional courses at Pacific's Arthur A. Dugoni School of Dentistry in San Francisco.

Any freshman applicant who selects "pre-dental" from the list of majors on his/her/their application for undergraduate admission is automatically considered for all three programs. Please note that students admitted to the 2+3 program are also automatically admitted into the 3+3 and the 4+3 programs, and those students admitted to the 3+3 program are also admitted to the 4+3 program. It is also important to note that the 2+3 and 3+3 programs do not "accelerate" four years worth of undergraduate study into two or three years. Students in these two programs take the same course load as most students on campus, they simply take only those specific courses which meet the requirements to advance to the Arthur A. Dugoni School of Dentistry after two or three years.

The following minimum criteria for consideration are valid for students entering in the Fall semester. Pacific reserves the right to change criteria for students entering in subsequent years.

### Five-Year (2+3) Pre-Dental/Doctor of Dental Surgery (DDS)

Program allows completion of two years (four regular semesters) of specific Pre-Dental and general education courses on Pacific's Stockton campus. This is then followed by three years (eight semesters in 36 months) at the Arthur A. Dugoni School of Dentistry in San Francisco. Upon successful completion of the five-year program, the student earns a DDS degree.

### Six-Year (3+3) Bachelor's/DDS

Program allows for completion of all Pre-Dental and general education requirements, and the courses for a major in either Biological Sciences or Chemistry in three years (six regular semesters). The credit from the first year of dental school can then be used to earn a bachelor's degree, and the DDS degree is earned upon completion of the third year of dental school.

### Seven-Year (4+3) Bachelor's/DDS

Program allows students to major in almost any discipline, while they complete all Pre-Dental and general education requirements, prior to entering the DDS program.

## Pacific Legal Scholars

### Six-Year (3+3) Bachelor's/Juris Doctorate (JD)

<http://go.pacific.edu/LegalScholars>

This program permits highly qualified students to enroll at University of the Pacific's McGeorge School of Law during the fourth year of study at the University and complete a bachelor's degree at the end of the first year of law school. Students must apply for admission to the Pacific Legal Scholars program and meet program admissions requirements, including an admissions interview. To move on to the McGeorge School of Law, students must complete all general education and major course requirements, complete three seminars and an upper division law course to prepare for law school and participate in a number of off-campus law-related activities. They must also complete the application for admission to University of the Pacific's McGeorge School of Law and meet all admissions criteria including the median LSAT score and undergraduate GPA for the prior year's matriculating students. The Pacific Legal Scholars Program is open to students in any major, but some majors may not be possible to complete in three academic years. A 4+3 version of the program is also available.

## Admission of Professional PharmD Students

[www.pacific.edu/pharmd](http://www.pacific.edu/pharmd) (<http://www.pacific.edu/pharmd/>)

Students who seek admission to the Doctor of Pharmacy degree program who did not enter Pacific as a freshman through the pre-pharmacy advantage program must have completed a minimum of 64 transferable units prior to matriculation. These units must be in specific courses which meet University of the Pacific Thomas J. Long School of Pharmacy requirements. Therefore, no application to the Doctor of Pharmacy program is accepted unless the applicant has taken, is taking, or plans to take, all of these pre-pharmacy courses prior to enrollment (see specifics in School of Pharmacy section). Students who have not taken organic chemistry or biology within the last seven years must enroll in refresher courses before entering.

Admission to the Doctor of Pharmacy degree program is competitive. Factors considered in the application review include overall grades, math/science grades, difficulty of course loads, academic performance trends, curriculum selection, recommendations, involvement in clubs, organizations and community service, demonstrated leadership positions, pharmacy work experience, communication skills, and a mandatory interview.

All students applying to the Doctor of Pharmacy program must apply through the Pharmacy College Application Service (PharmCAS): [www.pharmacas.org](http://www.pharmacas.org) (<http://www.pharmacas.org/>). Pacific's application deadlines, and all instructions for applying for this program, is found at [www.pacific.edu/pharmd](http://www.pacific.edu/pharmd) (<http://www.pacific.edu/pharmd/>). It is critical that candidates submit all required information in a timely manner. Applications are not reviewed until they are complete. Students who complete their files after published deadlines are considered on a space available basis only. A completed application includes: PharmCAS application and fee, supplemental application form and fee, two recommendations (on required forms), Educational Background Chart, resume, and official transcripts from all colleges and universities attended. International students must also supply an official letter on bank stationery that verifies funding for at least one full year, a copy of their I-20 form, and a copy of their I-94 form, and furnish an international address. Some documents must be sent to PharmCAS and some to Pacific. Students with international coursework are required to submit an evaluation from Educational Credential Evaluators (ECE). Students whose native language is not English may be requested to submit scores from the Test of English as a Foreign Language (TOEFL). The minimum acceptable TOEFL score for admission consideration is 550 (paper-



based), 213 (computer-based), or 80 (Internet Based). An IELTS score of 6.5 is acceptable in place of the TOEFL.

All admitted students are required to grant consent for a background investigation and to read and agree to the Technical Standards for Pharmacy Admission and Graduation prior to matriculation. Final approval for admission will not be granted until the background investigation results are reviewed. Additional information on the Technical Standards for the Doctor of Pharmacy program can be found at: <http://www.pacific.edu/Admission/Graduate-Professional/Pharmacy/Pharm-D-Technical-Standards.html> (<http://web.pacific.edu/Admission/Professional/Pharmacy/Pharm-D-Technical-Standards.html>).

Please visit [www.pacific.edu/pharmd](http://www.pacific.edu/pharmd) (<http://www.pacific.edu/pharmd/>) for details on application requirements. Direct any questions about the Thomas J. Long School of Pharmacy to the Coordinator for Pharmacy Admission at (209) 946-2211.

## Enrollment Deposit

An enrollment deposit is required of all admitted applicants to hold the applicant's space in the academic program. This enrollment deposit is nonrefundable, unless otherwise noted, and is applied toward the student's first-term tuition upon matriculation to the University. Deposit amounts may vary depending upon the academic program.

## Campus Map

### Location

University of the Pacific  
155 Fifth Street  
San Francisco, CA 94103  
415.929.6400

Map >> ([http://maps.google.com/maps?](http://maps.google.com/maps?ll=37.774428,-122.389628&mapclient=embed&q=155%205th%20St%20San%20Francisco,%20CA%2094103/)

[ll=37.774428,-122.389628&mapclient=embed&q=155%205th%20St%20San%20Francisco,%20CA%2094103/](http://maps.google.com/maps?ll=37.774428,-122.389628&mapclient=embed&q=155%205th%20St%20San%20Francisco,%20CA%2094103/))

### BART

Take BART to Powell Street Station. Exit at the Fifth Street exit. Walk to the corner of Market and Fifth Street and turn left. The school is located at the corner of Fifth and Minna. For more information about BART, please visit <http://bart.gov>.

### Bus Lines (MUNI)

For information about bus, streetcar and light rail routes and schedules in the area, please visit [www.sfmuni.com](http://www.sfmuni.com) (<http://www.sfmuni.com>).

Bus Routes	Nearest Stop to Dental School
KT, J, L, M, N, S	Metro Powell Station
5, 5L, 21, 31, Powell-Hyde, Powell-Mason	Market Street and Powell Street
F, 6, 9, 9L, 71	Market Street and Fifth Street
8X, 27, 30, 45	Howard Street and Fifth Street
14, 14L	Mission Street and Fifth Street
12	Folsom Street and Fifth Street

### CalTrain

The nearest Caltrain station is the San Francisco Station located at 700 Fourth Street. From there, patients and visitors may either walk to the dental school or transfer to Muni lines 30, 45, N or T.

### Parking

We recommend public transportation, as street parking is very limited. If you chose to drive, please allow yourself plenty of time to find parking.

The nearest garage is the Fifth and Mission/Yerba Buena Garage (<http://www.fifthandmission.com/>), and its entrance is on Mission Street.

There are also several parking garages nearby for longer visits. Details about meter rates and tips about parking in the city are available here:

- <http://www.sfmta.com/getting-around/parking> (<http://www.sfmta.com/getting-around/parking/>)
- <http://www.cityparksf.com>

## Traveling by Car From the Bay Bridge

Take the Fifth Street exit to Fifth Street and proceed north to Mission Street. The campus is located at 155 Fifth Street (between Howard and Mission Street).

## From the Golden Gate Bridge

After crossing the bridge to San Francisco, proceed to the Lombard Street exit. Follow Lombard to Van Ness (101 South) go right on Van Ness, continue on to O'Farrell Street. Left on O'Farrell Street, right on Hyde Street (becomes Eighth Street as it crosses Market Street). After crossing Market proceed one block to Mission, left on Mission Street to Fifth Street, turn right on Fifth Street, and 155 Fifth Street will be on your left.

## From 101 North

Exit at the Seventh Street exit, Seventh Street north to Mission Street, turn right on Mission, turn right on Fifth Street.

## From 280 North

Exit at Sixth Street, continue north on Sixth Street to Mission Street, go right on Mission one block, and turn right at Fifth.

For information about airport transportation services to the dental school, please visit the San Francisco International Airport (<http://www.flysfo.com>), Oakland International Airport (<http://www.oaklandairport.com>) or San Jose International Airport (<http://www.sjc.org/>).

## Division of Student Life

- Graduate/Undergraduate (p. 40)
- Professional (p. 40)

## Graduate/Undergraduate

### Arthur A. Dugoni School of Dentistry

Dental Hygiene

### College of the Pacific

Food Studies

### Conservatory of Music

Music Therpay

### School of Engineering and Computer Science

Data Science

### School of Health Sciences

Audiology

## Professional

### Arthur A. Dugoni School of Dentistry

Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

# Division of Student Life on this page are for the following graduate and undergraduate programs on the San Francisco campus.

**Arthur A. Dugoni School of Dentistry**  
Dental Hygiene

**Conservatory of Music**  
Music Therapy

**School of Engineering and Computer Science**  
Data Science

**School of Health Sciences**  
Audiology

The vision of Student Life at Pacific is to be a leader and advocate within the University of the Pacific and our profession by inspiring and cultivating global student citizens for a lifetime of learning, growth, engagement, and service. The mission of Student Life is to provide transformative educational experiences and essential services that advance student success. Through innovative thinking and dynamic programs, each Student Life member focuses on students' personal growth and educational experience. These values inform our individual roles and departmental functions and unify us as a Division. We realize our mission through:

- **Potential** - We are committed to providing a living, learning, and working environment that encourages both our students and our staff to reach their full potential;
- **Student Development** - We believe in educating the whole student by developing and supporting their emotional, environmental, financial, ethical, intellectual, physical, and social needs;
- **Meaning and Purpose** - We believe in the importance of providing opportunities to those seeking meaning and purpose in ones' life and value the various activities and practices associated with a religious or spiritual tradition including, but not limited to, meditation, reflection, or prayer;
- **Responsible Leadership** - We believe that leadership manifests itself in many forms. It can be taught, developed, and nurtured and is a tool that encourages success throughout a student's education, lives', and future careers;
- **Achievement** – We believe that each student is unique and deserves a comprehensive system of support services that will assist in meeting their educational and personal goals;
- **Diversity and Inclusion** - We are committed to social justice, diversity, and challenging forms of hate and exclusion, and;
- **Community Involvement** - We believe in the value of community service, volunteerism, and in the importance of civic engagement, connection, and participation.

## Student Outreach and Academic Support Services

### Community Involvement Program

The Community Involvement Program (CIP), established in 1969, is a comprehensive need-based scholarship and retention program for first-generation college students from the Stockton community who have demonstrated the potential for sustainable leadership, community awareness, and involvement. The Community Involvement Program

is only for new incoming University of the Pacific students. Once in the program, students are offered leadership training and various opportunities for students to return to the community as leaders and agents of social change.

Students in the Community Involvement Program are selected based on their participation in the Stockton community, maturity, and potential to contribute his/her time and energy to the Community Involvement Program. CIP students contribute a significant amount of time in the Stockton community through volunteering at various community organizations. For more information contact the CIP Office at:

Center for Student Success  
McCaffrey Center, First Floor  
Telephone: (209) 946-2436  
Fax: (209) 946-2176  
Email: [cip@pacific.edu](mailto:cip@pacific.edu)

### The Women's Resource Center

The Women's Resource Center (WRC) aims to increase awareness and scholarship regarding women's and gender issues, to celebrate and cultivate leadership on campus and beyond, and to empower students to be active participants in bringing about social change. Annual events hosted by the WRC include the Women of Distinction Awards Luncheon as well as programming for Women's History Month, Sexual Assault Awareness, and Domestic Violence Awareness. In partnership with the Office of Title IX, the WRC runs the Title IX Peer Education Program to encourage students to help end gendered violence in our community. Located inside the Intercultural Student Success Center, the WRC is a welcoming space for students to study, relax, and find community.

### Military and Veteran Student Support Center

Proud of its designation as being a military friendly institution, the University of the Pacific is dedicated to serving the needs of those who previously were in, or currently are serving in, the United States armed services and their qualified dependents. The Military and Veteran Student Support Center is the hub Veteran student life and offers help and assistance in the application, certification, and coordination of military and veteran educational benefits, the synchronization of University support services with the needs of Veteran students, and in being a liaison between Veteran students and the Department of Veterans Affairs.

### Intercultural Student Success

Intercultural Student Success (<http://www.pacific.edu/Campus-Life/Diversity-and-Inclusion/Multicultural-Affairs.html>) strives to provide enriching educational opportunities for students of all backgrounds. ISS is an inclusive community that advances student success by helping students navigate their identity development and build intercultural competence. The department includes the ALANA (African, Latinx, Asian Pacific Islander, Native American) Center, Black Student Success, El Centro (Latinx Outreach), The Pride Resource Center, and the Women's Resource Center. Together, these areas work to help support students' intersectional identities through building community, capacity, and advocacy.

The Pride Resource Center (<http://www.pacific.edu/Campus-Life/Diversity-and-Inclusion/Pride-Resource-Center.html>) provides holistic and identity conscious support services to the lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual (LGBTQIA+) community at Pacific. Signature programs and events include: Safe Zone LGBTQ+ Awareness & Allyship Training, National Coming Out Day, Pacific Pride Week, and Lavender Graduation. The PRC strives to be a leader and

advocate for LGBTQ+ inclusion and equity within the University of the Pacific and the greater Stockton community.

## El Centro (Latinx Outreach and Academic Resource Center)

El Centro's mission is to assist in recruiting new undergraduate students, retain current students, build mutual beneficial partnerships with community organizations, connecting students to internal and external resources, advising Latinx-focused student groups, and in planning and developing rich and relevant programming around Latino/a/x themes and issues. El Centro also helps the University's commitment to diversity, inclusivity, national/ international education and cross-cultural understanding. El Centro is a home away from home for all students on or off campus.

Some of our annual events include Bienvenidos Week, Student Financial Aid and College Awareness Workshop, Raza Unida Conference, Pozole for the Academic Soul, Latinx Heritage Month, and Latinx Graduation.

We are located at Raymond Lodge (El Centro) between Casa Warner and Price House Residence Halls and across from the Vereschagin Alumni House. For more information call 209.946.7705 or check out our website for upcoming events and activities at

<http://www.pacific.edu/Campus-Life/Diversity-and-Inclusion/Latino-Outreach.html>

## Black Student Success

Black Student Success offers programs and support services to students of African descent. Throughout the school year, Black Student Success hosts receptions, academic workshops, networking events with members of the Black Alumni Club, and social events. Black Student Success also offers book scholarships of up to \$250 for students in need.

A signature program of Black Student Success is Students Emerging as Pacificans (STEPS) program. STEPS is a 4-day retreat that assists incoming students of African descent with their transition to college life. Pacific faculty, staff, current students, and alumni work directly with STEPS participants, introducing them to University and community resources to enhance their academic and co-curricular success.

## Pacific Health Services

Pacific Health Services is available Monday, Wednesday and Thursday on the San Francisco campus. The on-site nurse practitioner is supported by an extended professional staff that includes a supervising physician, other nurse practitioners, and a registered dietitian. Services available to students include health education, wellness information, and direct care during illness. Visit the health services website (<http://www.pacific.edu/healthservices/>) for more information.

## Health Insurance

Health insurance is a mandatory non-academic condition for enrollment. To ensure that all students have adequate health care coverage, including ongoing primary and specialty care, and to satisfy the mandatory health insurance requirement, Pacific automatically enrolls all registered students listed below into the Anthem Blue Cross of CA PPO, Student Health Insurance Plan (SHIP).

- Undergraduate and Pharmacy Students enrolled in **9** or more units
- Dental Students, International Students, and Graduate Students enrolled in **1** or more units
- Law Students enrolled in **6** or more units
- Advanced Education in General Dentistry (AEGD): **all residents**

***This policy excludes distance learning, off-campus, and external programs, and therefore students are not eligible to enroll in SHIP.***

Each term that a qualified student is enrolled in classes at Pacific, the student account is automatically charged the fee for SHIP and you will be enrolled automatically\*. The fee will appear on your e-bill statement as a separate charge.

Qualified students who have their own comprehensive health insurance coverage and do not wish to be enrolled in Anthem Blue Cross PPO may apply to waive out of the Student Health Insurance Plan (SHIP).

**Health Insurance Waiver Requirements: Your health insurance plan must include ALL of the following in order to qualify for a waiver (Domestic and International Students)**

- The plan must provide coverage for medical evacuation of \$50,000 and repatriation of remains of \$25,000 (**International Students**)
- coverage for the entire academic year
- must be a U.S. based insurance company
- coverage for inpatient and outpatient hospitalizations
- coverage to local doctors, specialists, hospitals, and other health care providers in emergency and non-emergency situations within your campus area
- coverage for lab work, diagnostic x-rays, emergency room treatment, and prescription coverage within your campus area
- coverage for inpatient and outpatient mental health, substance abuse and counseling services in your campus area

**The following types of insurance plans are NOT acceptable and will NOT be considered:**

- Non-ACA (Affordable Care Act (<https://www.healthcare.gov/where-can-i-read-the-affordable-care-act/>)) compliant health care plan
- Short Term Medical Plans that are available to purchase on a weekly or monthly basis
- Insurance Plans that are underwritten in a Country outside of the United States
- California Medi-Cal Health Plans that do NOT have assigned benefit coverage in your UOP campus area
- Out of State Medicaid Insurance does not cover students in California

**All waivers must be submitted during the open waiver period.**

**For the waiver period and more information please visit: <https://www.pacific.edu/healthservices>**

## Counseling and Psychological Services (CAPS)

- The CAPS mission is to promote student growth and development, with regard to both personal characteristics and interpersonal competencies. We do this in the service of enabling students to benefit from and maximize their educational experience at Pacific. We also consistently strive to integrate multiculturalism into the everyday functioning and structure of our agency. Through the broad range of therapeutic services that we offer, persons may come to appreciate the uniqueness of their personalities and discover new ways to develop their potential. We have seen students make personal progress through the therapeutic process and tools provided by CAPS. We utilize a stepped care model to provide students with the tools they need to be academically successful.
- Services on the Sacramento campus are located in Halbert Hall. CAPS services are confidential and are funded, in part, by the Wellness Fee. We do not bill insurance. Students have access to individual and couples therapy on Monday, Tuesday, and Friday of

each week, these meetings are by appointment only and can be scheduled in person at Halbert Hall or by calling 209.946.2315 x2. CAPS also offers online self-guided therapy, and a 24/7 crisis services for phone appointments. To access our crisis phone therapist call 209.946.2315 x2, if it is during business hours asks to be transferred to the on-call therapist. If it is after business hours, wait for the CAPS voicemail to begin and then choose option 4. Additionally, limited psychiatric consultation and medication management is available on the Stockton campus.

- For more information please see our website: [www.pacific.edu/CAPS/Sacramento](http://www.pacific.edu/CAPS/Sacramento) (<http://www.pacific.edu/CAPS/Sacramento/>) or call 209.946.2315 Ext. 2.

## Pacific PROMISE Scholars

The University of the Pacific is proud to be a private institution of higher education to provide a support program to assist its students who are former foster care students and others from similar backgrounds. Eligible students can receive many services to assist in their successful transition to Pacific including mentoring, social events, college starter kits and finals baskets. In addition, scholarships may be available for eligible students.

For more information, contact: Pacific PROMISE Scholars  
McCaffrey Center, First Floor  
Phone: (209) 946-3917  
Email: [abautist@pacific.edu](mailto:abautist@pacific.edu)

## Religious and Spiritual Life

Our goal is to cultivate and support religious and spiritual life at Pacific in all its many forms. We serve the needs of all students, no matter what one's religious tradition, or if you don't consider yourself religious or spiritual at all. While we make no claim to have all of life's answers, we can help point you in the right direction, provide resources for you, and work with you through the questions that will inevitably arise as you grow during your time at university. We can also help you find people or groups who share your interests. Our hope is that in doing so you will find a level of fulfillment, understanding, and perhaps meet other people who you can journey with in the questions of life.

The multifaith Chaplain's Office in Religious and Spiritual Life provides spiritual care and support for all students. Visit Sears Hall (connected to Morris Chapel) to meet the Chaplains and Affiliate Campus Ministers. Pacific has many active religious, faith, and spiritually-based student organizations including (among others): Asian American Christian Fellowship, Black Campus Ministries, Chi Alpha Christian Fellowship, Fellowship of Christian Athletes, Health Sciences Christian Fellowship, Hillel Jewish Student Club, Indian Student Association, Interfaith Council, Muslim Student Association, Newman Catholic Community, Nest Prayer Family, Open Door Methodist Student Ministry, Orthodox Christian Fellowship, Pacific Christian Fellowship (Intersarsity), Secular Student Alliance, and Sikh Student Association. There are also over 160 different churches, synagogues, and other places of worship and religious organizations in the greater Stockton area. Go to [pacific.edu/religiouslife](http://pacific.edu/religiouslife) for more information.

## Academic Standards

### Student Conduct and Community Standards

The Office of Student Conduct and Community Standards manages the student conduct process for students, including but not limited to, undergraduate and graduate students on Pacific's three campuses. In addition to the Code of Conduct, specific schools and programs may have policies and procedures that apply to students enrolled in a specific program of study. Pacific has developed policies and procedures to clarify

the expectations and standards for students. Each student is responsible for knowing and adhering to all University policies and procedures. These policies are explicitly outlined in the Tiger Lore Student Handbook and on the web site at <http://go.pacific.edu/tigerlore> (<http://www.pacific.edu/Campus-Life/Safety-and-Conduct/Student-Conduct/Tiger-Lore-Student-Handbook-.html>) Policies and procedures specific to a course of study are available through the respective school or program.

### Honor Code

The Honor Code at the University of the Pacific calls upon each student to exhibit a high degree of maturity, responsibility, and personal integrity. Students are expected to:

- 1) Act honestly in all matters;
- 2) Actively encourage academic integrity;
- 3) Discourage any form of cheating or dishonesty by others;
- 4) Inform the instructor and appropriate university administrator if she or he has a reasonable and good faith belief and substantial evidence that a violation of the Academic Honesty Policy has occurred.

## Conduct Standards

### Student Code of Conduct, University Policies, and Local, State, and Federal Laws

The violation of established policies and procedures and local, state, and federal laws may constitute a violation of the Student Code of Conduct or other policies and procedures specific to a course of study, school, or program. Such violations may include conduct occurring off-campus when students are participating, attending, or in some manner connected to a University-related activity. Please refer to <http://www.go.pacific.edu/tigerlore> (<http://www.pacific.edu/Campus-Life/Safety-and-Conduct/Student-Conduct/Tiger-Lore-Student-Handbook-.html>) for additional information and definitions.

### Campus Behavior Standards

Rather than publish in this catalog a complete and detailed code of the laws, rules, and regulations that students are required to follow, the University declares its intention to uphold all federal, state and municipal laws applicable and expects all students to abide by the Student Code of Conduct and university policies. At the time of admission, each student agrees to follow such standards. Accordingly, any conduct not consistent with responsible and lawful behavior may be considered cause for the University to take appropriate administrative, disciplinary, or legal action.

In addition, the University acknowledges and actively upholds the adult status of each student with all the rights pertaining thereto and, in accordance with that status, considers each student responsible for their own actions. With regard to conduct, "student" is defined as full and part-time undergraduate, professional, and graduate students from the time of application for admission to the time of the conferral of a degree and includes periods prior to the start of classes, after classes have ended, between terms, and when a student is not officially enrolled but has an ongoing relationship with Pacific.

University policies and regulations are published in the Student Code of Conduct and available online [go.pacific.edu/tigerlore](http://go.pacific.edu/tigerlore) (<http://www.pacific.edu/Campus-Life/Safety-and-Conduct/Student-Conduct/Tiger-Lore-Student-Handbook-.html>). Statements pertaining to or clarification of student rights is also published in this document. Additional policies for specific schools and programs are respectively available from each school or program.

# Alcohol and Other Drugs Policy

All students, faculty, and staff must comply with all federal, state, and local laws and University policies governing the consumption, possession, distribution, and sale of alcoholic beverages and drugs on University property; at any activity or event on and off the campus sponsored by Pacific; or where a campus community member is representing Pacific as part of an off-campus program, activity, or event.

This notice is provided as a requirement of the Drug-Free Schools and Communities Act of 1990, and the Drug-Free Workplace Act of 1988. Universities that receive federal/state funds in any form are required to comply with the above acts. We must take affirmative steps to prohibit the unlawful possession, use, and/or distribution of illicit drugs and alcohol.

## Description of Health Risks

The misuse of alcohol and/or prescription drugs or use of illicit drugs can result in overdose, death, violence, incarceration, loss of a driver's license, failed relationships, petty property crime, school dropout, lowered productivity and quality, increased absenteeism and tardiness, serious psychobiological and neurobiological problems, reduced concentration, impaired judgment, loss of short term and long term memory, diminished reasoning skills, strained family relationships, damaged fetuses, and other serious life-altering effects. Additional information regarding health risks is available from the Cowell Wellness Center or at [DrugAbuse.gov](http://DrugAbuse.gov)

## Criminal Penalties

Federal penalties for the trafficking of controlled substances are dependent upon several conditions including the substance, amount, and whether the matter is a first offense or repeated offense for an individual or other legal entity.

For a [detailed list of penalties](#)>>

For information on [California DUI penalties](#)>>

For information on [California underage drinking laws](#)>>

## Resources for Assistance

- Alcohol Abuse 24 Hour Action Helpline 800.234.0420
- Alcohol & Drug Treatment Center 24 Hour Helpline 800.711.6375
- Counseling and Psychological Services 209.946.2315 ext. 2
- Employee Assistance Program 877-595-5281
- Pacific Health Services 209.946.2315 ext. 1

**Pacific's alcohol and drug policies are available online:**

- Students: [Student Code of Conduct](#)>>
- McGeorge School of Law students: [McGeorge Substance Abuse Policies and Procedures](#)>>
- Dugoni School of Dentistry students: [Dugoni Alcohol Consumption and Drug Use Policy](#)>>
- All University employees>>

## Pacific Alumni Association

The Pacific Alumni Association (PAA) includes all alumni of the University of the Pacific. There is no membership fee and services are available to all members. An elected Board of Directors (30) develops programs and benefits with the Office of Alumni Relations staff. Opportunities provided to alumni through PAA include Regional Pacific Clubs, class reunions, special events, communications and a variety of benefits.

The Pacific Alumni Association encourages all alumni to maintain their relationship with the University of the Pacific and with one another. For more information call (209) 946-2391.

# Student Academic Support Services

**Office of Services for Students with Disabilities in the Division of Student Life**

The University does not discriminate against students and applicants on the basis of disability, in the administration of its educational and other programs. The University reasonably accommodates qualified students (including applicants) with disabilities as defined by applicable law, if the individual is otherwise qualified to meet the fundamental requirements and aspects of the program of the University, without undue hardship to the University. Harassment on the basis of disability issues is prohibited by the University's policies.

For purposes of reasonable accommodation, a student or applicant with a disability is a person who: (a) has a learning, physical or psychological impairment which limits one or more major life activities (such as walking, seeing, speaking, learning, or working); or (b) has a record with the University by which the University has officially recognized such impairment. To be eligible to continue at the University, the student or applicant must meet the qualifications and requirements expected generally of its students, and must also be able to perform the requirements of the individual major or program in which s/he is enrolled.

A qualified student or applicant is an individual with a disability as defined by this policy and applicable law who meets the academic and technical standards requisite to admission and participation in the educational program or activity. Accommodations are such modifications to the course, program or educational requirements as are necessary and effective for the individual, if reasonable to provide at the University and do not alter the fundamental nature of programs. Accommodations do not include exemption from academic evaluation standards or from the code of student conduct.

Pacific expects that, if a student has a disability, the student gives sufficient notice of the need for assistance (preferably prior to the start of the semester) although the University does fully consider the merits of each request at the time it is received. Upon receiving a request for assistance as well as appropriate documentation, the Director of the Office of Services for Disabilities considers the student's need for assistance as it relates to the documented disability. If appropriate, the University may choose to consult with such individuals, internal or external to the University, to provide further assistance needed to evaluate the request for accommodation. The following list is an example of the types of reasonable accommodations and services that the university may provide, on a case-by-case basis, to assure equal access:

- Academic adjustments and curricular modifications
- Assistive technology
- Consultation with faculty and staff
- Registration assistance and classroom rescheduling
- Readers, scribes, note-taking, and library assistance
- Test proctoring services

Please note the university does not provide or subsidize personal care devices or services such as ambulatory devices or assistance with bathing, dressing, laundry, etc. Referrals to external agencies, however, are available upon request.

For additional information, please contact:

Daniel Nuss, Director  
Office of Services for Students with Disabilities  
McCaffrey Center, Room 137  
Phone: (209) 946-2879  
E-mail: dnuss@pacific.edu

More detailed information as well as our Policy Manual for Students with Disabilities is available on the web at: <http://www.pacific.edu/Campus-Life/Student-Services/Disabilities-and-Testing-services.html>

### International Programs and Services (IPS)

Located on the Sacramento campus, IPS offers comprehensive services to international students and scholars coming to the United States as well as to Pacific students interested in studying, interning or volunteering abroad. IPS serves as a liaison between University schools, departments, and offices, collaborating with them to enhance international education across campuses.

### International Students and Scholars Services

IPS offers a variety of services, including immigration advising, to international students and scholars at Pacific, supporting and enhancing their social and cultural integration into the Pacific community. IPS also administers Pacific's Exchange Visitor Program. The objective of this U.S. Department of State effort is to facilitate and increase mutual understanding between Americans and citizens of other countries through educational and cultural exchanges. For more information, call (916) 739-7019.

## Division of Student Life on this page are for the following professional programs on the San Francisco campus.

### Professional

#### Arthur A. Dugoni School of Dentistry

Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

- American Dental Education Association (ADEA) (p. 48)
- American Student Dental Association (ADSA) (p. 48)
- Associated Student Body (p. 47)
- California Dental Association (CDA) (p. 48)
- Code of Ethics and Adjudication of Ethics Violations (p. 46)
- Dental Mission Trips and Community Outreach (p. 48)
- Determination of Accommodation Requests and Right to Obtain Further Review (p. 46)
- Equal Educational Opportunity (p. 45)
- First-Year Retreat and Counseling (p. 47)
- National Dental Fraternities (p. 48)
- Pacific Health Services (p. 47)
- Policy Statement on Alcohol Consumption and Drug Use (p. 47)
- Policy on Accommodations for Students with Disabilities (p. 45)
- Procedure for Seeking Accommodations (p. 46)
- Professional and Fraternal Organizations (p. 47)
- Prohibited Sexual and Other Unlawful Harassment Policy (p. 47)
- Responsibility of Student, Resident, or Applicant (p. 46)
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- Student Services and Housing (p. 47)

- Student Store (p. 47)
- Study Clubs (p. 48)
- Security and Anti-Violence Policy (p. )

## School Policies

Students and residents who enroll in programs under the authority of the dean of the School of Dentistry agree to adhere to the school's policies and procedures and to conform their conduct to the standards of the school and of the law. Students and residents who fail to do so are subject to all sanctions or other appropriate action by the school, up to and including interim or indefinite suspension, interim or indefinite involuntary leave of absence, or final dismissal.

In cases where the school determines in its judgment that a student's or resident's continued enrollment at the School of Dentistry would not be prudent, for reasons including but not limited to the student's or resident's violation of standards of conduct, inadequate academic performance, and/or a judgment that the student has failed to demonstrate attributes of character which the school believes are necessary to qualify students and residents to practice in their chosen profession, the school may terminate the student's or resident's enrollment and/or refuse to award a degree.

### Equal Educational Opportunity

The school is an equal opportunity institution of higher learning and is firmly committed to nondiscrimination in its delivery of educational services and employment practices. In compliance with all applicable federal and state laws, such decisions will be made irrespective of the individual's race, color, religion, religious creed, ancestry, national origin, age (except for minors), sex, marital status, citizenship status, military service status, sexual orientation, medical condition (cancer-related or genetic condition), disability and/or any other status protected by law. When necessary, the School will reasonably accommodate an individual (including students) with disabilities if the educational program of the school is not compromised and the individual can safely perform all essential functions without undue hardship to the school and without altering fundamental aspects of its educational program. See also: <https://webshare.pacific.edu/sites/policies/Pages/Non-Discrimination%20and%20Non-Retaliation%20Policy.aspx>

### Other school policies

Please click on the link below for select additional policies:

<https://webshare.pacific.edu/sites/policies/SitePages/Policies%20by%20Category.aspx?Category=Human%20Resources%20and%20Labor%20Relations>. (<https://webshare.pacific.edu/sites/policies/SitePages/Policies%20by%20Category.aspx?Category=Human%20Resources%20and%20Labor%20Relations/>)

### Disclaimer

All claims against the school or university for loss or damage arising from acts, omissions, or contingencies beyond the control of the university and its employees are hereby expressly waived. The waiver includes loss by fire, theft, or natural catastrophe of any materials belonging to a member of the student body, whether such loss occurs on or off the school premises. Students agree to these conditions when they register.

## Policy on Accommodations for Students with Disabilities

The school grants otherwise qualified students, residents, and applicants all the rights, privileges, programs, and activities generally accorded or made available to students at the school and does not discriminate on

the grounds listed in the Policy Prohibiting Unlawful Discrimination in the administration of its educational programs, admissions, scholarships and loans, or other school activities.

The school will reasonably accommodate individuals with disabilities when the individual so presents a request in accordance with this policy and the individual is qualified to safely and effectively perform all essential functions of the position unless there is undue hardship in doing so. Reasonable accommodations do not include a modification of the fundamental requirements and elements of the program (e.g. behavior and conduct standards, attendance and grading policies, academic and patient-care standards, etc.)

If the individual student, resident, or applicant is otherwise qualified, in response to a request for accommodation the school will offer to make an accommodation if the accommodation is reasonable, effective, does not alter a fundamental aspect of the program, will not otherwise impose an undue hardship on the school, and/or there are no equivalent alternatives. If appropriate, the school may choose to consult with such individuals, internal or external to the school, to provide further assistance needed to evaluate the request for accommodation.

For purposes of reasonable accommodation, a student, resident, or applicant with a disability is a person who: (a) has a physical or mental impairment which limits one or more major life activities (such as walking, seeing, speaking, learning, or working); or (b) has a record with the school by which the school has officially recognized such impairment. To be eligible to continue at the school, the student, resident, or applicant must meet the qualifications and requirements expected generally of its students, and must also be able to perform the requirements of the individual major or program in which s/he is enrolled, with or without reasonable accommodation.

Note: In the event that a request for reasonable accommodation is denied, the school may occasionally choose to afford the student some temporary measure or flexibility, which is not based on the asserted disability issue, but which otherwise is considered appropriate, if it does not alter a fundamental element of the program and is not viewed by the School as inequitable toward other students. In such few cases, such temporary measure or flexibility will not be a precedent, nor will be a reasonable accommodation, and the student thereby will not be regarded as an individual with a disability.

## Procedure for Seeking Accommodations

A student, resident, or applicant who requires an accommodation aid or assistance ("accommodations"), whether for academic or other uses, and who believes s/he is qualified under the school's policy, should contact the Assistant Dean of Academic Affairs, who serves as coordinator of disability accommodations and services. Individuals who may apply for admission are also encouraged to contact this office to request general information.

Faculty and staff members who receive student-initiated inquiries or requests regarding accommodations should promptly refer those students to the Assistant Dean of Academic Affairs. Accommodation determinations should not be made without consultation and written determination of the assistant dean.

Students and residents who seek academic accommodations are expected to contact the Assistant Dean of Academic Affairs well in advance of the commencement of the activity course(s), and to provide all requested supporting information at least three weeks in advance of the requested implementation date.

## Determination of Accommodation Requests and Right to Obtain Further Review:

Provided that the assistant dean determines that the documentation provided by the student, resident, or applicant is sufficient, the Assistant Dean of Academic Affairs will respond in writing to the request for accommodation and will do so in a manner consistent with the policy. If the student, resident, or applicant agrees with the response, faculty and staff members who will be involved in providing or facilitating the accommodation will be informed of the accommodation, but the Assistant Dean of Academic Affairs will not provide medical or health-related information, unless such information is appropriate in order to allow them to assist in implementing the accommodation.

## Responsibility of Student, Resident, or Applicant

Each student, resident, or applicant requesting accommodation bears the responsibility for initiating, documenting and communicating promptly with the school regarding a disability-related request for accommodation. Timely communication between the student and the Assistant Dean of Academic Affairs and/or individual faculty members is critical. Requests for information and details on accommodations will generally be communicated via confidential email, and student, resident, or applicant replies to such communications, be they from the assistant dean or a faculty member, should be in writing within 72 hours. Students must contact course directors at least one week in advance of an assessment for which accommodation is requested. Once an accommodation has been agreed upon by the student or resident and a faculty member, the student or resident must adhere to the accommodation, barring a significant and unforeseen event (e.g., sudden serious illness). Last-minute requests for or cancellations of previously agreed upon accommodations are prohibited by this policy. Furthermore, a student or resident who appears late for an assessment for which accommodations have been arranged forfeits the time lost due to tardiness.

The student, resident, or applicant will provide to the Assistant Dean of Academic Affairs the documentation to support the request. Documentation from the appropriate health professional(s) should reflect the nature of and present level of disability, how the disability affects the student's, resident's or applicant's needs in a collegiate setting, and how the requested accommodation will resolve the needs. Because the provision of all reasonable accommodations and services is based upon assessment of the current impact of the disability on current academic performance, it is in an individual's best interest to provide recent and appropriate documentation, generally no more than three years old. Earlier documentation regarding learning disabilities will be reviewed, if it is supplemented by more recent materials.

The Assistant Dean of Academic Affairs has discretion to determine what type of professional documentation is necessary, and this may vary depending on the nature of the disability and/or accommodation. The assistant dean has discretion to seek independent medical assessment if in his/her judgment it is appropriate in some circumstances.

## Code of Ethics and Adjudication of Ethics Violations

All allegations of unethical student behavior are investigated by a senior faculty member appointed by the Dean to serve as an Initial Reviewer. If there is sufficient evidence to support the allegations and the student agrees to the proposed sanction, the Initial Reviewer recommends the appropriate disciplinary action to the Dean. If the student disagrees

with the findings of the Initial Reviewer or the proposed sanction, the allegation will then be forwarded to the full Ethics Committee.

The Ethics Committee conducts hearings on matters related to student behavior and violations of the Code of Ethics. The committee is a joint faculty-administrative committee comprised of a chair selected by the Dental Faculty Council, three elected faculty members, and five elected students, one from each DDS and IDS class. In addition, four elected faculty members and three elected students, one from each class, act as alternates, and may be called to serve during committee review of a complaint that may involve an elected member or when an elected member is unable to be present. Recommendations of the Ethics Committee are submitted to the Dean for action. The decision of the Dean can only be appealed through University channels (Office of the Provost). Privileged information related to petitions, petitioners, and all deliberations and recommendations of the committee are treated as confidential and will remain "in committee" except as reported through appropriate channels.

Please click here ([http://sfdental.pacific.edu/docs/Code\\_of\\_Ethics.pdf](http://sfdental.pacific.edu/docs/Code_of_Ethics.pdf)) to see the Code of Ethics.

## Policy Statement on Alcohol Consumption and Drug Use

<http://sfdental.pacific.edu/employees/hrdocuments/Policy%20Statements/Alcohol%20Consumption%20and%20Drug%20Use%20-%20Student.pdf>

## Security and Anti-Violence Policy

<https://webshare.pacific.edu/sites/policies/Pages/Security%20and%20Anti%20Violence%20Policy.aspx>

## Prohibited Sexual and Other Unlawful Harassment Policy

<https://webshare.pacific.edu/sites/policies/Pages/Policy%20Prohibiting%20Sexual%20Misconduct%20Discrimination%20and%20Retaliation.aspx>

## Student Services

Under direction of the assistant dean of Admissions, Student Affairs and Diversity, this office is responsible for recruiting and advising potential students, coordinating admissions and pre-dental programs, managing admissions committee activities and directives, and providing consultation and assistance in nonacademic areas including student retreats, government, clubs and organizations, financial aid, health, insurance, and housing.

The school maintains a listing of off-campus, privately-owned apartments for interested students. The school does not endorse, investigate, or guarantee the tenability of listings or suitability of those responding to any off-campus listing.

## First-Year Retreat and Counseling

During matriculation week, all first-year students attend a one-day retreat in San Francisco. During the retreat, students meet with student leaders from the second-year and third-year classes to discuss student experiences and leadership opportunities. Several activities are planned to encourage interaction between students and faculty, such as team building activities and a social mixer.

Many faculty members who teach first-year courses serve as advisors to new students to provide friendly ears and sounding boards for their concerns and to assist them in the transition from undergraduate to professional education. Students are assigned an advisor at the beginning of their first year. Second- and third-year students have access to their assigned group practice leader as well as course directors and other faculty members.

Academic counseling is provided by advisors as well as course directors, faculty members, the associate dean of oral health education, and the assistant dean for academic affairs. Referral to professional health care counseling is available; however the school cannot warrant the services of external health care providers. (Students should become familiar with the procedures of such counselors before engaging the services.) The university's Counseling and Psychological Services (CAPS) offer on-campus services to students by appointment and on an on-call, emergency and drop-in basis.

## Pacific Health Services

Pacific Health Services (PHS), part of the university's Division of Student Life, maintains a clinic at the School of Dentistry. Dental and dental hygiene students who are enrolled full-time and have submitted the required health history form and immunization records are eligible for care at any PHS clinic. The on-site nurse practitioner is supported by an extended professional staff that includes a supervising physician, other nurse practitioners, and a registered dietitian. A full-time staff psychologist is also available for individual appointments or ongoing therapeutic intervention. Services available to students include health education, wellness information, and direct care during illness.

All dental students are charged a health service fee of \$124.00 each quarter. The fee covers nurse practitioner services, nutritionist services (mostly by phone), and health and wellness management. The health services fee does not cover student health insurance, the cost of some procedures, the cost of medications, or costs incurred as a result of outside referrals.

## Student Store

The student store stocks equipment, books, and supplies for the educational program. It is available for students, faculty, and staff. Merchandise is also available from the store's website, [www.dentalstudents.com](http://www.dentalstudents.com) (<http://www.dentalstudents.com>).

## Professional and Fraternal Organizations

Social, fraternal, and professional organization memberships are open to all students in the doctoral program. Opportunities to establish associations that will endure throughout graduates' lifetimes are described in the groups.

## Associated Student Body

The Associated Student Body of the University of the Pacific, Arthur A. Dugoni School of Dentistry is composed of all students enrolled in the doctoral program. Business affairs of the organization are conducted by the Student Executive Council which consists of the elected student body officers, the president and vice president of each class, and elected representatives to selected agencies of organized dentistry. Any student may meet with the Student Executive Council, but only duly elected officers may vote on issues under consideration. Students are represented on the following school committees: Curriculum; Faculty Appointment, Promotion, and Tenure; Student Appeals; Ethics; Museum; Postgraduate Studies; Safety; Store; Student Clinic Advisory; Infection Control; Clinical Quality Assurance; and Academic Advisory.



- Academy of General Dentistry (AGD)
- Academy of LDS Dentists
- The American Association of Developmental Medicine and Dentistry (AADMD)
- American Association of Women Dentists (AAWD)
- Chinese American Student Dental Association
- Christian Medical and Dental Association (CMDA)
- Dugoni Business Club
- El Dentista Club
- Global Relations Club
- Hispanic Student Dental Association (HSDA)
- Iranian-American Student Dental Association (IASDA)
- Military Dental Club
- Peer Support Program
- Performing Arts Club
- Pre-Dental Bootcamp
- Student National Dental Association (SNDA)
- Student Professionalism and Ethics Association (SPEA)

## National Dental Fraternities

- Alpha Omega: Founded in Baltimore, Maryland in 1907 by a group of dental students, Alpha Omega's mission is to promote the profession of dentistry and establish a spirit of fellowship among members. Alpha Omega has about 6,000 active dentists worldwide.
- Delta Sigma Delta: Founded in 1882 in Ann Arbor, Michigan, Delta Sigma Delta is an international organization designed to encourage scholastic achievement for dental students, foster high professional standards in dentistry and cultivate outstanding teachers and practitioners. The Nu Nu Chapter at the Dugoni School supports professional camaraderie, student research and network development for young professionals.

## Study Clubs

- Aesthetics Study Club
- Dentist Anesthesiologist Deliberation Club
- Endodontics Study Club
- Oral Surgery and Maxillofacial Surgery Study Club
- Orthodontics Study Club
- Pacific Implant Continuum
- Pediatric Obstructive Sleep Apnea Study Club
- Pediatrics Study Club
- Periodontal Study Club
- Student Research Group (SRG): The Student Research Group (SRG) works to enhance the research culture at the Dental School by supporting collaboration between students and faculty members in current research projects. The goal of SRG is to promote the advancement of dental research and evidence-based practice. The SRG is a chapter of the National Student Research Group (NSRG)/American Association for Dental Research (AADR) and the International Association for Dental Research (IADR). Group members are encouraged to participate in various school events, attend the NSRG meeting and the annual AADR/IADR meeting. A member of the student group also represents Pacific each year at the ADA-sponsored Annual Dental Student Conference on Research in the Washington DC area.

## Dental Mission Trips and Community Outreach

- Guatemala Dental Mission
- Jamaica Dental Mission
- Mexico Dental Mission
- Philippines Dental Outreach
- Student Community Outreach for Public Education (SCOPE): The SCOPE organization provides students professional development projects focused on community oral health. The student-directed public health organization utilizes the peer-mentoring model. At the School of Dentistry, SCOPE's mission is to engage students and faculty in volunteer oral health projects directed toward community health needs. Created in 1994 by innovative students and a faculty mentor, thousands of students and underserved public members have benefitted. Today, SCOPE exemplifies several of the school's strategic priorities, including: to provide inter-professional opportunities to support readiness for practice in integrated health systems; and to serve unmet oral healthcare needs in our community.

Clinical extramural externships on Saturdays and academic break periods, form an experiential component of the SCOPE Community Health Programs. Externships and SCOPE Health Projects provide the major components of Pacific's Community-Campus Partnership Programs (CCPP). This CCPP partnership links Dugoni students' oral health community projects to key community stakeholders and agencies.

Inter-professional projects, leadership development, and evidence-based best practices form the foundation of CCPP and SCOPE programs. SCOPE student officers take an active role in designing, leading, and evaluating health projects such as screenings, prevention services, group presentations and educational sessions. Health services are directed toward culturally diverse children, families and senior citizens in the Bay Area. SCOPE officers and faculty strive to sponsor inter-professional projects with audiology, pharmacy, nursing, physical therapy, social service and physician assistant students and schools.

## Organized Dentistry

### American Student Dental Association (ASDA)

All University of the Pacific dental students are members of ASDA and, concurrently, student members of the American Dental Association with all the rights and privileges of such membership. Benefits are detailed in publications distributed by these organizations.

### California Dental Association (CDA)

University of the Pacific dental students were the first in California to avail themselves of the student membership category offered by the California Dental Association. Modest annual dues provide each student member with CDA publications, access to CDA meetings without charge, and other benefits.

### American Dental Education Association (ADEA)

All enrolled predoctoral students are members of ADEA.

The Council of Students is one of several councils of ADEA. The school's elected representatives to the council participate in the ADEA annual session and regional meetings. The Council of Students has an administrative board consisting of a vice president who serves on the ADEA executive committee, and a chair, vice chair, secretary, and member-at-large. The council elects several student delegates who have full voting privileges in the ADEA House of Delegates.

## American Dental Hygienists' Association (ADHA)

The ADHA provides personal and professional development for enrolled dental hygiene students. Students can participate in the annual conference, community involvement, and networking opportunities. ADHA offers preparation for the National Dental Hygiene Board Exam, scholarships and grants, publications and leadership opportunities.

## California Dental Hygienists' Association (CDHA)

The CDHA represents the student voice in the dental hygiene profession. Annual dues provide each dental hygiene student scholarship and networking opportunities. They can participate in conferences and activities throughout the state which includes the annual regional conference, Student House of Representatives and the CDHA Table Clinic Competition.

## Emeritus Faculty/Staff

Name	Year and Degrees
Richard R. Abood	1991, Professor of Pharmacy Practice, Emeritus, 2014.
Glen A. Albaugh	1971, Professor of Sport Sciences, Emeritus, 1999.
Leigh Charles Anderson	2000, Professor of Biomedical Sciences, Emeritus, 2017
Steven C. Anderson	1970, Professor of Biological Sciences, Emeritus, 1997.
Judith K. Andrews	1966, Associate Professor, University Libraries, Emerita, 2001.
Harriett Arnold	1994, Director, Early Childhood Development Projects, Associate Professor of Education, Emerita, 2014.
Michael H. Ballott	1971, Professor of Business, Emeritus, 2005.
David P. Baral	1981, Professor of Education, Emeritus, 1999.
Roger Barnett	1965, Professor of Geography, Emeritus, 1999.
Marlin Bates	2004, Associate Professor of Communication, Emeritus, 2019
Robert Benedetti	1989, Dean of the College of the Pacific, 2002, Executive Director of the Jacoby Center, Professor of Political Science, Emeritus, 2013.
Roy C. Bergstrom	1980, Associate Professor of Mathematics, Assistant Dean for Administration, Emeritus, 2018
David F. Besch	1985, Assistant Professor of Electrical and Computer Engineering, Emeritus, 2002.
Robert W. Blaney	1966, Professor of Religious Studies, Emeritus, 1996.
James Blankenship	1977, Professor of Pharmacology, Emeritus, 2010.
Diane M. Borden	1971, Professor of English, Director of Film Studies, Emerita, 2014.
Martha W. Bowsky	1984, Professor of Religious and Classical Studies, Emerita, 2014.

Robert Boyd	1996, Professor of Orthodontics, Emeritus, 2019
Lynn Beck Brallier	2005, Dean and Professor of Education, Emerita, 2017
Dennis Brennan	1978, Assistant Dean and Associate Professor of Education, Emeritus, 2012.
William H. Brennan	1976, Associate Professor of History, Emeritus, 2006.
Ashland O. Brown	1991, Dean of the School of Engineering, Professor of Mechanical Engineering, Emeritus, 2016
Donald W. Bryan	1974, Associate Professor of Business, Emeritus, 2007.
Dorothy Burk	1979, Professor of Biomedical Sciences, Emerita, 2020
Gaylon L. Caldwell	1970, Dean of Elbert Covell College and Professor of Political Science, Emeritus, 1982.
Gerald Caplan	1992, Dean of the McGeorge School of Law, Professor of Law, Emeritus, 2014
William H. Carpenter	1986, Professor of Dental Practice, Emeritus, 2014
Linda Carter	1985, Distinguished Professor of Law, Emerita, 2016
Patrick N. Catania	1970, Professor of Clinical Pharmacy, Emeritus, 2006.
Patrick D. Cavanaugh	1997, Vice President, Business and Finance, Emeritus, 2014.
Judith Chambers	1973, Vice President for Student Life, Emerita, 2001.
Kishori Chaubal	1972, Associate Professor of Biological Sciences, Emerita, 1999.
Madhukar G. Chaubal	1964, Professor of Medicinal Chemistry, Emeritus, 1999.
Roy Childs	1973, Professor of Sociology, Emeritus, 2008.
Deann J. Christianson	1967, Professor of Mathematics, Emerita, 2006.
Lee Christianson	1967, Professor of Biological Sciences, Emeritus, 2006.
Elmer U. Clawson	1974, Professor of Education, Emeritus, 1995.
Robert Coburn	1993, Professor of Music Composition and Theory, Emeritus, 2019
Joel A. Cohen	1974, Professor of Biomedical Sciences, Emeritus, 2014.
Raymond Coletta	1989, Professor of Law, Emeritus, 2015
Rex Cooper	1973, Professor of Piano, Emeritus, 2014.
Thomas A. Coyne	1978, Professor of Law, Emeritus, 1999.
Donald DaGrade	1970, Professor of Bassoon and Saxophone, Emeritus, 2007.

Robert W. Dash	1964, Professor of Modern Language and Literature, Emeritus, 2001.	Paul Glassman	1989, Professor of Diagnostic Sciences, Emeritus, 2019
Julie Davies	1984, Professor of Law, Emerita, 2019	Katie Golsan	1994, Professor of French and Film Studies, Emerita, 2016
Kenneth Day	1987, Professor of Communication, Emeritus, 2019	Robert Hanyak	1985, Associate Professor of Speech-Language Pathology and Audiology, Emeritus, 2018
Gilbert L. Dellinger	1973, Professor of Art, Emeritus, 2000.	George Gould	1983, Professor of Law, Emeritus, 2008.
Donald V. DeRosa	1995, President Emeritus, 2009.	Alex T. Granik	1982, Associate Professor of Physics, Emeritus, 2005.
Clifford L. Dochterman	1972, Vice President, Emeritus, 1990.	Carol Ann Hackley	1985, Professor of Communication, Emerita, 2011.
Richard P. Dodge	1964, Professor of Chemistry, Emeritus, 1994.	Fay B. Haisley	1984, Dean, Gladys L. Benerd School of Education and Professor of Education, Emerita, 1999.
Marilyn Draheim	1986, Associate Professor of Curriculum and Instruction, Emerita, 2018	Robert E. Hamernik	1962, Professor of Civil Engineering, Emeritus, 1998.
Arthur A. Dugoni	1951, Dean of the Dugoni School of Dentistry and Professor of Dentistry, Emeritus, 2006.	George T. Hankins	1980, Professor of Electrical and Computer Engineering, Emeritus, 1991.
I. Dale Dunmire	1973, Professor of Electrical and Computer Engineering, Emeritus, 1990.	Roseann Hannon	1970, Professor of Psychology, Emerita, 2010.
Jill Duthie	2006, Associate Professor of Speech-Language Pathology, Emerita, 2019	Halvor P. Hansen	1959, Professor of Communication, Emeritus, 1990.
Pamela Eibeck	2008, President Emerita, 2019	Peter Hansen	2008, Associate Professor of Preventive and Restorative Dentistry, Emeritus, 2019
H. Richard Etlinger	1982, Professor of Music Management/Business, Emeritus, 2000.	Robert Hanyak	1985, Associate Professor of Speech-Language Pathology and Audiology. Emeritus, 2018
Fred Fendler	1999, Associate Professor of Diagnostic Sciences, Emeritus, 2019	Lois N. Harrison	1985, Professor of Music Education, Emerita, 1997.
U. Wolfgang Fetsch	1967, Professor of Piano, Emeritus, 1991.	Michael Hatch	1984, Professor of Political Science, Emeritus, 2014.
Dale Fjerstad	1974, Associate Professor of Trumpet, Emeritus, 1986.	Paul J. Hauben	1969, Professor of History, Emeritus, 1994.
Barbara Flaherty	1988, Associate Professor of Art, Emerita, 2010.	A. Craig Hawbaker	1994, Professor, Reference and Instruction Librarian, Emeritus, 2014
David Q. Fletcher	1973, Professor of Civil Engineering, Emeritus, 2006.	Eddie K. Hayashida	1979, Associate Professor of Administration, Emeritus, 2017
Donald G. Floriddia	1968, Professor of Pharmaceuticals, Emeritus, 2014.	James Heffernan	1972, Professor of Philosophy, Emeritus, 2014.
Dennis O. Flynn	1978, Professor of Economics, Emeritus, 2014.	Joel Herche	1994, Associate Professor of Marketing and International Business, Emeritus, 2019
Paul T. Fogle	1979, Associate Professor of Speech-Language Pathology, Emeritus, 2012.	Stefan Highsmith	1978, Professor of Biomedical Sciences, Emeritus 2018
William H. Ford	1974, Professor of Computer Science, Emeritus, 2014.	Deborah Horlak	2004, Associate Professor of Periodontics and Dental Hygiene, Emerita, 2019
Richard Fredekind	1985, Executive Associate Dean, Professor, Emeritus, 2018	Ron Hoverstad	1990, Associate Professor of Marketing, Emeritus, 2015
David Fries	1973, Professor of Medicinal Chemistry, Emeritus, 2010.	Gary N. Howells	1971, Professor of Psychology, Emeritus, 2013.
Joan E. Coulter Garn	1973, Assistant Professor of Music, Emerita, 1997.	Wilbur R. Hughes	1980, Professor of Dentistry, Emeritus, 1995.
Philip Gilbertson	1996, Director of the Pacific History Project, 2010-2014, Provost Emeritus, 2014.	J. Carolyn Hultgren	1989, Assistant Professor of Physical Therapy, Emerita, 2002.

Leonard A. Humphreys	1970, Professor of History, Emeritus, 1991.	Arthur M. LaVere	1968, Professor of Dentistry, Emeritus, 1998.
A. Thomas Indresano	2001, Professor of Oral and Maxillofacial Surgery, Emeritus, 2017	Thomas J. Leach	2001, Professor of Law, Emeritus, 2015
Giuseppe Inesi	1969, Professor of Biomedical Sciences, Emeritus, 2014.	Ira C. Lehn	1968, Professor of Violoncello, Emeritus, 1991.
Mari G. Irvin	1981, Professor of Education, Emerita, 2000.	Alan S. Leider	1975, Professor of Dentistry, Emeritus, 1998.
Ravi Jain	2000, Dean of the School of Engineering and Computer Science, Professor of Civil Engineering, Emeritus, 2013.	George H. Lewis	1970, Professor of Sociology, Emeritus, 2013.
Patrick R. Jones	1974, Professor of Chemistry, Emeritus, 2011.	Laurie Lichter-Heath	2008, Lecturer in Business Law, Emerita, 2019
Warren Jones	1981, Professor of Law, Emeritus, 2015	Ronald H. Limbaugh	1966, Professor of History, Emeritus, 2000.
Daniel Kasser	1984, Professor of Art and Graphic Design, Emeritus, 2019	B. Jean Longmire	1976, Professor of Education, Emerita, 2005.
Lucinda Kasser	1987, Associate Professor of Art and Graphic Design, Emerita, 2019	Hether MacFarlane	1996, Professor of Lawyering Skills, Emerita, 2018
Roger C. Katz	1974, Professor of Psychology, Emeritus, 2006.	Gary Martin	1983, Assistant Dean of Engineering, Director of Cooperative Education, Emeritus, 2019
David E. Keefe	1978, Associate Professor of Economics, Emeritus, 2011.	Alice Jean Matuszak	1963, Professor of Medicinal Chemistry, Emerita, 2000.
William Kehoe	1985, Professor of Pharmacy Practice, Emeritus, 2019	Charles A. Matuszak	1963, Professor of Chemistry, Emeritus, 2000.
Charles D. Kelso	1978, Professor of Law, Emeritus, 2015	Maurice L. McCullen	1970, Professor of English, Emeritus. 2002.
W. Joseph King	1983, Professor of Electrical and Computer Engineering, Emeritus, 2009.	Dale W. McNeal	1969, Professor of Biological Sciences, Emeritus, 2002.
John R. Knight	1995, Professor of Finance and Real Estate, Emeritus, 2013.	Denis Meerdink	1990, Associate Dean, Associate Professor of Physiology-Pharmacology, Emeritus, 2019
Lorrie Knight	1996, Reference/Instruction Librarian, Professor, Emerita, 2013.	Lawrence Meredith	1966, Professor of Religious Studies, Emeritus, 1999.
Linda Koehler	1989, Associate Professor of Health, Exercise and Sport Sciences, Emerita, 2014.	Doris C. Meyer	1956, Professor of Physical Education, Emerita, 1990.
Randall Koper	1985, Professor of Communication, Emeritus, 2014.	David Wilkinson Miller	1981, Professor of Law, Emeritus, 2006.
J. Curtis Kramer	1975, Professor of Geosciences, Emeritus, 2005.	James P. Morgali	1961, Professor of Civil Engineering, Emeritus, 1999.
Lynn Kraynak	1987, Associate Professor of Religious and Classical Studies, Emerita, 2012.	Roger C. Mueller	1969, Professor of English, Emeritus, 1997.
Robert A. Kreiter	1960, Professor of Modern Language and Literature, Emeritus, 1994.	Alexander Murphy	1972, Professor of Biomedical Sciences, Emeritus, 2018
Bruce LaBrack	1975, Professor of Anthropology, Emeritus, 2008.	Fred Muskal	1970, Professor of Education, Emeritus, 2009.
Brian K. Landsberg	1987, Distinguished Professor of Law, Emeritus, 2015	John Myers	1984, Professor of Law, Emeritus, 2019
Dorothy Landsberg	2003, Associate Professor of Lawyering Skills, Emerita, 2019	John M. Nagle	2000, Dean of the Benerd School of Education and Professor of Education, Emeritus, 2006.
Margaret A. Langer	1981, Associate Professor of Education, Emerita, 2002.	Thomas Nelson	1995, Associate Professor of Education, Emeritus, 2019
Neil L. Lark	1962, Professor of Physics, Emeritus, 1999.	George L. Nemeth	1970, Professor of Horn and Music History, Emeritus, 2005.
		David Nielsen	1986, Executive Director, Arthur A. Dugoni School of Dentistry Alumni Association, Emeritus, 2016

Carl E. Nosse	1980, Professor of Theory-Composition, Dean, Conservatory of Music, Emeritus, 1999.	John E. Seaman	1969, Professor of English, Emeritus, 1999.
Robert Oprandy	2000, Professor of Education, Emeritus, 2019	Francis Michael Sharp	1979, Professor of Modern Language and Literature, Emeritus, 2008.
Elizabeth Rindskopf Parker	2002, Dean of the Pacific McGeorge School of Law, Emerita, 2013.	Donald Y. Shirachi	1971, Professor of Physiology and Pharmacology, Emeritus, 1994.
Newman Peery	1982, Professor of Business, Emeritus, 2008.	John Sims	1986, Professor of Law, Emeritus, 2019
Edwin R. Pejack	1982, Professor of Mechanical Engineering, Emeritus, 2007.	Anthony Skrocki	1973, Professor of Law, Emeritus, 2004.
Bruce Peltier	1994, Professor of Pediatric Dentistry, Emeritus, 2019	Douglas Smith	1970, Professor of Computer Science, Emeritus, 2007.
Richard L. Perry	1961, Professor of Physics, Emeritus, 1997.	John D. Smith	1970, Professor of English, Emeritus, 1999.
Sandra L. Persels	1976, Professor of Drama, Emerita, 1996.	Reuben W. Smith III	1972, Dean of the Graduate School and Professor of History, Emeritus, 1994.
John C. Phillips	1976, Professor of Sociology, Emeritus, 2008.	Roland C. Smith	1971, Professor of Dentistry, Emeritus, 1998.
Larry L. Pippin	1965, Professor of Political Science and Geography, Emeritus, 1994.	Timothy J. Smith	1993, Professor of Pharmacy and Pharmacology, 2019
Mark Plovnick	1989, Dean of the Eberhardt School of Business, 2006, Director of Economic Development, Professor of Management, Emeritus, 2014.	Simalee Smith-Stubblefield	1983, Associate Professor of Speech-Language Pathology, Emerita, 2015
Edward T. Pohlman	1961, Professor of Education, Emeritus, 1995.	Christopher Snell	1990, Professor of Sport Sciences, Emeritus, 2014.
Willard T. Price	1980, Professor of Operations Management and Engineering Management, Emeritus, 2015	Larry O. Spreer	1970, Professor of Chemistry, Emeritus, 2011.
Virginia L. Puich	1969, Associate Professor of Communicative Disorders, Emerita, 1997.	Louise Stark	1992, Associate Dean and Professor of Computer Engineering, Emerita, 2015
Jan (Ellen) Rein	1989, Professor of Law, Emerita, 2006	William T. Stringfellow	2009, Director of the Ecological Engineering Research Program, Professor, Emeritus, 2018
Herbert R. Reinelt	1962, Professor of Philosophy, Emeritus, 1999.	S. Thomas Stubbs	1963, Associate Professor of Sport Sciences, Emeritus, 1999.
Claude D. Rohwer	1964, Professor of Law, Emeritus, 2005.	Henghu (Henry) Sun	2008, Professor of Engineering, Director of the Pacific Resources Research Center, Emeritus, 2016
Jennifer Ross	1993, Associate Dean of the School of Engineering and Computer Science, Emerita, 2019	J. Connor Sutton	1963, Associate Professor of Sport Sciences, Emeritus, 1999.
Robert Sarka	1982, Professor of Dentistry, Emeritus, 2004.	Ted T. Takaya	1979, Professor of Modern Language and Literature, Emeritus, 1996.
Darwin Sarnoff	1972, Professor of Pharmacy Practice, Emeritus, 2004.	Paul A. Tatsch	1980, Associate Professor of Business, Emeritus, 2005.
Ralph L. Saroyan	1970, Director of Pharmacy Pre-Health Programs, Emeritus, 2002.	Joseph Taylor	1993, Professor of Law, Emeritus, 2015
Jon E. Schamber	1980, Professor of Communication, Emeritus, 2014.	Douglas Tedards	1982, Associate Professor of English, Emeritus, 2007.
Gilbert W. Schedler	1967, Professor of English and Religious Studies, Emeritus, 2004.	Richard Tenaza	1975, Professor of Biological Sciences, Emeritus, 2014.
Merrill Schleier	1982, Professor of Art and Architectural History and Film Studies, Emerita, 2015	William Topp	1970, Professor of Computer Science, Emeritus, 2008.
George W. Schroeder	1981, Professor of Electrical Engineering, Emeritus, 2005.	Paul Turpin	2007, Associate Professor of Communication, Emeritus, 2019
Glendalee Scully	1976, Professor of Law, Emerita, 2008.		

Richard H. Turpin	1984, Professor of Electrical and Computer Engineering, Emeritus, 2005.
Darcy Umphred	1987, Professor of Physical Therapy, Emerita, 2006.
Warren van Bronkhorst	1967, Professor of Violin, Emeritus, 1991.
Judith L. Van Hoorn	1982, Professor of Education, Emerita, 2007.
Richard J. Vargo	1981, Professor of Accounting, Emeritus, 2013.
Ray VarnBuhler	1980, Professor of Art, Emeritus, 1998.
Ravindra C. Vasavada	1973, Professor of Pharmaceutics, Emeritus, 2000.
William H. Wadman	1955, Professor of Chemistry, Emeritus, 1988.
Joel Wagner	1998, Clinical Professor of Pharmacy, Emeritus, 2017
Suzanne Walchli	2000, Associate Professor of Marketing, Emerita, 2017
Coburn C. Ward	1977, Professor of Mathematics, Emeritus, 2001.
Lori D. Warner	1987, Associate Professor of Economics, Emerita, 2007.
Paula Watson	2004, Associate Professor of Periodontics/Dental Hygiene. Emerita, 2018
Gregory Weber	1990, Professor of Law, Emeritus, 2014.
Donald K. Wedegaertner	1963, Professor of Chemistry, Emeritus, 2004.
Cynthia Wagner Weick	1990, Director of the Powell Scholars Program and Professor of Management, Emerita, 2017
Brian Weick	1995, Professor of Mechanical Engineering, Emeritus, 2019
Stephen Wheeler	1994, Visiting Professor of Accounting, Emeritus, 2019
Roy A. Whiteker	1976, Dean of the College of the Pacific, Emeritus, 1989; Professor of Chemistry, Emeritus, 1992.
William P. Whitesides	1978, Professor of Voice, Emeritus, 1996.
Keith Whittington	1987, Professor of Mathematics, Emeritus, 2019
Frank Wiens	1976, Professor of Piano, Emeritus, 2019
Lynelle Wiens	1976, Professor and Program Director, Voice, Emerita, 2020
Philip Wile	1987, Professor of Law, Emeritus, 2007.
John S. Williams	1965, Professor of English, Emeritus, 1998.
Christine R. Wilson	2003, Associate Professor of Physical Therapy, Emerita, 2014.
Joseph A. Woelfel	2006, Professor of Pharmacy Practice, Emeritus, 2017

William Wolak	1975, Professor of Theatre Arts, Emeritus, 2007.
David E. Wolfe	1987, Professor of Music Therapy, Emeritus, 2007.
Kojo Yelapaala	1981, Professor of Law, Emeritus, 2019
Douglas Young	1996, Professor of Diagnostic Sciences, Emeritus, 2019
Walter Zimmermann	1970, Professor of Mathematics, Emeritus, 2008.

## Financial Aid

### Graduate

#### Conservatory of Music

Music Therapy

#### School of Engineering and Computer Science

Data Science

#### School of Health Sciences

Audiology

### Professional

#### Arthur A. Dugoni School of Dentistry

All information applies to the DDS, IDS and Dental Graduate Programs. Not all information applies to the Certificate Programs. For more information, contact your program.

### Undergraduate

#### Arthur A. Dugoni School of Denistry

Dental Hygiene

## Financial Aid on this page is for the following graduate programs on the San Francisco Campus.

#### Conservatory of Music

Music Therapy

#### School of Engineering and Computer Science

Data Science

#### School of Health Sciences

Audiology

Many programs offer graduate assistantships each year for students based on academic quality and experience in research. Graduate assistantships are available each year in many of the departments and schools where advanced degrees are offered. These graduate assistantships may be in the form of scholarship, tuition waiver, cash stipends for services performed, or a combination of those, depending upon each student's program and department recommendations. Please contact your program director(s) for details on graduate assistantships or other forms of financial aid.

Research awards are available for departmental or contract research in some fields. From time to time, fellowships are offered in certain federally-supported programs in which University of the Pacific participates.

Graduate students who are U.S. citizens or eligible non-citizens may apply for federal student loans. For information, visit [www.pacific.edu/financialaid](http://www.pacific.edu/financialaid) (<http://www.pacific.edu/financialaid/>) or contact the:

Financial Aid Office  
University of the Pacific  
Stockton, CA 95211  
(209) 946-2421 or [financialaid@pacific.edu](mailto:financialaid@pacific.edu)

## **Financial Aid on this page is for the following professional programs on the San Francisco campus.**

### **Professional**

#### **Arthur A. Dugoni School of Dentistry**

All information applies to the DDS, IDS and Dental Graduate Programs. Not all information applies to the Certificate Programs. For more information, contact your program.

It is important to know that all applicants are considered for admission regardless of their financial circumstances. Financial aid is awarded on the basis of financial need as long as the student is a U.S. citizen, permanent resident or eligible non-citizen. The financial aid office emails application materials beginning in January to those who are accepted for admission. An applicant must be approved for admission before financial aid can be awarded.

Loans and scholarship funds are available from private, state, and federal sources. The financial aid office assists students in managing their financial resources and their indebtedness in school and after graduation. Staff members conduct a needs analysis and provide comprehensive financial guidance for every student applying for financial aid. Complete information about the types of financial aid available and the application process can be obtained from our website at [www.dental.pacific.edu](http://www.dental.pacific.edu) (<http://www.dental.pacific.edu>) or from the financial aid staff in the Office of Student Services.

## **Financial Aid on this page is for the following undergraduate program on the San Francisco campus.**

#### **Arthur A. Dugoni School of Dentistry** Dental Hygiene

The University maintains a substantial student financial assistance program that includes scholarships, grants, loans and job opportunities. Detailed financial aid information and application instructions are available at [www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-Financial-Aid.html](http://www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-Financial-Aid.html) (<http://www.pacific.edu/financialaid/>).

Students who wish to be considered for academic merit-based scholarships are advised to complete the admission application process by the appropriate deadline or priority date. Students who seek other University scholarships, grants, work-study, or loans or whose parents wish to apply for a Federal Direct PLUS Loan must also file a Free Application for Federal Student Aid (FAFSA) and complete other application procedures as instructed by the Financial Aid Office. In addition, financial aid applicants who are legal residents of California and do not already have a bachelor's degree are expected to apply for a Cal

Grant. High schools and colleges have information about the Cal Grant programs and application procedures.

Students are advised to file the FAFSA electronically at the Federal Student Aid Web site. A worksheet and instructions may be downloaded from the Web site, or may be secured at a high school or college or from the University. The priority FAFSA filing date for entering Pacific students is January 15. Pacific awards financial aid to students who apply after the admission and financial aid priority dates; however, late awards may be less favorable.

A student must be approved for admission as a regular student to an eligible degree or certificate program before financial aid can be awarded. Students must enroll on at least a half-time basis to qualify for most financial aid and some awards require full-time enrollment. Aid is usually awarded for the entire school year, with the full-year amount divided equally among the semesters or trimesters of enrollment. Please note that financial aid eligibility is re-evaluated when a student completes pre-professional work and enters a professional program.

Financial aid at the University is available only to U.S. citizens, permanent residents and other eligible non-citizens.

When a financial aid recipient withdraws during a semester, the student's financial aid is adjusted according to federal and state regulations and University policy. Details are available on the Financial Aid website under Student Consumer Information.

## **Academic Requirements**

Federal regulations require the Financial Aid Office to ensure that financial aid recipients maintain acceptable academic standing and make satisfactory progress in their programs of study.

Students placed on academic probation may receive financial aid, but students who are academically disqualified are placed on financial aid disqualification. Financial aid recipients are also expected to complete satisfactorily at least 67% of all units attempted and to obtain their degrees within a specified maximum period of full-time study. Access to financial aid to pay for repeated courses is limited by federal regulations.

For further information, please refer to the Academic Probation and Disqualification Policy Statement in this catalog and the Satisfactory Academic Progress Policy Statement available from the Financial Aid Office.

## **Educational Equity Programs: Community Involvement Program (CIP)**

### **History**

The Community Involvement Program (CIP) was established in 1969 by a group of students, community members, faculty and staff who wanted to provide educational opportunities to the local community. Since implementation of the scholarship program there have been over 1000 CIP Alumni. This program serves the educational needs of students who demonstrate low income and first generation college status.

### **Purpose**

The Community Involvement Program is limited to new incoming freshman or transfer students to the university. The review process for the scholarship places a substantial emphasis on the applicant's educational and financial background. It also examines the applicant's community involvement and awareness, maturity, and potential to

contribute his/her time and energy to the Community Involvement Program.

## Qualifications

- Demonstration of financial need. Must be eligible for Cal and Pell Grants at the University of the Pacific, and meet the Free and Reduced Lunch income guidelines.
- Clear demonstration of community involvement, volunteerism, and awareness of social issues prior to acceptance at the university.
- Stockton resident (must have resided in Stockton, i.e. Census Tracts #1-38 boundaries) for the past three years. (Does not apply to transfer students from San Joaquin Delta College)
- First generation college student (neither parent/guardian has earned a bachelor's degree from an accredited university).
- Accepted for admission at Pacific.
- U.S. citizen or permanent resident.

For additional information, please contact:

Community Involvement Program  
Bannister Hall, First Floor  
Phone (209) 946-2436  
E-mail: [cip@pacific.edu](mailto:cip@pacific.edu)

## Student Complaint Procedure Notice

The United States Department of Education requires institutions of higher education to publish and comply with policies regarding student complaints that address the school's program of education.

Any student at Pacific who wishes to bring a formal complaint to the administration regarding a significant problem that directly implicates a) University of the Pacific's program of education and its compliance with the WASC Standards; b) University of the Pacific's policies or protocols; or c) California state laws, should do the following:

1. Submit the complaint in writing to the Vice President for Student Life. The complaint may be sent via email, U.S. Mail, facsimile, or in person to the Office of the Vice President for Student Life (Hand Hall).
2. The complaint should describe in detail the behavior, program, process, or other matter that is at issue, and should explain how the matter directly implicates the student's program of education and the University's compliance with a specific, identified WASC Standards\*, University policy/procedure, or state law.
3. The complaint must contain the complaining student's name, student ID#, official Pacific email address, and current mailing address. This information will be kept confidential, but there must be an identifying name for a response to take place.

\*WASC Standards found on the WASC website at: [http://wascsenior.org/files/Standards\\_at\\_a\\_Glance.pdf](http://wascsenior.org/files/Standards_at_a_Glance.pdf)

When an administrator receives a student complaint that complies with the foregoing requirements, the following procedures shall be followed:

1. The Vice President for Student Life will acknowledge the complaint within 3 business days of receipt. Acknowledgement may be made by email, U.S. Mail, or by personal delivery, at the option of the Vice President.
2. Within 10 business days of acknowledgement of the complaint, the Vice President for Student Life, or the Vice President's designee, shall respond to the substance of the complaint, either in writing or in person, and shall indicate what steps are being taken by the University to address the complaint. If further investigation is needed,

the complaining student shall, upon conclusion of the investigation, be provided with substantive response to the complaint within 10 business days after completion of the investigation.

3. Any appeal regarding a decision on a complaint shall be brought before the President of the University. The decision of the President will be final. Any appeal must be brought within 10 business days from the date of the response by the Vice President for Student Life.
4. A copy of the complaint and a summary of the process and resolution of the complaint shall be kept in the Office of the Vice President for Student Life for a period of 8 years from the date of final resolution of the complaint.

A complaint may also be pursued in the following manner(s):

1. If your complaint concerns the institution's compliance with academic programs, academic quality and/or accrediting standards, you may submit your complaint to the Western Association of Schools and Colleges (WASC), University of the Pacific's accrediting agency, at [www.wascsenior.org/comments](http://www.wascsenior.org/comments) (<http://www.wascsenior.org/comments/>).
2. If you believe that your complaint warrants further attention or is related to alleged violation of state law, you may contact the Bureau for Private Postsecondary Education for review of a complaint. The bureau may be contacted at:

Most complaints made to media outlets or public figures, including members of the California legislature, Congress, the Governor, or individual Regents of University of the Pacific are referred to the Office of the President.

Nothing in this disclosure limits any right that the student may have to seek civil or criminal action to resolve the complaint.

University of the Pacific has provided this disclosure to you in compliance with the requirements of the Higher Education Act of 1965, as amended, as regulated in CFR 34, Sections 600.9 (b) (3) and 668.43(b). If anything in this disclosure is out of date, please notify the Vice President for Student Life, 3601 Pacific Avenue, Stockton, CA 95211, 209.946.2365.

## Scholarships and Grants

University of the Pacific students who demonstrate financial need may qualify for federal and state grants. In addition, Pacific offers scholarships and grants from income provided by gifts, endowments and the University's general fund, which includes Pacific Fund gifts. Qualifications vary according to conditions stipulated by donors, but attention is usually given to some or all of the following: academic record, special talents, leadership abilities, vocational objectives and financial need. Academic scholarships may be renewed for full-time enrollment in a bachelor's degree or pre-professional program.

Detailed information about scholarships and scholarship renewal is available from the Financial Aid Office and online at [www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-Financial-Aid.html](http://www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-Financial-Aid.html) (<http://www.pacific.edu/financialaid/>).

## Academic Merit-Based Scholarships

Entering freshmen who demonstrate superior leadership ability and a commitment to academic excellence and meet minimum academic criteria may be recommended by their high schools for the Powell Scholarship, valued at \$40,000 per academic year. An application form is available on the Financial Aid website.



Entering students who complete the admission application process by January 15 are automatically considered for the merit-based scholarships listed below.

Freshmen entering the University directly from high school may be considered for Regents Scholarships, valued at \$22,000 per academic year, President's Scholarships, for \$18,000 per academic year, Provost's Scholarships, for \$14,000 per academic year, and Pacific Scholarships, for \$10,000 per academic year. Recipients are selected on the basis of grade point average, test scores, and other criteria.

Transfer Academic Distinguished Scholarships, for \$16,000 per academic year, are awarded to applicants with a college GPA of 3.50 or above, Transfer Academic Excellence Scholarships, for \$14,000 per academic year are awarded to transfer students with college GPAs of 3.00 to 3.49, and Transfer Merit Scholarship of \$12,000 are awarded to applicants with college GPAs of 2.80 to 2.99.

A student who qualifies for more than one academic scholarship receives the most advantageous award.

## General Academic Endowed Scholarships

Many of the scholarships listed below provide funding for the Regents', President's, Provost's, Pacific and Bishop's Scholarship programs. Scholarships are also available for students regardless of major. A student is considered an eligible candidate via his/her application for financial aid and maintaining a 3.0 GPA.

Anne and Ray Arnold Endowed Memorial Scholarship. Established by Mrs. Anne Brady Arnold of Stockton in memory of her husband, a former Tracy banker. Augmented by gifts in memory of Mrs. Arnold.

Laura Tull, Walter Pike Austin, and Henrietta T. Austin Endowed Scholarship.

John N. and Jessie L. Ballantyne Endowed Memorial Scholarships. Established during their lifetimes by these Lodi friends of Pacific.

Grace Burns Baun Endowed Scholarship. Established with gifts from her estate.

Gertrude Moore Beans and William Know Beans Endowed Memorial Scholarship. Established by a bequest from an alumna of the Class of 1920.

Lonzo and Julie Beck Endowed Scholarship. Established in memory of her husband.

Henry and Elsie Bell Memorial Endowed Scholarship. Established with gifts from her estate.

Gladys L. Benerd Endowed Scholarship. Established by Gladys Benerd.

William and Dorothy Biddick Endowed Scholarship. Established by William and Dorothy Biddick.

Bishop's Endowed Scholarship.

William M. Black Endowed Scholarship. Established by the bequest of a faculty member's father.

Constance Bowen Endowed Scholarship.

Anton Brawthen Endowed Memorial Scholarship. Established by his daughter Clara Brawthen.

Seba M. Bronson Endowed Scholarship. Established with a trust.

Dahl Burnham Endowed Scholarship.

Robert E. Burns Endowed Scholarship. Established in memory of Robert E. Burns, 20th president of the University, by his widow Grace Weeks Burns Baun.

Norman J. Cain Endowed Memorial Scholarship. Established by Dr. Harvey D. Cain in memory of his son.

Central United Methodist Church Endowed Scholarship.

Class of 1927 Endowed Scholarship. Established and supplemented by members of the class of 1927.

Classes of '49, '50, and '51 Endowed Scholarship. Established by the members of these three classes.

Class of 1965 Endowed Scholarship. Established by various gifts from members of the Class of 1965.

Claypool Endowed Scholarship. Established by an estate gift given in memory of Jane Singleton Claypool and Rosa Shambeau Claypool.

Herman A. and Margaret P. Clover Endowed Memorial Scholarship. Established by Dr. Haworth A. Clover and his wife Carol in memory of his parents.

Robert L. and Lucy S. Colthart Endowed Scholarship. Established with gifts received from their trust.

Elmer C. and Lena E. Courtney Endowed Memorial Scholarship. Established by Lena C. Courtney.

Grace Covell Endowed Scholarship.

S. H. Cowell Foundation Endowed Scholarship. Established by the Foundation and matching gifts.

Juanita and Earnie Cronkite Endowed Scholarship. Established with their estate gift.

Paul L. Davies, Sr. Endowed Memorial Scholarship. Funded by a gift from a special friend.

Hugh and Esther Davis Endowed Scholarship. Established with an estate gift.

Robert C. and Olive V. d'Erlach Endowed Memorial Scholarship. Funded by their bequest.

Clifford L. Dochterman Endowed Scholarship. Established to honor him upon his retirement.

Coach Don Edwards Endowed Scholarship. Established with a gift from Mr. Cecil Harp in memory of his wife Joan E. Harp.

Christopher A. and Cora S. Elliott Endowed Scholarship.

Charles Sumner Esrey Endowed Scholarship.

Fiftieth Reunion Class Endowed Scholarship. Established in 1991 and supplemented annually by each 50th reunion class.

Elliott L. Fisher Endowed Memorial Scholarship. Established by his family and friends.

Samuel Jacob and Gertrude Alice Fox Endowed Scholarship. Established by a gift from his estate.

Emery and Susie Freeman Endowed Scholarship. Established by a bequest from the Susie Freeman estate.

Friedberger Endowed Educational Scholarship. Established by the bequest of Dr. William Friedberger, in memory of his parents, Arnold and Lotta Friedberger.

David Friedrich Memorial Endowed Scholarship. Established by parents, family and friends in memory of David, class of 1988, who lost his life in a water skiing accident in his senior year at U.O.P.

A. P. Giannini Endowed Scholarship. Established by a bequest.

Irving and Fay Goleman Endowed Educational Opportunity Scholarship. Established by Gordon Zuckerman in honor of two Pacific professors emeriti.

Mildred Woodward Graham Endowed Scholarship. Established with a gift from the National Society of Colonial Dames.

Virginia Graves Endowed Middle Income Scholarship.

Sarah Elizabeth Riley Harris Endowed Memorial Scholarship. Established by the will of Grace Dell Stuart in memory of her mother.

Hearst Foundation Endowed Scholarship. Established by The Hearst Foundation.

Ruth M. Heath Scholarship. Established through her bequest.

Francis W. and Mary V. Hellman Endowed Scholarship. Established through their bequest.

Ruth Templeton Henney Endowed Memorial Scholarship. Established through her bequest.

Hoefer Foundation.

Claude H. Hogan Endowed Memorial Scholarship. Established through his bequest.

The Honey Family Endowed Scholarship.

John and Ruth Bay Hoobay Endowed Scholarship. Established with an estate gift.

Cecil and Alberta Humphreys Endowed Scholarship. Established by a distinguished alumnus and long-time member of Pacific's Board of Regents and his wife, an alumna.

Ruth and Francis H. Jackson Endowed Memorial Scholarship. Established in his memory by his wife Ruth M. Jackson.

Harriot West Jackson Endowed Memorial Scholarship. Established by the late Mrs. Winifred Cumming of Washington, D.C., and Frank West of Pebble Beach, in memory of their aunt.

Clarence and Martha Jones Endowed Scholarship. Established by Clarence and Martha Jones.

Donald S. Jones Memorial Scholarship. Established through an estate gift.

Fletcher Jones Endowed Scholarship.

Dorothy Lea and Anthony J. Ketman Memorial Endowed Scholarship. Established with an estate gift.

Fay Wallace Kiser Endowed Memorial Scholarship. Established by his wife, Beulah Lee Watson Kiser, who served the University as Dean of Women from 1940 to 1948.

Edith E. Knoles Endowed Scholarship. Established through her estate.

Emily Knoles Centennial Endowed Scholarship. Created on her 100th birthday by family and friends, and augmented by gifts in memory of the wife of former Pacific President Tully C. Knoles.

Samuel Kress Endowed Scholarship.

Dr. Harry W. Lange and William H. Pfund Endowed Scholarship.

La Quinta Inns Inc. Endowed Scholarship. Originally established by La Quinta Inns Inc. and augmented by a portion of the rooms rented by Pacific visitors.

Elizabeth Laskin Endowed Memorial Scholarship. Established and supplemented by her parents, Mr. and Mrs. Myron Laskin of Milwaukee, WI, and many friends in memory of this 1956 graduate.

The Leatherby Family Endowed Scholarship. Established with a gift from Russell and Susie Leatherby.

Edward Charles Leighton Endowed Scholarship Fund. Established with an estate gift.

Bessie Lenvig Endowed Scholarship.

William and Carol Linee Endowed Scholarship. Established through the bequest of these long-time Stockton residents.

Garth Rodrick Lipsky Endowed Memorial Scholarship. Established by his mother, Edna Lipsky.

Lenora M. Magee Endowed Memorial Scholarship.

George H. Mayr Endowed Scholarship. Established by the George H. Mayr Foundation in honor of their founder.

Erford and Dorothy Knoles McAllister Endowed Scholarship.

Stanley E. McCaffrey Endowed Scholarship. Established by family, friends and colleagues in honor of the 21st president of Pacific (1971-1987).

John A. McCarthy Memorial Endowed Scholarship.

Robert T. Monagan Endowed Scholarship. Established with honorary gifts from Omega Phi Alpha and Delta Upsilon donors.

Wert E. and Viola Moore Endowed Scholarship. Established by a bequest of long-time Stockton resident, Viola Moore.

Timothy Patrick Murphy Endowed Memorial Scholarship. Established by the parents and many friends of Tim Murphy, class of 1978, whose life at Pacific left an indelible impression.

Marshall O. Nelson Endowed Scholarship.

Orange Aid Endowed Scholarship. Established by community members and friends of the University who volunteered their services. Funded by the sale of student "survival kits" and membership dues.

Pacific Alumni Board Endowed Scholarship. Established by the Alumni Board in honor of Kara Brewer, past Alumni Director.

Pacific Co-op House Endowed Scholarship. Established by former students who resided in Pacific's Co-op House during the 1930s and '40s.

Doris and Frank Peirano Endowed Scholarship. Established by an estate gift.

Irma E. Pennycook Endowed Scholarship. Established by a bequest from this University friend.

Marion Pope Endowed Scholarship. Established by a bequest.

Powell Scholars Endowment Scholarship Program. Established with a gift from the Robert C. and Jeannette C. Powell Trust.

Nina Reid Prather Endowed Scholarship.

Chalmers Price Endowed Scholarship. Established with gifts from his estate.

Sandy Price Endowed Memorial Scholarship. Established by the Caldor Lumber Company and the Mildred Kellogg estate.

Alstyn E. and Frances A. Pruner Endowed Scholarship. Established with an estate gift.

Rhizomia Endowed Scholarship. Established by members of Rhizomia Fraternity.

Lincoln and Stella Ruggles Endowed Memorial Scholarship. Established by Lottie Ruggles in memory of her parents and later supplemented through her will.

Joseph Robert Rupley Endowed Memorial Scholarship. Established by his parents. He was accidentally shot to death in 1965 by Venezuelan police while serving in the Peace Corps.

Rupert and Philamena Russell Endowed Scholarship. Established by the bequests of Mr. and Mrs. Russell.

Walter B. Sampson Endowed Scholarship. Established by a bequest.

George and Georgia Sanderson Endowed Scholarship. Established with gifts from their son Robert E. Sanderson.

William and Jeanne Sanford Endowed Scholarship. Established by friends and members of the Paradise United Methodist Church in honor of their minister and his wife.

Audrey and Henry Schwerin Endowed Scholarship. Established by a bequest.

Charles Schiffman Endowed Memorial Scholarship. Established with an estate gift. Delete scholarship from here.

Dorothy J. and Daniel H. Singleton Endowed Scholarship. Established by a bequest.

J. W. and Florence E. Smith Endowed Memorial Scholarship.

Mary Leach Smith Endowed Memorial Scholarship. Established by Onnie Smith in memory of her mother.

Robert J. and Ernestine Smutny Endowed Scholarship. Established with an estate gift.

Southeast Asian Endowed Scholarship. Established by memorial gifts and proceeds from benefit performances. In memory of the five children killed at Cleveland Elementary School in 1989.

Mary Lou Spiess Scholarship. Established by her son.

R. & R. Stuart Endowed Scholarship.

Esther J. Tarr Endowed Scholarship. Established by Curtis W. Tarr, in honor of his mother and augmented by gifts in her memory.

Elliott J. Taylor and Burta M. Taylor Endowed Scholarship. Established with gifts from their estate.

Charles A. and Harriette E. Thomas Endowed Scholarship. Established by bequest and given in loving memory of their parents.

Thomas S. and Margaret A. Thompson Endowed Scholarship. Established by Mr. and Mrs. Thompson. Mr. Thompson served as Vice President for Development from 1963-1969.

Guy P. and Grace Tucker Endowed Scholarship. Established by a bequest from these University friends.

Twenty-fifth Class Reunion Endowed Scholarship. Established by various 25th Reunion classes.

Alex and Jeri Vereschagin Endowed Scholarship. Established by Mr. and Mrs. Vereschagin, both loyal Pacific alumni and parents.

Zana Taylor Weaver Endowed Scholarship. Established by her will.

Wendy Webb Endowed Memorial Scholarship. Established by her parents, Mr. and Mrs. J. S. Webb of Calabasas, and many friends in memory of a former student.

Dr. Gustav A. and Ellen M. Werner Endowed Memorial Scholarship. Established by family and friends in memory of a popular history professor and his wife.

Steven G. Werner Endowed Scholarship.

Ed and Joan Westgate Endowed Scholarship.

Gene and Arlene Weston Endowed Scholarship.

Robert and Margaret Wicker Endowed Scholarship.

Wickert Memorial Endowed Scholarship. Established by the Carol Wickert Raab Trust.

Wightman Memorial Endowed Scholarship. Established in her brother's memory by Mrs. Bessie Jasmann.

Norma H. Williams Endowed Scholarship.

Theresa Woo Scholarship. This scholarship was established by her estate.

Carlos and Madeline Wood Endowed Scholarship.

Zeta Phi Scholarship. Established by Zeta Phi alumnae.

## Annually Funded Academic Scholarships

In addition to the endowed scholarships, the University receives both restricted and un-restricted scholarships annually from a variety of sources.

## School and Departmental Scholarships

The scholarships listed below are granted to students who meet major requirements and/or other criteria as well as a minimum GPA of 3.0. It is NOT necessary to submit a separate application form unless specifically noted. Many of these scholarships provide funding for the Regents', President's, and Bishop's Scholarship programs.

## Center for Professional and Continuing Education

Osher Reentry Scholarship Program Endowed Scholarship. Established by gifts from the Osher Foundation

## College of the Pacific

A. S. H. Graduate Research Endowed Biology Award. Established by Dr. Alice S. Hunter, a respected faculty emeritus.

Art Award Endowed Scholarship. Established by sale of University art holdings and friends of the Art Department.

Julian Smith Bacon, Jr. and Jedediah Smith Society Scholarship. Established with gifts from the Jedediah Smith Society.

Barker-Knoles Endowed Scholarship.

Jess A. Berger Endowed Memorial Scholarship. Established by Dr. Evelyn Berger Brown in honor and memory of her husband.

Gertrude Sibley Billard Endowed Memorial Scholarship. Established in memory of a former professor of English at Pacific.

Frank Black Endowed Memorial Scholarship. Established in memory of a former student.

Maynard A. Bostwick Endowed Scholarship. Established by an alumnus.

Erma Boyce Endowed scholarship.

DeMarcus Brown Endowed Drama Scholarship. Established by Elinor P. Canedy, class of 1944, in honor of the emeritus drama chairman.

Leslie M. Burwell Endowed Memorial Scholarship. Established by Mrs. Leslie M. Burwell.

William P. Christiansen Endowed Award.

Howard and Emma Churchill Endowed Scholarship. Established by a bequest.

Eva and Stout Clack Endowed Scholarship.

Emerson and Edith Cobb Endowed Scholarship. Established by faculty, alumni and friends in honor of long-time chairman (1948-78) of the Chemistry Department and his wife.

Iva B. Colliver Endowed Scholarship. Established by her bequest.

Roselyn J. Cook Endowed Scholarship.

Corson Family Endowed Scholarship. Established with gifts from the Corson family members

Ray and Ruby Dami Endowed Scholarship.

Ellen Deering Endowed Senior Award.

Ellen Deering Endowed Senior Art Award.

Helen B. Dooley Endowed Scholarship.

Max and Victoria Dreyfus Foundation Endowed Award.

Helene and Jack Drown Endowed Scholarship.

Fred J. Early, Jr. and Marguerite C. Early Science Research Endowed Award.

Marie Easterbrook Endowed Scholarship.

Fred L. Farley Endowed Scholarship. Established by Erwin and Tom Farley.

David Friedrich Memorial Endowed Scholarship.

Fresno Methodist Foundation Endowed Scholarship. Established in 1970 from a transfer of the Foundation's assets to the University.

Martin T. Gipson Endowed Memorial Scholarship. Established by friends wishing to memorialize a former Psychology Department Professor.

Jan Good Endowed Award. Established by Janice E. Good for outstanding students majoring or minoring in French or Spanish.

Ralph Guild Endowed Communication Scholarship. Established by Ralph Guild, radio major, class of 1951 and president of INTEREP National Radio Representatives in appreciation to the University and Professor John Crabbe.

Clifford J. Hand Endowed Scholarship.

Clarence Hinkle Endowed Art Scholarship. Established through the estate of Mable Bains Hinkle.

Kathryn Gehlken Howe Endowed Memorial Scholarship. Established by Edna Gehlken, former chair of the Home Economics Department, in memory of her sister.

Wesley O. Janzen Endowed Theology Scholarship. Established with an estate gift from Alicia "Alice" M. Powell.

James Earl Jewell Endowed Scholarship in Technical Theatre.

Harold Klose, Jr. Endowed Scholarship. Established with various memorial gifts.

Sharon Brookhart Krakora Endowed Scholarship. Established by a gift from her husband as a loving tribute to her lifetime achievements.

Geraldine Scott Krause Endowed Scholarship. Established by this alumna of the class of 1936.

Allen and Helen Laursen Scholarship. Established by a stock gift.

F. Melvin and Verna Kopka Lawson Endowed Scholarship.

Los Angeles Pacific Club Pantheon of the Arts Endowed Scholarship. Established by a gift from the Los Angeles Pacific Club.

Bryon R. Meyer Endowed Theatre Scholarship honoring DeMarcus Brown '23. He was a very active and respected professor in the Theatre Arts Dept. at Pacific from 1924-1968.

Charles B. Norman Endowed Economics Scholarship. Established in memory of Dr. Charles B. Norman, who taught economics at Pacific for 32 years.

Doris E. Osborn Endowed Scholarship.

Dr. Vincent D. Panico Endowed Scholarship. Established with gifts from family and friends.

Mr. and Mrs. Michael A. Pappas Endowed Scholarship. Established to support biology students.

Irving Pasternak Endowed Memorial Scholarship.

Ida R. Patton Endowed Memorial Scholarship. Established through the Ida Patton Trust Fund.

Margaret S. Payne Endowed Scholarship. Established by memorial gifts from her husband Dr. Herbert Reinelt & friends.

Walter Arville Payne Endowed Memorial Scholarship. Established by family, colleagues, friends and former students in memory of a long-time member of the history department faculty.

Barbara Bodley Reinelt Endowed Scholarship. Established with a gift from Dr. Herbert Reinelt.

San Joaquin County Medical Society Pre-Medical Endowed Scholarship. Established with a gift from the society.

Karma Cundell Schad Endowed Scholarship. Established in memory of a former art student by her husband.

Arnold C. Scott Endowed Scholarship. Established through his estate.

John E. Seaman Endowed Scholarship. Established with a gift from Leeyee J. Su.

Dr. Benjamin Smith Endowed Memorial Scholarship. Established by relatives and friends in recognition of this former Lodi-Stockton minister who was the recipient of an honorary degree from Pacific in 1937.

John D. Smith Endowed Scholarship. Established with a gift from Leeyee J. Su.

Bud Stefan Endowed Memorial Scholarship. Established by his friends, relatives and wife in his memory.

Derek Forbes Stewart Endowed Memorial Scholarship. Established by his family and friends in commemoration of his life.

Dr. John Hadman Sticht Endowed Memorial Award.

Doris Reyburn Lathy, Margaret Reyburn Collis and Adda Reyburn Thompson Endowed Scholarship.

Esther Myers Umhalt Class of 1918 Endowed Scholarship. Established by a bequest.

Stanley G. Volbrecht Endowed Scholarship.

John D. Valentine Endowed Scholarship for Writing Excellence. Established by a gift from Russell E. and Mary S. Leatherby.

G. Warren and Ruby Zahn White Endowed Memorial Scholarship. Established in memory of Professor White, who taught mathematics and business courses at Pacific for 44 years. He retired in 1966.

Marjorie Webster Williams Endowed Art Scholarship.

Paul Winters Endowed Forensics Scholarship. Established to honor Paul Winters on the occasion of his retirement in the spring of 1989.

R. Coke Wood Memorial Endowed Scholarship. Established with memorial gifts.

## Community Involvement Program

The S. H. Cowell Foundation. Established by the Foundation and a combination of estate gifts.

## Conservatory of Music

Marietta Atherton Endowed Scholarship. Established by a bequest from a University friend and Stockton patroness of the arts.

Allan Bacon Endowed Memorial Scholarship. Established by Mrs. Allan Bacon and friends and former students of Professor Bacon. He was a professor of organ from 1922 until he retired in 1956.

Dr. J. Russell Bodley Endowed Scholarship. Established by former students and friends and augmented by memorial gifts. Dr. Bodley was associated with Pacific for over 60 years as a student, faculty, Dean of the Conservatory and Emeritus Dean. In 1986, the American Cinema Awards Foundation made a special gift to this fund in honor of actress Janet Leigh, one of his former students.

Maynard A. Bostwick Endowed Scholarship. Established by an alumnus.

Alix E. and Horace I. Brown Endowed Scholarship. Established in memory of these music professors.

Buck Family Young Musicians Endowed Scholarship. Established by a gift from Mrs. Eva Buck.

Roberta Burland Endowed Scholarship.

Ruth J. Camp Scholarship. Funded annually from an outside endowment.

Chrissie W. Collins Endowed Vocal Scholarship. Established by various family gifts.

Elford-Roy Endowed Scholarship. Established by Mr. and Mrs. Robert Elford in honor of their parents.

Calla Guild Music Endowed Scholarship. Established by Ralph Guild to honor his wife, Calla.

Wilhelmina Harbert Music Therapy Endowed Scholarship.

Evelyn Ashmore Heath Endowed Scholarship.

P. Maddux Hogin Endowed Memorial Scholarship. Established by a bequest from Gwen Hogin in memory of her husband, a 1937 alumnus.

Gladys Thelma Ryan King Endowed Scholarship. Established by her bequest.

Lenora M. Magee Endowed Scholarship.

Virginia Short McLaughlin Endowed Scholarship.

Dr. Lawrence H. McQuerrey Endowed Memorial Scholarship. Established in memory of this former music education professor and chair of the department, with gifts from his family, friends, colleagues and students.

Edna B. Meyerholz Endowed Scholarship. Established by the bequest of Mrs. Meyerholz, class of 1911.

Jules F. Moullet Endowed Memorial Scholarship. Established by an estate gift from Louis F. Moullet.

The Naylor Family Endowed Scholarship. Established by Victor and Polly Naylor.

Pooled Endowed Scholarship. Established and augmented by alumni, parents and friends of the Conservatory.

William H. and Pauline Crawford Ramsey Endowed Scholarship.

Elizabeth E. Rice Endowed Memorial Scholarship. Established by Mrs. Marion V. Neufeld in memory of her mother.

Rosalie C. Rohr Scholarship. Established and funded annually by a distribution from her estate.

Bernice L. Rose Endowed Scholarship. Established by a 1925 Conservatory alumna.

Margaret Michael Saladana Endowed Scholarship.

Mildred Murphy Scott Endowed Scholarship. Established by Oliver D. Scott in honor of his wife.

Lawrence and Marilyn Short Endowed Scholarship.

John W. Sloss Endowed Conservatory Scholarship. Established by William and Joseph Sloss in memory of their father.

Doenda Hammond Smith Endowed Piano Scholarship. Established to assist Conservatory Students.

Faye Spanos Endowed Scholarship. Established by her children and proceeds from the Faye Spanos Concert Hall dedication benefit, in honor of the wife of Alex G. Spanos, Pacific alumnus and business leader.

Dr. Lucas and Kathe Underwood Endowed Scholarship.

Richard Van Alstyne Endowed Scholarship.

Eva Varnum Endowed Memorial Scholarship.

Jack and Eleanor Vogel Endowed Scholarship.

C. A. Webster Foundation Endowed Stringed Instrument Scholarship.

Judith and Walter Willmette Endowed Scholarship. Established by Judith and Walter Willmette.

Steven and Maureen Wincor Family Endowed Scholarship. Established to assist Jazz Studies Students.

R. Coke Wood Memorial Endowed Scholarship. Established with memorial gifts. Delete scholarship from here.

## **Eberhardt School of Business**

Bank of America Foundation Endowed Scholarship.

Charles and Carolyn Bloom Endowed Scholarship.

Chambers Family Endowed Scholarship. Established by the Chambers Family Charitable Trust.

Credit Bureau of San Joaquin County Endowed Scholarship.

Robert E. Ferguson Endowed Scholarship. Established in memory of alumnus and Regent Bob Ferguson.

Joseph Kaeslin Endowed Memorial Scholarship.

George B. Lagorio Endowed Scholarship.

Daisy Lum Lee Endowed Scholarship. Established in her memory by family.

Marian and George Malloy Endowed MBA Scholarship.

John and Rhonda Minges Endowed Scholarship.

Andrew and Helen Neumann Endowed Scholarship. Established with their estate

Gregory A. and Amy Lonegran Mitchell Endowed Scholarship.

Andrew and Helen Neumann Endowed Scholarship. Established with an estate gift.

Benedict H. Van Endowed Scholarship. Established with an estate gift.

Jack and Eleanor Vogel Endowed Scholarships.

Robert R. Winterberg Outstanding Senior Award.

Thomas W. Witter Endowed Scholarship. Awarded to needy and deserving School of Business students.

## **Benerd College**

William P. Bacon Endowed Scholarship.

Barker-Knoles Endowed Scholarship.

Benerd School of Education Graduate Student Endowed Scholarship. Established through the Gladys L Benerd Estate.

Benerd School of Education Pooled Endowed Scholarships. Established and augmented by alumni, parents and friends of the School of Education.

Esther Berchtold Endowed Scholarship. Established by this alumna, class of 1926.

Melvin and Jayne Bernasconi Endowed Graduate Scholarship. Established by Mr. and Mrs. Bernasconi.

R. John, Jr. and Margaret Wennhold Charles Endowed Scholarship. Established through their estate.

Clare Ann Christian Memorial Endowed Scholarship. Established in the memory of this 1967 alumna by her husband, family and, friends.

Armando B. Flores Endowed Scholarship. Established to honor his years of services with APS Company.

Quintard and Patricia Gregory Endowed Scholarship.

Al and Lois Erwin Family Endowed Scholarship.

J. Marc and Ruth P. Jantzen Endowed Scholarship. Established in honor of the retired dean of the School of Education.

Susie Leatherby Endowed Scholarship. Established by Russell and Susie Leatherby.

Hilga G. Lister Endowed Scholarship. Established by Dr. and Mrs. Cy Coleman in memory of her mother.

The John and Elizabeth Nagle Family Endowed Scholarship Do not delete this scholarship

Pedro and Edna Osuna Endowed Graduate Scholarship. Established by Professor and Mrs. Osuna.

Alexandra Green Ottesen and Peter Ottesen Endowed Scholarship.

Glen Ainslee Payne Endowed Memorial Scholarship. Established by the Walter A. Payne family.

Marion Pease Endowed Scholarship. Established by several local groups in honor of Pacific emeriti professor of education.

Phi Delta Kappa Endowed Scholarship.

Willis N. and Viola Potter Endowed Scholarship.

Janet Rose Baker Robinson Endowed Scholarship. Established by bequest from a 1936 School of Education graduate.

Victor Russell Robinson Endowed Scholarship.

Tony and Dorothy Rodina Endowed Scholarship.

Barbara Ratto Rosemond Endowed Memorial Graduate Scholarship. Established from memorial gifts.

Charles Schiffman Endowed Memorial Scholarship. Established with an estate gift from Charlie class of '40, who was a generous local teacher and administrator for over 40 years. Charlie believed in the power of education and provided guidance; support and intellectual challenges to all knew him.

J. A. and Mary Thomason Endowed Scholarship. Established by Mr. and Mrs. Thomason.

Bonnie Jean Thompson Endowed Scholarship. Established by Mary Middleton Cunningham, class of 1957.

Virginia Sadler Toomay Memorial Endowed Scholarship. Established with a gift from General John C. Toomay.

Rebecca L. Troutner Memorial Endowed Scholarship. Established by family, friends, and faculty in memory of a 1985 School of Education graduate, an elementary school teacher who died in an automobile accident.

Milton M. Tyler Endowed Scholarship. Established in memory of the former special education professor by his family and friends.

Chuck Verduzco Endowed Memorial Scholarship.

Phyllis L. Vince Endowed Memorial Scholarship. Established by her husband, Mr. Robert Vince.

## **School of Engineering and Computer Science**

Andrew C. Ausman Memorial Endowed Scholarship. Established in memory of this son, a former student at Pacific.

James F. Baun Family Endowed Scholarship. Established with a trust.

Charles and Carolyn Bloom Endowed Scholarship.

Chambers Family Endowed Scholarship. Established by the Chambers Family Charitable Trust.

Gladys and John de Arrieta Endowed Scholarship. Established by an engineering graduate and his wife, both alumni, class of 1940.

Robert H. and Margaret E. Edwards Endowed Scholarship. Established through their estate.

General Mills Endowed Scholarship Fund.

Jack C. Goble Endowed Scholarship. Established with memorial gifts from family and friends.

Roy S. Hamma Family Endowed Scholarship. Established by an estate gift in honor of himself and his three siblings, all of whom received baccalaureate degrees from Pacific.

Robert L. Heyborne Endowed Scholarship. Established in memory of a former dean of the School of Engineering from 1969-1990 with memorial gifts from family, friends, alumni and faculty.

Robert C. Johanson Endowed Scholarship. Established with memorial gifts from family and friends.

Robert and Emily Lovell Endowed Scholarship.

Joseph and Genevieve Madeiros Endowed Engineering Scholarship. Established with an estate gift.

Henderson E. McGee Endowed Fund.

Herman G. and Myrtle E. Nelson Endowed Scholarship. Established through their estate.

Laurie Ann Pecoraro-Nemetz Endowed Scholarship. Established with memorial gifts.

Andres Rodriguez Endowed Scholarship. Established with memorial gifts.

Paul M. Sensibaugh Endowed Scholarship. Established with various gifts in his honor.

Teichert Foundation Endowed Scholarship.

Elsa and David Wheeler Endowed Scholarship.

## **School of International Studies**

Kirk and Laura Bowman Endowed Scholarship.

Arthur J. Cullen Endowed Scholarship.

Rom Landau Endowed Scholarship. Established by Professor Landau through life-time gifts and by his will.

George and Isabelle Wilson Endowed Scholarship. Established by a gift from Mrs. Isabelle Wilson.

## **Thomas J. Long School of Pharmacy**

Gregory Bard, M.D., Endowed Physical Therapy Scholarship. Established in his honor by his wife.

Donald Y. Barker Endowed Scholarship. Established in honor of a 32-year member of the School of Pharmacy's faculty on his retirement by faculty, friends, family and former students.

Ocea McMurray Brooksbank Endowed Scholarship.

Allen and Hazel M. Caldeira Endowed Scholarship. Established with a gift from her estate.

The Catania Family Endowed Scholarship. Established with a gift from Patrick and Harriet Catania.

H. R. Cenci Family Endowed Scholarship. Established with a family trust.

Charles T. Countryman Endowed Memorial Scholarship. Established by his family and friends in memory of this distinguished pharmacy graduate.

Ray and Ruby Dami Endowed Scholarship. Established through the bequest of Mrs. Ruby Dami.

Mabel and Charles P. Dezzani Endowed Scholarship.

Ted and Georgia Econome Endowed Scholarship. Established with memorial gifts from family and friends.

The Lucy and Joseph Floriddia Memorial Endowed Scholarship. Established by Dr. Donald Floriddia in honor and memory of his parents.

The Flowers Foundation Endowed Scholarship.

Joseph S. Gee Endowed Scholarship.

Jay Patrick Gould Endowed Memorial Scholarship. Established by friends and family.

James C. King Endowed Scholarship.

Steven Edward Lancaster Endowed Scholarship. Established with gifts from Miyuki Lancaster.

J. M. Long Foundation Endowed Scholarship.

Thomas J. and Muriel T. Long Endowed Scholarships. Established by gifts from the co-founder of Long's Drug Stores and emeritus Regent of the University.

Charles Magnasco Endowed Memorial Scholarship. Established by Andrew Magnasco in memory of his brother.

Marvin Malone Endowed Memorial Scholarship. Established with memorial gifts in memory of Marvin Malone.

Erin Michael McGreevy Endowed Memorial Pharmacy Scholarship. Established with a gift from the estate of his wife Lucille McGreevy.

Janet Nimitz Endowed Scholarship. Established by the Dept. of Speech Language Pathology in recognition of her 19 years service to Pacific.

Pacific Golf Tournament Endowed Scholarship. Funded by proceeds from annual tournament.

Mr. and Mrs. Michael Pappas Endowed Scholarship.

Virginia Puich Endowed Scholarship for Academic and Clinical Excellence.

Rexall Pharmacy Endowed Scholarship.

Carl C. Riedesel Endowed Scholarship.

Emmons E. Roscoe Endowed Memorial Scholarship. Established with memorial gifts from family and friends.

Ivan W. and Helen T. Rowland Endowed Scholarship. Established in their honor.

George H. Sanderson Endowed Scholarship for Physical Therapy. Established with an estate gift from his son Robert E. Sanderson.

Charlotte and George Saroyan. Established by a gift from their son, Ralph L. Saroyan, Professor Emeritus, Thomas J. Long School of Pharmacy and Health Sciences.

Ralph L. Saroyan Endowed Scholarship. Established in his honor by various donors.

Warren J. Schneider Endowed Memorial Scholarship.

John H. Shinkai Endowed Graduate Pharmacy Student Scholarship.

John H. Shinkai Endowed Pharmacy Scholarship.

Masao and Ayako Shinkai Endowed Memorial Scholarship. Established by Dr. John H. Shinkai in memory of his parents.

Sixties Alumni Memorial Endowed Pharmacy Scholarship.

Florence Scott Van Gilder "The Tolley Award" Endowed Award.

Richard C. Vessey Endowed Memorial Scholarship. Established by his family and augmented by gifts from his friends in memory of this 1975 School of Pharmacy graduate.

Walgreen Company Endowed Pharmacy Scholarship. Awarded to needy and deserving pharmacy students to assist in finishing their professional studies or participating in vital research within the school.

Bryant Kerry Wong Endowed Memorial Scholarship. Established in memory of Mr. and Mrs. Wong's 4-year-old son who was killed in an auto accident in 1965. Both parents are pharmacists.

## **University Library**

Gladys L. Benerd Student Employee Endowed Scholarship.

## **Intercollegiate Athletics**

Athletic Grants are awarded to qualified student athletes according to the regulations of the National Collegiate Athletic Association (NCAA).

Jim and Lois Berens Endowed Athletics Scholarship. Established by a gift from James and Lois Berens.

Chester Caddas Family Endowed Scholarship. Established by gifts from various donors.

Ellen L. Deering Endowed Athletic Scholarship. Established by bequest.

Marilyn E. Field Endowed Scholarship. To support Women's Athletics.

Jessie Murphy Grogan and Robert Grogan Endowed Memorial Softball Scholarship. Established in her memory by her family and friends.

Larry E. Heller Endowed Scholarship.

Al and Lois Irwin Family Endowed Scholarship.

Bing and Jody Kirk Endowed Athletic Scholarship. Established by a gift from E. Bing and Jody Kirk.

Claudine and Jerald Kirsten Endowed Athletic Scholarship. Established with estate and various memorial gifts.

Chris Kjeldsen Endowed Memorial Scholarship. Established in honor of an alumnus and long-time member of the University faculty.

Ted and Stefanie Leland Endowed Scholarship.

Justin and Shirley Marshall Endowed Scholarship.

Tunney McClendon Endowed Memorial Tennis Scholarship. Established by her husband, Dwayne McClendon and her many friends in loving memory of her life and love for the game of tennis.

Warren T. McNeil Endowed Memorial Scholarship.

Myers' Moose Men Endowed Scholarship. Established through tribute gifts for Jack 'Moose' Meyers Pacific football coach 1950-1961.

Jean Rule Sanders Endowed Women's Tennis Scholarship. Established by her daughters. Awarded to a female member of the team who has excelled in scholastic endeavors and has high moral character.

Doug Scovil Memorial Endowed Scholarship. Established with memorial gifts.

Tom Stubbs Endowed Baseball Scholarship. Established by gifts honoring him as baseball coach, assistant football coach, and professor at Pacific for 33 years.



Bert I. Van Gilder Memorial Endowed Scholarship. Established through a gift from Marian Schroven '29 in memory of her husband.

## Student Loans

Loan funds may be used to pay tuition, fees, room, board and other related educational expenses. Information about federal loans is available at the Financial Aid website or may be obtained in the Office of Financial Aid.

### Federal Direct Ford Loans, Federal Direct PLUS Loans and Federal Grad PLUS Loans

Under these programs, the U.S. Department of Education makes loans available through the University, directly to students and parents. The University of the Pacific Financial Aid Office determines eligibility and provides application instructions. Students may be eligible for Federal Direct Ford Loan funds. Parents of dependent students may apply for the PLUS Loan, while graduate students and professional Pharmacy students may qualify for the Graduate/Professional PLUS.

### Health Professions Student Loan

The HPSL program is sponsored by the U.S. Department of Health and Human Services and is administered by the University Student Loan Department. This loan offers a five percent, fixed interest rate and is available for eligible students enrolled full-time in the University's professional pharmacy and dental programs.

### Herbert E. and Lillian E. Burbank Memorial Student Loan Fund

Established with an estate gift from their daughter Jeanne C. Burbank.

### Robert and Merle Carter Student Loan Fund

Established by two long-time friends of the University whose belief in Pacific and its students motivated them to provide this opportunity for worthy and needy young men and women.

### Juanita and Earnie Cronkite Loan Fund

Established with an estate gift to assist deserving students with their education.

### Lloyd Ivan Gerry Memorial Loan Fund

Established from the estate of Isa Spencer Gerry in memory of her husband.

### Claude H. Hogan Revolving Loan Fund

Established to provide emergency loans, supplemental loans and summer study loans for non-traditional students.

### Clara and Frank Mayo Student Loan Fund

Established from a trust to assist students with interest-free loans.

### Blanche Pope Neal Student Loan Fund

Established with a gift to assist students.

### Ralph M. Parsons Revolving Loan Fund

Established by a gift from the Ralph M. Parsons Foundation to assist sophomores, juniors, and seniors who meet GPA and other eligibility requirements. Preference is given to engineering and science majors.

### Edna Ormsby Proctor Endowed Memorial Loan Fund

Established by a gift from her estate to assist the University in training students for full-time Christian service in the area of religious education,

preparing for directorships, conference executive work, and other related professions.

### SIS Tenth Anniversary Loan Fund

Established to assist students with the cost of attending Pacific.

### Francis A. Wagstaff Loan Fund

Established with an estate gift to assist students with expenses.

### Methodist Student Loan Fund

A limited number of students who are active members of the United Methodist Church may obtain loans from the Student Loan Fund administered by the Board of Education of that church. Information is obtained from the University of the Pacific Financial Aid Office.

## Federal Work-Study Program

University of the Pacific participates in the Federal Work-Study program, which provides employment opportunities for students who demonstrate financial need.

## General Education

All accredited universities require that undergraduate students complete not only a major but also a program of general education to broaden their education. At Pacific, the general education program exposes students to areas of study outside of their major, and it develops essential knowledge and skills that are transferable to students' other courses at Pacific as well as to their personal and public lives. It is thus the liberal arts foundation of a Pacific undergraduate education.

The general education program has three main components: the Pacific seminars, the breadth program, and fundamental skills. Refer to the general education section for additional information.

### The Pacific Seminars

All students who enter the University as freshman must complete the three Pacific Seminars. Freshmen are required to take PACS 001 and PACS 002 in their first year, and PACS 003 in their last year. Students who enter Pacific having completed 28 or more units of transferable, classroom college work that appear on a college transcript, except for units earned through a dual enrollment high school program, are exempt from taking PACS 001 and PACS 002 but must complete PACS 003. Students participating in the Freshman honors program should complete the honors section of PACS 001 regardless of the number of college units completed.

Students are not allowed to drop PACS 001 or PACS 002 for any reason, even if they plan to transfer to another college or university. Students who would benefit from special attention to writing skills or who place into WRIT 001 are deferred from the Pacific Seminar sequence until their sophomore year.

If students fail PACS 002, they can repeat a different PACS 002 course.

However, students must pass PACS 001 and PACS 002 in order to graduate. There are no substitutions. The Pacific Seminars cannot be repeated if students earn a "D" or higher and they must be taken for a letter grade.

PACS 003 may be taken when students achieve senior standing and/or have completed 92 or more units to take the course. Students in accelerated programs must take PACS 003 in their last year as undergraduates.

Transfer and Post Baccalaureate students must complete PACS 003.

## The Breadth Program

In addition to the Pacific Seminars, students must complete between six to nine courses in the breadth program. Students should check with their school or college dean's office for specific breadth program requirements. With the guidance of their advisor, students select courses from the categories below:

1. *Social and Behavioral Sciences*
  - a. Individual and Interpersonal Behavior
  - b. U.S. Studies
  - c. Global Studies
2. *Arts and Humanities*
  - a. Language and Literature
  - b. Worldviews and Ethics
  - c. Visual and Performing Arts
3. *Natural Sciences and Mathematics*
  - a. Natural Sciences
  - b. Mathematics and Formal Logic
  - c. Science, Technology and Society

Students can take a maximum of two courses from a single department (as defined by subject code, e.g., HIST or ENGL or MPER) to satisfy the breadth requirement; however, there is an exception for area IIC since students may take three 1-unit courses in the same discipline of applied music or dance to meet the requirement. All bachelor's and first professional degree students on the Stockton campus must complete a minimum of two courses in each category. All students must complete a course in categories IIIA and IIIB. Independent study courses cannot be used to satisfy general education requirements.

Catalog year determines degree requirements; however, general education (GE) courses and transfer course articulations are subject to change. It is the responsibility of the student to be informed of any GE or transfer course articulation changes.

## Fundamental Skills

The University evaluates students to identify those with deficiencies in written expression and quantitative skills. These students are required to take courses designed to improve their understanding and performance in these areas. The writing and quantitative skills requirements are part of the University-wide general education program that must be met before a student graduates with a bachelor's degree or a first professional degree.

## Elective Courses

Students in most academic programs at the University find that in addition to the courses required for their major and for general education they have space in their schedules for a number of elective courses. The diversity of academic fields and specialties represented on the Stockton campus provides the student with a wide choice in the selection of electives. The University's policy is to allow students in any program to take courses in any other school or college on campus. Some students use this freedom primarily to explore unfamiliar academic areas, some to pursue a variety of secondary intellectual interests, and some to develop another area of emphasis as an academic minor or even a formal second major.

## Accelerated Programs

The University offers joint-degree programs between liberal studies, graduate and professional programs that result in accelerated learning. Requirements include varying degrees of demands on the student to take

certain courses and maintain grade point averages. This educational linking is offered through the School of Engineering and Computer Science with a blended BS/MSES program, the School of Pharmacy and Health Sciences offers a Pre-Pharmacy Advantage Program, the School of Dentistry offers a Pre-Dental/DDS. accelerated program, and the McGeorge School of Law offers a JD/MPA and an accelerated JD program. Details on these programs are found in each school's section later in this publication. Graduate program details are found in either the Sacramento, San Francisco or Stockton Graduate catalogs.

## Diversity Requirement

### Mission

#### Self-Understanding

One goal of Pacific's general education program is fundamentally personal: to enrich students' self-understanding and expand their interests in preparation for a fulfilling life. Students are exposed to new intellectual, moral, spiritual, and aesthetic possibilities. Through the interaction with others from different backgrounds and the study of different disciplines, students come to understand who they are and the sources of their beliefs. They thus gain the skills to identify, express and analyze their beliefs and to fashion a philosophy of life that can guide them in their future endeavors. Students may also find life-long pleasure in learning, self-reflection, and conversation.

### Diversity Requirement

The diversity course requirement serves as a key curricular component of the University of the Pacific's commitment to diversity and inclusive excellence. The diversity requirement contributes to students' intercultural competencies and to an understanding of the complex connections among domestic diversity, globalism, and democracy.

The University of the Pacific requires that all students who earn a bachelor's degree must successfully complete at least one 3-unit officially designated diversity course. [Exception: the two-unit INTL 151 and INTL 161 Cross Cultural Training courses may be combined to meet the diversity requirement.] This requirement is applicable to all students who have enrolled at Pacific on or after fall 2010.

## Transfer Students

Students who transfer into the university on or after fall 2011 are required to complete a designated diversity course prior to graduation. Transfer students are defined in the General Education section of the catalog

## Post Baccalaureate

Students who completed a Bachelor's degree elsewhere and who are seeking an additional Bachelor's degree at Pacific are exempt from this requirement.

## Transfer Courses

The University diversity requirement can be met entirely, or in part, by the successful completion of an approved course at Pacific or at an approved college and university. Students who wish to meet this requirement by taking a course at a different college or university must first complete a Transfer Course Approval Request form, available at the Office of the Registrar in Knoles Hall or online at <http://web.pacific.edu/x7909.xml>.

## Objectives of the Diversity Course Requirement

Students who complete any approved diversity course are able to articulate, in both written and oral forms, how notions of difference work within frameworks of social hierarchy. (Difference may be defined by such notions as age, class, citizenship, disability, ethnicity, gender identity, language, nationality, race, religion, sexual orientation, and/or socioeconomic status.)

Students who complete an approved “diversity course” are also able to do at least *three of the following four* tasks:

1. Articulate their own developing understanding of social difference and its impact on their discipline(s), personal life and society as a whole;
2. Express, in both written and oral forms, their understanding of how ideas and beliefs about diversity and difference in the United States have changed over time, identifying relevant historical movements and players;
3. Demonstrate a satisfactory understanding of how social institutions and individuals respond to issues of difference;
4. Apply their understanding of relevant theory and/or historical analysis of diversity to a specific “societal problem” for the purpose of developing solutions.

The full Text of the Diversity Course Requirement can be found at: <http://web.pacific.edu/Documents/provost/acrobat/DiversityCR.pdf>

## Diversity Courses

The courses listed below are approved to count toward the diversity course requirement which are infused throughout the General Education and major curricula.

The listing of diversity courses being taught during a particular term can be found using the search for class by attribute function on insidePacific.

ANTH 053	Cultural Anthropology	4
ANTH 153	Language and Culture	4
ANTH 172	Culture and Power	4
BUSI 170	Human Resources Management	4
COMM 133	Documentary Film as Persuasive Communication	4
COMM 143	Intercultural Communication	4
EDUC 181	ECE: Social Justice/Diversity	3
ENGL 041	British Literature before 1800	4
ENGL 126	Environment and Literature	4
ENGL 130	Digital Chaucer	4
ENGL 131	Shakespeare	4
ENGL 141	Topics in British Literature Pre-1800	4
ENGL 144	Medieval Women Readers and Writers	4
ENGL 145	Romances of Magic in the West	4
ENGL 161	Topics in American Ethnic Literature	4
ENGL 162	Diasporic Asian American Literature	4
ENGL 164	WAR	4
ENGR 030	Engineering and Computing Ethics in Society	3
ETHN 011	Introduction to Ethnic Studies	4
GEND 011	Introduction to Gender Studies	4
HESP 141	Sport, Culture and U.S. Society	4
HESP 153	Adapted Physical Education and Sport	4

HIST 020	United States History I	4
HIST 021	United States History II	4
HIST 050	World History I	4
HIST 112	History of the Holocaust	4
HIST 120	Native American History	4
HIST 123	Civil War Era	4
HIST 132	American Immigration	4
HIST 133	Women in United States History	4
HIST 135	Women in Time and Place	4
HIST 167	Gender in the History of Science/Medicine/Technology	4
INTL 151	Cross-Cultural Training I	2
INTL 161	Cross-Cultural Training II	2
MHIS 006	Music of the World's People	3
MMGT 111	Music Industry Analysis	4
PHRM 111	Pharmacy Practice and Professionalism	3
POLS 104	Urban Government	4
POLS 134	American Political Thought	4
PSYC 017	Abnormal and Clinical Psychology	4
PSYC 129	Advanced Lab in Developmental Psychology	4
RELI 035	Judaism	4
RELI 104	Religion of the Pharaohs	4
RELI 128	Social Topics in Early Christianity	4
RELI 143	Religion, Race, Justice in US	4
SLPA 143	Multicultural Populations	3
SOCI 021	Culture and Society	4
SOCI 031	Deviant Behavior	4
SOCI 041	Social Problems	4
SOCI 051	Introduction to Sociology	4
SOCI 108	Food, Culture and Society	4
SOCI 111	Environment and Society	4
SOCI 123	Sex and Gender	4
SOCI 125	Sociology of Health and Illness	4
SOCI 141	Race and Ethnicity	4
SOCI 172	Social Inequality	4
SPAN 124	Escritores hispanos en los Estados Unidos	4
THEA 113	What's Past is Prologue: Practice and Perspective in Theatre History I	4
THEA 115	What's Past is Prologue: Practice and Perspective in Theatre History II	4

## General Education Program

“After taking some of these general education courses, I have found new and unexpected interests. I found that I love to learn not only how the world works, but also how belief systems direct people’s perceptions of the world, as I explored in my religious studies classes; or how the knowledge people gain impacts their choices, as I discussed with my Pacific Seminar I class; or how the arts confound and beautify a mechanistic and scientific perception of the world, as I learned in my art history and music appreciation class. The topics I explored in each of my classes helped me cultivate a larger depth and scope of knowledge.”

—Cassie Karambela,  
Biological Sciences major

At Pacific, the general education program exposes students to areas of study outside of their major, and they develop essential knowledge and skills that are transferable to other courses at Pacific as well as to their personal and public lives. The exposure to different areas of study and the development of intellectual and practical skills promote the mission of Pacific's general education: self-understanding, citizenship, and career development.

## Mission

### Self-Understanding

One goal of Pacific's general education program is fundamentally personal: to enrich students' self-understanding and expand their interests in preparation for a fulfilling life. Students are exposed to new intellectual, moral, spiritual, and aesthetic possibilities. Through the interaction with others from different backgrounds and the study of different disciplines, students come to understand who they are and the sources of their beliefs. They thus gain the skills to identify, express and analyze their beliefs and to fashion a philosophy of life that can guide them in their future endeavors. Students may also find life-long pleasure in learning, self-reflection, and conversation.

### Citizenship

Another goal is to produce engaged and informed citizens who advance a democratic society by contributing to political and civil life and by committing themselves to the service of others. General education fosters the skills to evaluate complex social and political issues and teaches the moral and political grounds that inform political action and service in a democracy. The health of a society depends on informed and active citizens who can balance the public good and self-interest.

### Career Development

Finally, the general education program prepares students to enter professional life by developing practical skills that are valuable to employers and essential to civil society. These skills include the abilities to express oneself clearly and cogently in writing and orally, to be diligent and careful in the preparation of one's work, to interpret and evaluate information, to think creatively in order to solve problems, to work independently as well as collegially in groups with a sensitivity toward cultural differences, to use technology, and to treat others ethically in their professional interactions.

## Outcomes

Pacific's general education mission of fostering self-understanding, citizenship and career development is advanced by the completion of three Pacific Seminars and the breadth program courses, all of which introduce students to the natural sciences, social sciences, humanities and arts and which develop the following intellectual and practical skills:

- written communication
- oral communication
- critical thinking
- research skills
- quantitative thinking
- cross-cultural awareness
- ethical reasoning
- civic responsibility
- aesthetic judgment

## Coursework

The course of study described below is required for all students completing a bachelor's degree or a first professional degree from the University. Students must complete three Pacific Seminars and a breadth program that ranges from six to nine courses, depending on the academic unit. Students must also satisfy the fundamental skills requirements in writing and quantitative analysis.

## The Pacific Seminars

The Pacific Seminars are the distinctive feature of Pacific's general education program and have received national attention by the Association of American Colleges and Universities (AAC&U). They focus on the question, "What is a Good Society"? The seminars are taught by faculty from all academic divisions (humanities, social sciences, and natural sciences) and academic units. PACS 001 and PACS 002 are taken in sequence during the first year, and Pacific is one of only a few universities in the nation that has a full first-year general education experience. PACS 003 is taken in the senior year and serves as a culminating general education experience.

### Pacific Seminar 1: What is a Good Society?

(4 Units)

Pacific Seminar 1 (PACS 1) introduces students to the intellectual life of the University by exploring the intersection of who we are as individuals and who we are as communities. The course engages the critical tension between individual rights and social responsibilities as that tension manifests in issues such as identity, equality, and sustainability, among others.

PACS 1 is a shared intellectual experience, incorporating materials from the humanities, social sciences, and natural sciences. Students meet in small sections to discuss the readings and issues and develop their reading, writing, and critical thinking skills.

PACS 1 develops skills students will need to succeed in any field of study at the University and beyond. The course represents an introduction to general education in the best sense of the term: education for self-examination and engaged citizenship. Such grounding will help students develop the agency and flexibility necessary to navigate a rapidly changing political, social, and economic environment.

PACS 1 fulfills the University's College Level Writing Requirement. It requires 6,000-7,000 words of edited composition.

Students entering Pacific as freshmen must pass PACS 001 and PACS 002. There are no substitutions. The Pacific Seminars cannot be repeated if students earn a "D" or higher.

### Pacific Seminar 2: Topical Seminars

(4 Units)

In the second semester of the freshman year, all students must take a Pacific Seminar II topical seminar. Whereas Pacific Seminar I (PACS 001) introduces students to aspects of the issue of a Good Society, the PACS 002 topical seminars focus in depth on a particular aspect of this issue. Some potential seminars are "War, Peace and Religion", "Science and Pseudoscience", "Catastrophes in World History", and "Crime, Punishment and Justice". The seminars are offered from virtually every department and academic unit on campus and will be some of the most innovative courses at Pacific. Students meet in small sections to discuss the readings and issues and develop their writing, critical thinking, and oral presentation skills. Students entering Pacific as freshman must pass PACS 001 and PACS 002. There are no

substitutions. The Pacific Seminars cannot be repeated if students earn a “D” or higher. Prerequisite: Fundamental Skills Writing.

### Pacific Seminar 3: What is an Ethical Life?

(3 Units)

In their senior year, students take **Pacific Seminar 3: What is an Ethical Life?** This course is a culminating general education experience and the final component of the university writing requirement. Students learn about and analyze ethical concepts and theories to understand better their moral development, moral values, and behavior. Students will analyze ethical issues in the contexts of family and friends, work, and political life. Faculty use narrative media—such as film, biography, and literature—to illustrate ethical issues. Students write an ethical autobiography to reflect back on their ethical development and anticipate ethical decisions they may encounter in their future roles as family members and friends, as part of the workforce, and as citizens and members of local, national, and global communities. Students must have completed 92 units to take PACS 3. Students in accelerated programs take PACS 3 in their last year as undergraduates.

#### Pacific Seminar Exemption Policy:

All students who enter the University as freshman must complete the three Pacific Seminars. Freshmen are required to take PACS 001 and PACS 002 in their first year, and PACS 003 in their last year. Students who enter Pacific having completed 28 or more units of transferable, classroom college work that appear on a college transcript, except for units earned through a dual enrollment high school program, are exempt from taking PACS 001 and PACS 002 but must complete PACS 003. Students participating in the Freshman honors program should complete the honors section of PACS 001 regardless of the number of college units completed.

Students are not allowed to drop PACS 001 or PACS 002 for any reason, even if they plan to transfer to another college or university. Students who would benefit from special attention to writing skills or who place into WRIT 001 are deferred from the Pacific Seminar sequence until their sophomore year.

If students fail PACS 002, they can repeat a different PACS 002 course.

However, students must pass PACS 001 and PACS 002 in order to graduate. There are no substitutions. The Pacific Seminars cannot be repeated if students earn a “D” or higher and they must be taken for a letter grade.

PACS 003 may be taken when students achieve senior standing and/or have completed 92 or more units to take the course. Students in accelerated programs must take PACS 003 in their last year as undergraduates.

Transfer and Post Baccalaureate students must complete PACS 003.

### The Breadth Program 6-9 Courses

(3 or 4 Units Each)

The general education program beyond the Pacific Seminars provides students with considerable choice but within a framework that ensures they gain essential knowledge and skills. With the help of their advisors, students choose courses in the breadth program that interest them or that relate to other courses in their planned course of study.

The Breadth Program requirements vary from School or College (see the table following the listing of the categories and sub-categories). All students must complete at least six courses, two from each of the three

main categories listed below (I, II, and III); however, only one class can come from each subcategory or area (A, B, and C), and all students must complete a course in area III-A and in area III-B.

Students can satisfy subcategory IIIC by taking a second course in subcategory IIIA.

Students can take a maximum of two courses from a single department (as defined by subject code, e.g., HIST or ENGL or MPER) to satisfy the breadth requirement; however, there is an exception for area IIC since students may take three 1-unit courses in the same discipline of applied music or dance to meet the requirement. Courses in the breadth program component of the general education program normally have a value of three or four units.

Independent study courses cannot be used to satisfy general education requirements. Catalog year determines degree requirements; general education courses and transfer course articulations are subject to change. It is the responsibility of the student to be informed of any general education or transfer course articulation changes.

The structure of the breadth program is as follows:

#### Social and Behavioral Sciences

IA. Individual and Interpersonal Behavior

IB. U.S. Studies

IC. Global Studies

#### Arts and Humanities

IIA. Language and Literature

IIB. Worldviews and Ethics

IIC. Visual and Performing Arts

#### Natural Sciences and Mathematics

IIIA. Natural Sciences

IIIB. Mathematics and Formal Logic

IIIC. Science, Technology and Society

or a second IIIA Natural Sciences course

The titles of the courses themselves are listed by category and subcategory later in this section.

The breadth program requirements for each School or College are listed in the table below. Contact the General Education Unit Coordinator in your unit for more information.

Category/Sub-category	BUSI	CONSCOP	EDU	ENGR/ COMP	PH	SIS
I.A Individual and interpersonal Behavior	X	Two of	X	Two of	X	X
I.B U.S. Studies	X	three areas	X	three areas	X	X
I.C Global Studies		areas	X	areas	X	
II.A Language and Literature	X	Two of	X	Two of	X	X
II.B Worldviews and Ethics	X	three areas	X	three areas	X	
II.C Visual and Performing Arts	X	areas	X	areas	X	X
III.A Natural Sciences	X	X	X	X	X	X
III.B Mathematics & Formal Logic	X	X	X	X	X	X
III.C Science, Technology, Society			X	X	X	

Students can satisfy GE requirements with a 4 or higher for Advanced Placement and a 5 or higher for Higher Level International Baccalaureate. A maximum of 28 units total from Advanced Placement, International Baccalaureate DANTES and/or CLEP test results may be applied toward a Pacific degree, including General Education breadth areas.

## Fundamental Skills

As part of the general education program, all students are required to be competent in two fundamental skills at entrance: writing and quantitative analysis. Students may demonstrate competence in these skills in one of three ways:

1. Completion of approved, college-level courses at an accredited college or university;
2. Satisfactory performance on an approved, nationally administered examination; or
3. Satisfactory performance on examinations given at Pacific during new student orientation or shortly thereafter.

### Students can meet these fundamental skills by taking course work to improve their skills as follows:

- Based on their writing placement, students will take a combination of writing courses (WRIT 001/WRIT 002 and/or PACS 001 with PACS 001P) to fulfill the writing requirement.
- To show competency in quantitative analysis (math), students must successfully complete MATH 005 (Intermediate Algebra), MATH 035 (Statistics) with a grade of C- or better, or complete an equivalent course from another accredited college or university with a grade of C or better during the first full year of study including summer sessions.
- Successful completion of course work in quantitative analysis and writing at Pacific requires a grade of C- or better. Course work taken in quantitative analysis or writing at another college or university requires a grade of C or better and must be approved in advance via a [Transfer Course Approval form](#).
- Failure to make progress toward fulfilling Pacific's fundamental skills requirements during the first year of study is grounds for being placed on academic probation. Failure to satisfy the fundamental skills requirements (as summarized in the three points above) by the end of four semesters of full-time study at the University is grounds for academic disqualification.
- Students with documented disabilities that directly affect their mastery of these skills or students concurrently enrolled in an approved English-as-a-Second-Language (ESL) Program of instruction in reading and writing may seek a written extension of the deadline for demonstrating competence.
- The quantitative analysis (math) and writing requirements must be met before a student graduates with a bachelor's degree or a first professional degree.

## Requirements for Transfer Students

### Fundamental Skills Requirements

Fundamental skills requirements for transfer students include writing and quantitative analysis (math). Students may demonstrate competence in these skills in one of three ways:

1. Completion of approved, college-level courses at an accredited college or university;
2. Satisfactory performance on an approved, nationally administered examination; or

3. Satisfactory performance on examinations given at Pacific during new student orientation or shortly thereafter. Placement tests taken by transfer students at their previous institution do not replace Pacific's assessments.

### Breadth Program Requirements

Transfer students who completed the IGETC or CSU Breadth General Education requirements at a California Community College prior to enrolling at Pacific satisfy Pacific's General Education program, though they must complete PACS 003. *Students who have not completed the IGETC or CSU Breadth General Education requirements have their courses articulated for general education credit on a course by course basis.* General education courses taken by these students at their previous institutions which are of the same quality and equivalency as courses offered at Pacific do apply for breadth program requirements at Pacific.

### Pacific Seminar Requirements

Transfer students who have completed 28 or more units of transferable, classroom college work that appear on a transcript must only complete PACS 003.

Individual schools and colleges may impose general education graduation requirements, including skills requirements, beyond the University's general education program.

Transfer students who entered the University prior to the 1993-94 academic year and who desire an evaluation of their records in regard to general education should contact the Office of the Registrar.

## Requirements for Readmitted Students

Students who originally enter Pacific as a Freshman are required to complete PACS 001 and PACS 002, even if the student chooses to leave Pacific and applies for readmission at a later date. A student is held to the rules based on their original admission regardless of readmission at a later point in time. A freshman who leaves the university and applies for readmission later is not then treated as a transfer student, regardless of how many units the student is able to transfer to Pacific as part of their readmission. Students who withdraw from Pacific and complete either the CSU Breadth or UC IGETC General Education Program at a California community college will be exempt from PACS 001 and PACS 002, but they are required to complete PACS 003."

## Requirements for Post Baccalaureate Students

Students who completed a Bachelor's degree elsewhere and who are seeking an additional Bachelor's degree at Pacific must only complete PACS 003 to satisfy the GE and Fundamental Skills requirements.

## Breadth Course List for General Education

The courses listed below are approved as counting toward the breadth program requirement in each of the nine areas of the program. Students who satisfy II-C with one-unit dance or applied music courses must complete three courses in the same discipline. Although not always listed here, some "special topics" courses taught during a particular term may also be approved for general education. Some professional schools on campus have more restrictive requirements under which only some of the courses listed in each area count for students pursuing those professional programs.

The listing of general education courses being taught during a particular term can be found using the search for class by attribute function on Inside Pacific.

Catalog year determines degree requirements; however, general education (GE) courses and transfer course articulations are subject to change. It is the responsibility of the student to be informed of any GE or transfer course articulation changes.

#### I-A. Individual and Interpersonal Behavior

COMM 043	Introduction to Interpersonal Communication	3
COMM 117	Public Advocacy	4
ECON 053	Introductory Microeconomics	4
EDUC 100	Introduction to Language	4
GEND 011	Introduction to Gender Studies	4
HIST 064	A History of Alcohol and Intoxicants	4
PSYC 017	Abnormal and Clinical Psychology	4
PSYC 029	Developmental Psychology	4
PSYC 031	Introduction to Psychology	4
PSYC 066	Human Sexuality	4
SLPA 051	Introduction to Communication Disorders	3
SOCI 031	Deviant Behavior	4
SOCI 033	Criminology	4

#### I-B. United States Studies

BUSI 053	The Legal and Ethical Environment of Business	4
COMM 031	Media and Society	3
ECON 051	Economic Principles and Problems	3
ECON 055	Introductory Macroeconomics: Theory and Policy	4
ENGL 051	American Literature before 1865	4
ENGL 053	American Literature after 1865	4
ENGL 160	Blues, Jazz, and Literature	4
ENGL 161	Topics in American Ethnic Literature	4
ENGL 162	Diasporic Asian American Literature	4
ETHN 011	Introduction to Ethnic Studies	4
HESP 141	Sport, Culture and U.S. Society	4
HIST 020	United States History I	4
HIST 021	United States History II	4
HIST 120	Native American History	4
HIST 133	Women in United States History	4
MMGT 011	Music, Entertainment in U.S. Society	4
POLS 041	U.S. Government and Politics	4
RELI 143	Religion, Race, Justice in US	4
RELI 170	Bible in America	4
SOCI 021	Culture and Society	4
SOCI 041	Social Problems	4
SOCI 051	Introduction to Sociology	4
SOCI 125	Sociology of Health and Illness	4

#### I-C. Global Studies

ANTH 053	Cultural Anthropology	4
ASIA 124	Society, Gender and Culture in East Asia	4
CHIN 023	Intermediate Chinese, Third Semester	4
CHIN 025	Intermediate Chinese, Fourth Semester	4
CHIN 125	Advanced Chinese I	4
CLAS 051	Classical Mythology	4
CLAS 100	History of Ancient Greece	4

CLAS 102	History of Ancient Rome	4
COMM 143	Intercultural Communication	4
ENGL 063	Masterpieces of World Literature	4
FREN 023	Intermediate French, Third Semester	4
FREN 025	Intermediate French, Fourth Semester	4
FREN 122	La Francophonie	4
GERM 023	Intermediate German, Third Semester	4
GERM 025	Intermediate German, Fourth Semester	4
HIST 030	East Asian Civilization I	4
HIST 031	East Asian Civilization II	4
HIST 040	Colonialism in Latin America	4
HIST 041	The Problem with Latin America	4
HIST 061	Global History of Food	4
HIST 111	Europe in Turmoil 1900-1945	4
HIST 113	Europe Since 1945	4
HIST 132	American Immigration	4
HIST 141	Pre-Modern China to 1840	4
HIST 151	People's History of Mexico	4
JAPN 023	Intermediate Japanese, Third Semester	4
JAPN 025	Intermediate Japanese, Fourth Semester	4
JAPN 125	Advanced Japanese I	4
MHIS 006	Music of the World's People	3
POLS 011	Introduction to Comparative Politics	4
POLS 051	Introduction to International Relations	4
POLS 152	Politics of Asia	4
RELI 031	Jerusalem through the Ages	4
RELI 102	History of Ancient Egypt and the Near East	4
RELI 104	Religion of the Pharaohs	4
RELI 106	Illness and Healing in the Ancient World	4
RELI 124	Ancient Judaism	4
RELI 130	The Christian Tradition	4
SPAN 023	Intermediate Spanish, Third Semester	4
SPAN 025	Intermediate Spanish, Fourth Semester	4
<b>II-A. Language and Literature</b>		
CHIN 011A	First-Year Chinese, First Semester	4
CHIN 011B	First-Year Chinese, Second Semester	4
CLAS 110	Reading Greek Literature in English	4
CLAS 112	Reading Roman Literature in English	4
COMM 027	Public Speaking	3
ENGL 025	English 25	4
ENGL 041	British Literature before 1800	4
ENGL 043	British Literature after 1800	4
ENGL 082	How English Works	4
ENGL 130	Digital Chaucer	4
ENGL 131	Shakespeare	4
FREN 011A	First-Year French, First Semester	4
FREN 011B	First-Year French, Second Semester	4
FREN 051	French Literature in English	4
GERM 011A	First-Year German, First Semester	4
GERM 011B	First-Year German, Second Semester	4
GREK 011A	First-Year Ancient Greek, First Semester	4
GREK 011B	First-Year Ancient Greek, Second Semester	4
HBRW 011A	First-Year Classical Hebrew, First Semester	4
HBRW 011B	First-Year Classical Hebrew, Second Semester	4

JAPN 011A	First-Year Japanese, First Semester	4	RELI 027	Portraits of Jesus	4
JAPN 011B	First-Year Japanese, Second Semester	4	RELI 030	Comparative Religion	4
LANG 011A	First Year Language, 1st Sem	4	RELI 034	Introduction to Religion	4
LANG 011B	First Year Language, 2nd Sem	4	RELI 035	Judaism	4
LATN 011A	First-Year Latin, First Semester	4	RELI 043	Social Ethics	4
LATN 011B	First-Year Latin, Second Semester	4	RELI 044	Sex, Sin, and Salvation	4
RELI 023	Hebrew Bible	4	RELI 047	Unbelief: Atheism and Agnosticism	4
SLPA 053	Sign Language I	3	RELI 051	Classical Mythology	4
SPAN 011A	First-Year Spanish, First Semester	4	RELI 134	World Religions	4
SPAN 011B	First-Year Spanish, Second Semester	4	RELI 135	Asian Religious Traditions	4
SPAN 103	Introducción a la literatura hispánica	4	RELI 141	Animals, Religion, and Ethics	4
SPAN 133	Don Quijote	4	RELI 142	Business Ethics	4
THEA 111	Script Analysis	3	RELI 145	Biomedical Ethics	4
THEA 113	What's Past is Prologue: Practice and Perspective in Theatre History I	4	RELI 154	Buddhist Traditions	4
THEA 115	What's Past is Prologue: Practice and Perspective in Theatre History II	4	<b>II-C. Visual and Performing Arts</b>		
<b>II-B. Worldviews and Ethics</b>			ARTH 007	Survey of World Art to 1400	4
CLAS 120	Sexuality in Greek Society	4	ARTH 009	Survey of World Art After 1400	4
CLAS 122	Sexuality in Roman Society	4	ARTH 101	Design Thinking	4
ENGL 141	Topics in British Literature Pre-1800	4	ARTH 108	Renaissance Art and Architecture	4
ENGL 144	Medieval Women Readers and Writers	4	ARTH 112	19th Century European Art	4
ENGL 145	Romances of Magic in the West	4	ARTH 114	20th Century Art and Film	4
ENGL 164	WAR	4	ARTH 116	Contemporary World Art 1945 to Present	4
ENGR 030	Engineering and Computing Ethics in Society	3	ARTH 120	Chinese Art History	4
HHUM 051	Introduction to Health & Humanities	4	ARTH 122	Japanese Art History	4
HIST 010	Western Civilization I	4	ARTS 003	Visual Arts Exploration	4
HIST 011	Western Civilization II	4	ARTS 005	Drawing	4
HIST 050	World History I	4	ARTS 007	Principles of 2-D Design and Color	4
HIST 051	World History II	4	ARTS 009	Principles of 3-D Design	4
HIST 052	John Muir's World: Origins of the Conservation Movement	4	ARTS 023	Painting I	4
HIST 060	A History of Medicine	4	ARTS 037	Sculpture	4
HIST 062	History of Warfare	4	ASIA 120	Asian Cinemas	4
HIST 100	Renaissance and Reformation	4	CLAS 130	Greek Art and Architecture	4
HIST 135	Women in Time and Place	4	CLAS 132	Roman Art and Architecture	4
INTL 081	Perspectives on World History	3	EDUC 142	Visual Arts in Education	3
PHIL 011	Introduction to Philosophy	4	ENGL 031	Aesthetics of Film	4
PHIL 021	Moral Problems	4	ENGL 121	Major Filmmakers	4
PHIL 025	The Meaning of Life	4	ENGL 123	Film, Literature, and the Arts	4
PHIL 027	Fundamentals of Ethics	4	FREN 120	Le Cinema Francais/French Cinema in English	4
PHIL 035	Environmental Ethics	4	HIST 119	History Goes to Hollywood	4
PHIL 053	Ancient Greek & Roman Philosophy	4	MCOM 002	Music Fundamentals	3
PHIL 055	Science, Freedom & Democracy: History of Modern Philosophy	4	MEDX 117	Film Production	4
PHIL 124	God, Faith, and Reason	4	MHIS 005	Music Appreciation	4
PHIL 127	Philosophy of Sport	4	MHIS 007	Topics in American Popular Music	3
PHIL 135	Political Philosophy	4	MPER 066	Jazz Ensemble (Note: 1 unit)	1
PHIL 145	Biomedical Ethics	4	MPER 070	University Symphony Orchestra (Note: 1 unit)	1
POLS 021	Introduction to Political Theory	4	MPER 072	Symphonic Wind Ensemble (Note: 1 unit)	1
POLS 130	Ancient to Medieval Political Theory	4	MPER 073	Concert Band (Note: 1 unit)	1
POLS 132	Modern to Contemporary Political Theory	4	MPER 082	The Oriana Choir (Women's Chorus) (Note: 1 unit)	1
POLS 134	American Political Thought	4	MPER 083	University Chorus (Note: 1 unit)	1
RELI 025	New Testament and Christian Origins	4	MPER 084	Pacific Singers (Note: 1 unit)	1
			MUJZ 008	Introduction to Jazz	3
			RELI 171	Religion and Cinema	4
			SPAN 114	Cine hispano/Hispanic Film	4
			THEA 011	Introduction to the Theatre	4



THEA 051A	Ballet (Note: 1 unit)	1
THEA 051B	Jazz (Note: 1 unit)	1
THEA 051C	Modern Dance (Note: 1 unit)	1
THEA 051D	Tap (Note: 1 unit)	1
THEA 071	Beginning Acting	3
THEA 075	Expressive Movement	3
ENGL 112	Playwriting	3
THEA 134	Mask-Making	3

### III-A. Natural Sciences

BIOL 011	Human Anatomy and Physiology	4
BIOL 041	Introduction to Biology	4
BIOL 051	Principles of Biology	5
BIOL 061	Principles of Biology	5
BIOL 076	Marine Biology	4
BIOL 079	California Flora	4
CHEM 023	Elements of Chemistry	4
CHEM 024	Fundamentals of Chem	4
CHEM 025	General Chemistry	5
CHEM 027	General Chemistry	5
GESC 043	Environmental Science for Informed Citizens	4
GESC 051	Dynamic Planet	4
GESC 053	Earth and Life Through Time	4
GESC 057	Earth Systems Science	4
GESC 061	Geology of California	4
GESC 065	Regional Geology	4
PHYS 017	Concepts of Physics	4
PHYS 021	Energy for Global Citizens	4
PHYS 023	General Physics I	5
PHYS 025	General Physics II	5
PHYS 039	Physics of Music	4
PHYS 041	Astronomy	4
PHYS 053	Principles of Physics I	5
PHYS 055	Principles of Physics II	5

### III-B. Mathematics and Formal Logic

COMP 025	Computers and Information Processing	4
COMP 047	Discrete Math for Computer Science	4
COMP 051	Introduction to Computer Science	4
COMP 061	Introduction to Programming for Data Science	4
HIST 066	Ancient Arithmetic	4
INTL 101	Social Science Research Methods	4
MATH 033	Elements of Calculus	4
MATH 035	Elementary Statistical Inference	4
MATH 037	Introduction to Statistics and Probability	4
MATH 039	Probability with Applications to Statistics	4
MATH 041	Pre-calculus	4
MATH 045	Introduction to Finite Mathematics and Calculus	4
MATH 051	Calculus I	4
MATH 053	Calculus II	4
MATH 055	Calculus III	4
MATH 064	Ancient Arithmetic	4
MATH 072	Operations Research Models	4
PHIL 037	Introduction to Logic	4
POLS 133	Political Science Research	4
PSYC 101	Research Methods and Statistics in Psychology I	5

### III-C. Science, Technology and Society

BIOL 035	Environment: Concepts and Issues	4
COMP 041	Great Ideas in Computing	4
ENGL 039	Introduction to Digital Humanities	4
ENGL 126	Environment and Literature	4
ENGL 128	Science and Literature	4
ENST 041	Introduction to Environmental Studies	4
GESC 045	Soil, Water, and War	4
HESP 041	Health and Wellness for Life	4
HESP 045	Nutrition for Health	4
HIST 063	History of Science and Technology	4
HIST 167	Gender in the History of Science/Medicine/ Technology	4
PHIL 015	Introduction to Cognitive Science	4
PHIL 061	Philosophy of Science	4
PHIL 079	Sensation and Perception	4
PSYC 079	Sensation and Perception	4
RELI 039	Introduction to Digital Humanities	4
SOCI 111	Environment and Society	4

Any Second IIIA Course

## Pacific Core Competencies

### Core Competencies

The following are Pacific's university-wide undergraduate core competencies adopted in 2016:

- Critical Thinking
- Information Literacy
- Oral Communication
- Quantitative Reasoning
- Written Communication

The primary purpose of the core competencies is to support undergraduate teaching and learning at all three campuses of the University. These undergraduate core competencies are required by WSCUC but are defined for Pacific by the University Assessment Committee (UAC). Definitions of the core competencies can be found here (<https://www.pacific.edu/about-pacific/administrationoffices/office-of-the-provost/educational-effectiveness/assessment-of-student-learning-/undergraduate-core-competencies.html>) on Pacific's website.

Pacific's commitment to using this common set of core competencies in support of student learning will:

- Give students, faculty, administration and staff a clear and concise understanding of the essential competencies of an undergraduate Pacific education;
- Create a more coherent educational experience for students as schools and divisions align with these competencies;
- Enable Pacific to assess undergraduate outcomes at the university-level to continuously improve teaching and learning.

The UAC is charged with coordinating the assessment of these competencies; however, it is the responsibility of each School/College, General Education, and the Division of Student Life to report how learning outcomes for their programs align with these competencies. Each academic degree program will have additional learning outcomes beyond the university-wide undergraduate competencies stated here. Schools

and Divisions may also have additional learning outcomes common to all its programs.

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## Tuition and Fees

- Graduate/Undergraduate (p. 73)
- Professional (p. 73)

## Graduate/Undergraduate

**Arthur A. Dugoni School of Denistry**  
Dental Hygiene

**Conservatory of Music**  
Music Therapy

**School of Engineering and Computer Science**  
Data Science

**School of Health Sciences**  
Audiology

## Professional

**Arthur A. Dugoni School of Dentistry**

All information applies to the DDS Program. Not all information applies to the IDS, Certificate or Dental Graduate Programs. For more information, contact your program.

## Tuition and Fees on this page are for the following graduate and undergraduate programs on the San Francisco campus.

**Arthur A. Dugoni School of Denistry**  
Dental Hygiene

**Conservatory of Music**  
Music Therapy

**School of Engineering and Computer Science**  
Data Science

**School of Health Sciences**  
Audiology

The University of the Pacific is an independent institution. Each student is charged tuition that covers about three-fourths of the cost of services furnished by the University. The balance of these costs is met by income from endowment and by gifts from regents, parents, alumni, and other friends who are interested in the type of education this institution provides.

## Overall Costs for the School Year

The annual expenses for a student at the University of the Pacific depends upon a variety of factors. Tuition and fees are the same for students regardless of their state or country of residence. Basic expenses are as follows:

Type	Cost
Tuition (1) per academic year, enrolled in 12 to 18 units in each semester	\$48,904
Wellness Center	\$330
ASUOP Student Fee	\$274
Activity & Recreation Fee	\$80
Room and Board	\$13,408
Total per academic year	\$62,996
School of Pharmacy Annual Tuition (Eleven-month program, three terms)	\$78,354

<sup>1</sup> Arthur A. Dugoni School of Dentistry and McGeorge School of Law tuition and fee schedules are available in the Sacramento and San Francisco catalogs.

There are other fees and charges unique to certain programs. These fees or charges may be determined by contacting Student Accounts or the University office that administers those programs or activities in which the student intends to enroll or engage.

Expenses for books and supplies, special fees, and personal expenses usually average approximately \$5,157 annually.

The University reserves the right to change fees, modify its services or change its programs at any time and without prior notice.

## Tuition – Undergraduate Students (per semester)

All schools except Pharmacy and Health Sciences

Type	Cost
Full-time (12 to 18 units)	\$24,452
Part-time (.5 to 11.5 units) per unit	\$1,687
Excess units above 18 units, per unit	\$1,687
Engineering Co-op (full-time) Admitted prior to Fall 2016 tuition rate	\$12,226
Engineering Co-op (full-time) Admitted Fall 2016 tuition rate	\$6,114

## Tuition – School of Pharmacy (per term)

Type	Cost
Full-time (12 to 20 units)	\$26,118
Part-time (.5 to 11.5 units) per unit	\$1,800
Excess units above 20 units, per unit	\$1,800
Pharmacy Clerkship Rotation (full-time)	\$26,118
Pharmacy Technology Fee	\$330
Pharmacy Professional Fee (1)	\$325
Physical Therapy Fee	\$150

<sup>1</sup> Required of all students enrolled in the professional program with 12 units or more.

## Tuition – Graduate Students (per semester)

Type	Cost
All schools (16 to 18 units) plus applicable fees	\$24,452
All schools (.5 to 15.5 units) per unit, plus applicable fees	\$1,528
Excess units above 18 units, per unit	\$1,528
Physical Therapy (12 to 18 units), plus applicable fees (Fall, Spring, Summer Terms)	\$24,334
Physical Therapy (1 to 11.5 units)	\$1,520

## General Fees (per semester)

### Student Health Insurance Plan

Undergraduate Students \$1,260

Graduate and Professional Pharmacy Students \$1,671

Required for all students enrolled in 9 or more units and for all international students with an F-1 Visa taking .5 units or more. It is optional for students enrolled in .5 to 8.5 units. The Student Health Insurance can be waived with proof of own health insurance if provided by the deadline and if the coverage meets University requirements.

### Wellness Center Fee \$165

This fee is required for all students residing in University housing; and for all other students, both graduate and undergraduate, enrolled in 9 units or more.

### Wellness Center Fee \$90

This fee is required for all students enrolled in .5 to 8.5 units.

### ASUOP Student Fee \$137

This fee is required for all undergraduate students residing in University housing and all undergraduates enrolled in 9 units or more. It is optional for students enrolled in .5 to 8.5 units.

### ASUOP Graduate Student Fee \$30

This fee is required for all graduate students and doctoral candidates enrolled in 8.5 units or more. It is optional for students enrolled in .5 to 8.0 units.

### Activity & Recreation Fee \$40

This fee is required for all students enrolled in 9 units or more.

### Course Audit Fee, per class \$50

Instructor permission is required. Auditing is not available in participation courses such as applied music, physical education, art courses of an applied nature, etc. The student must indicate a desire to audit the course at the time of registration.

### Engineering/Computer Science Fee \$150

This fee is required for all students enrolled in the School of Engineering and Computer Science. Students are exempt from the fee while enrolled full time in the off-campus cooperative education program.

### Business School Fee \$20

This fee is required for all Business Majors.

### Conservatory Fee \$250

This fee is required for all Conservatory Majors.

### Practice Room Fee \$10

This fee is required for all Conservatory Majors.

### Applied Music Fees

Private lesson<sup>1</sup> fees vary by instrument and are based upon length of lesson. Fees range from \$70 to \$375. Please check with the Conservatory to determine appropriate charges. Applied music lessons must be arranged through the Conservatory Office.

<sup>1</sup> Private lessons and applied class lessons for non-music majors are available only if faculty loads permit and must be arranged through the Conservatory Office.

## Special Fees

(Partial List)

Type	Cost
Transcript Fee	\$5
Matriculation Fee	\$100
Petition Fee	\$25
Graduate Continuing Education Fee	\$50
Non-refundable, Credit by Exam Fee	\$50
Additional fee for successful Credit By Exam results	\$200

## Undergraduate Confirmation Deposit

A deposit of \$70 is required for all new students once notification of acceptance to the University has been received. The deposit is applied toward the student's tuition and is nonrefundable after May 1.

## Housing Deposit

A deposit of \$200 is required for all new students who apply to reside in campus housing. This should be paid once notification of acceptance to the University has been received. The deposit is applied towards the student's housing charges and is nonrefundable after May 1.

## Financial Responsibility

Registration, when accepted by the University of the Pacific, constitutes a financial agreement between the student and the University. Registration is considered complete when the bill has been settled. Tuition, fees and other charges the student incurs including but not limited to, housing, meal plans, and bookstore charges are added to the student account and are considered a loan for an educational benefit.

When you register for courses with the University of the Pacific, you are responsible for all "charges" as they become due. The charges include but are not limited to tuition, fees, room and board, meal plans, Laptop Agreement, bookstore charges and library charges (herein "charges"). These charges are for your educational benefit and if you fail to satisfy your financial obligation to the University you will not be provided any benefits from the University. The benefits which may be terminated include but are not limited to, course registration, housing and meal plans, transcripts and diplomas. Any outstanding charges due on your student account will be transferred to a Student Note Loan balance with the Student Loan Department, of the University of the Pacific for servicing. This Student Note Loan balance is subject to daily interest, late fees, collection fees, credit bureau reporting and any legal fees or costs associated with any bankruptcy. Failure to pay these charges when due will result in loss of housing, suspension of meal plans, termination of enrolled student status and will result in being denied access to the deferred payment plan options. It is your responsibility to ensure that all financial aid is properly credited to your account. The University reserves the right to increase their fees and charges. Registration constitutes my agreement to all the forgoing terms and conditions.

You agree, in order for us to service your account or to collect any amounts you may owe, we may contact you by telephone at any telephone number associated with your account, including wireless telephone numbers, which could result in charges to you. We may also contact you by sending text messages or e-mails, using any e-mail address you provide to us. Methods of contact may include using pre-recorded/artificial voice messages and/or use of an automatic dialing device, as applicable. I have read this disclosure and agree that the University of the Pacific or its appointed agents may contact me as described above.

In order to receive a bill that includes tuition and fees prior to the payment deadline, you must early register for courses. Please note that students with delinquent accounts are not permitted to register. It is the students' responsibility to pay by the deadline, regardless of receiving a statement. Students can obtain their current account balance by logging into *insidePacific*. The University sends monthly electronic billing statements. Students receive a monthly email notifying them that their statement is ready for viewing. This statement notification email is also sent to any Authorized Users that the student establishes. Authorized Users do not have access to any other student information through this site. The billing statement can be printed from the

computers located in the lobby of the Finance Center or by a request to the Student Accounts Office.

All electronic correspondence is sent to the student's u.pacific.edu email address.

A dispute of any charge on your student account must be submitted in writing to the Student Accounts Office within sixty days from the date of billing. If you fail to comply within the sixty day time period, you may forfeit your rights to dispute the charge in the future.

## Payment of Bills

Tuition, fees, and room and board, if applicable, are due in full by the payment deadline. The payment deadlines are August 1<sup>st</sup> for the fall semester and January 1<sup>st</sup> for the spring semester for general students. Payment deadline information for other programs is available online on the Student Business Services website located at [go.pacific.edu/studentaccounts](http://go.pacific.edu/studentaccounts). Any outstanding balances from prior semesters must be paid in full as well as the current semester payment, by the deadline. Students who have not yet registered can estimate their payment amount by utilizing the Calculation Worksheets available at the Student Business Services website. Payments for the intended enrollment must be made by the deadline, even if the student has not completed their course registration. Late fees will be assessed for payments received after the deadline. Failure to complete financial obligations can result in the cancellation of registration.

The University offers two payment options. The first is payment in full of all charges, less any applicable financial aid, by the deadline. The second option is a four month payment plan. The Monthly Plan requires a 25% down payment in addition to a \$75 non-refundable, deferred fee per semester. Those who utilize the monthly payment plan must enroll **online** through *insidePacific* by the payment deadline. In order for a parent or guardian to enroll in the monthly payment plan, their student must officially establish them as an Authorized User. Subsequent monthly payments are due by the first of the month.

International students may **not** utilize the monthly payment plan. Payment in full is required by the payment deadline.

It is the student's responsibility to ensure that all financial aid is properly credited to his/her account.

Payments can be made by cash, paper check, money order, cashiers check, and electronic checks. Payments must be received by the deadline; postmarks are not acceptable. Payments by check or cash can be made in person at the Cashiers Office, located in the Finance Center. If making payment by mail, please send check or money order to the attention of Student Accounts. Please include the student's university identification number or send a copy of the statement, which can be downloaded and printed, in order to ensure proper payment application.

Students who have not paid in full, completed all financial aid requirements and/or enrolled in the monthly payment plan by the payment deadline, are assessed a \$150 late payment fee. A late fee of \$50 is assessed for any payments made after the due date.

Failure to make payments as agreed can result in the University of the Pacific canceling all financial arrangements, a student's registration, and denying all University services.

Any payment on the student account that is returned by a financial institution for any reason can lead to cancellation of registration. If registration is cancelled for the semester, the student will not receive credit for those courses. A returned payment fee of \$25 is assessed

for the first returned payment. Any payment returned subsequently is assessed a \$35 returned payment fee. After two (2) returned payments, the University can suspend both electronic and paper check writing privileges and institute collection and/or legal actions against the payer. The student's account is then placed on a finance hold thus preventing the student from receiving any services from the University.

The University requires that all accounts be paid in full by the end of the semester. Any account that remains delinquent is transferred to the Student Loan Department for servicing. Once the account is transferred, the Student Account Note or balance is subject but not limited to, principal, interest, late charges, collection fees, credit bureau reporting, and any legal fees associated with the collection of the debt. In accordance with California state law, all unpaid balances accrue 10% interest, per annum, on the balance remaining on the date of transfer. Students are responsible for all fees associated in the collection of the debt. A student with a balance due to the University is not allowed any benefits from the University including but not limited to, registration for courses, copies of transcripts or diplomas, and utilization of University housing and meals, until the balance is paid in full. In addition, all institutional loans or other loans guaranteed by the Federal Government must be in good (current) standing and exit interviews completed prior to the release of diploma or transcripts.

If payments exceed charges on a student account, the account is said to have a credit balance. Credit balances are to be returned to the student based upon the method of payment. The student account is not to be used as a means for cash advances or payments to third parties. Upon request, credit balances resulting from cash payments will be refunded to the student. A credit balance that results from a check payment is refunded after 14 business days. Credit balances that result from *refundable* student loans and scholarships are also refunded upon request. All financial aid must be disbursed on the student account before a refund is processed. Refunds are issued on a weekly basis.

Effective August 1, 2019, any student using CH31 (Vocational Rehabilitation and Employment benefits) or CH33 (Post-9/11 G.I. Bill) is protected from any penalties imposed by our University while waiting for the VA to make tuition and fee payments.

## Refund of Tuition and Fees

The following refund schedule pertains only to tuition charges and is applicable when the student drops below full time enrollment or **officially withdraws** from the University. Students who intend to withdraw must notify the Office of the Registrar.

Refunds are based upon a percentage of calendar days. Calendar days of a semester may vary from semester to semester. For exact dates, please refer to the Student Accounts website or contact their office.

Notification and withdrawal before classes begin – No charge.

First day of classes until last day to add – \$150 clerical charge.

After 50% of calendar days no refund, 100% penalty.

Fees are non-refundable after the last day to add courses for the semester.

Housing and meal plan charges are refunded on a prorated basis as determined by the Office of Residential Life & Housing. Refunds are based upon per diem charges and actual approved check out date.

If the student reducing units or withdrawing from the University is a financial aid recipient, the student's financial aid award may be adjusted according to federal and state regulations and University policy. If the

student has received more federal financial aid dollars than earned, the unearned aid must be returned to the federal financial aid program or programs from which it was paid. The funds remaining on the student account after federal financial aid is returned might not cover all the charges on the account. Any remaining balance is owed to the University and is due and payable immediately. The Financial Aid Office can provide additional information related to changes in financial aid awards.

## Tuition and Fees on this page are for the following professional programs on the San Francisco campus.

### Professional

#### Arthur A. Dugoni School of Dentistry

All information applies to the DDS Program. Not all information applies to the IDS, Certificate or Dental Graduate Programs. For more information, contact your program.

University of the Pacific is a private institution with tuition and fees providing about two-thirds of the revenue necessary for the three-year doctoral program. Gifts from alumni, parents and regents, income from endowments, funds from private agencies and other revenue help meet program costs, but inflation and other factors may require annual increases in tuition and fees to provide necessary program revenue.

Because we offer the nation's only dental program that can be completed in three calendar years, our dental students pay tuition for three years as opposed to four years at all other dental schools.

#### Tuition

Tuition for the 2020-2021 academic year for the DDS and IDS predoctoral programs and for the residency programs in orthodontics and endodontology programs is \$117,020. The estimated annual fees for the Advanced Education in General Dentistry program are \$3,246.00. The Oral and Maxillofacial Surgery program offers a stipend and does not charge tuition and fees.

## Estimated Educational Expenses

Type	First Year	Second Year	Third Year
Tuition	\$117,020	\$117,020	\$117,020
Fees	\$8,439	\$9,172	\$10,833
Kit	\$11,385	\$3,541	\$0
Books and Supplies	\$2,795	\$800	\$800
Estimated Total	\$139,639	\$130,533	\$128,653

## Estimated Living Expenses

Category	Monthly	Quarterly	Annual
Rent	\$1,770	\$5,310	\$21,240
Food	\$545	\$1,635	\$6,540
Transportation	\$137	\$411	\$1,644
Personal/Misc.	\$274	\$822	\$3,288
Estimated Total	\$2,726	\$8,178	\$32,712

Upon notification of acceptance, applicants are required to submit a nonrefundable \$1,000 enrollment fee (\$500 for the graduate programs) as directed in the acceptance letter in order to hold their place. The fee will be applied to first quarter tuition upon matriculation to the University of

the Pacific. First quarter tuition is due and payable before matriculation day. Subsequent payment of tuition is due by the first day of each quarter and is required for registration and continued enrollment.

### Tuition Refund

**Withdrawal:** School policy provides that in response to written notice of withdrawal by a student or by an applicant, tuition credit shall be allocated as follows:

- Prior to matriculation: full credit less the enrollment fee.
- After matriculation: credit prorated according to calendar days after reduction by the enrollment fee (see below).
- After first day of class, second through final quarters: credit prorated according to calendar days as follows:
  - 1st through 7th day: 80% credit
  - 8th through 14th day: 60% credit
  - 15th through 25th day: 40% credit
  - 26th through 35th day: 20% credit
  - After 35th day: no refund

**Dismissal:** Upon dismissal for reasons other than misconduct, tuition credit is allocated according to the refund schedule above. When a dismissed student is readmitted, full tuition must be paid for each quarter repeated, or part thereof.

### Extended Program

A student who has not fully demonstrated competency to the faculty in all clinical disciplines by the end of the final quarter of the program will be extended beyond graduation. An extended student is not charged tuition for one quarter. Tuition for subsequent quarter(s) or part(s) thereof is charged at 85% of the current rate. In every quarter of the extension, an extended student pays current rates for mandatory health and disability insurance. Upon notification to the dean that performance meets graduation standards, an extended student receives tuition credit of 10% for each full week of instruction remaining in the quarter.

### Readmission and Repeat

Repeat students are charged 85% of the current tuition for any quarter repeated and 100% of the current rate thereafter. A student must pay any outstanding account balance to be eligible for readmission or to repeat all or part of an academic year.

### Diplomas

A diploma will not be issued until a student's account with the University is paid in full and in the judgment of the school all other requirements have been satisfied. If a diploma is held for financial reasons only, the original graduation date is retained on the record.

### Fees

The enrollment fee described above is nonrefundable. The list of fees and expenses below should not be considered complete for all students, and includes anticipated costs for outside agencies listed as "special fees." Fees listed below are for the DDS program and are estimates. Fees for the International Dental Studies and the Graduate programs are available from the Division of International Dental Studies, and the Department of Orthodontics and the Endodontics department, respectively.

### DDS Program Fees, 2020-2021

*(partial listing; some fees subject to adjustment)*

- Application Fees: \$75.00
- Instrument Management Fee: \$3,346.00
- Student Doctoral Kit\*: \$11,385

- Student Body\*\*: \$89.00
- Health Insurance: TBD
- Disability Insurance: \$54.00
- Technology Fee: \$694.00
- Optical Loupes: \$1,195.00
- Rental Kit: \$165.00

### Special Fees, 2020-21 (partial)

- A.S.D.A.: \$88.00
- California Dental Assn. Membership\*\*: \$5.00
- Laboratory Fee: \$325.00
- **Total: \$17,421.00\***

\*The Student Doctoral Kit includes textbooks, instruments and supplies that are required by the school according to guidelines submitted by the Store Committee. These materials are issued in a kit on matriculation day to all registered students. Instruments and supplies should not be purchased in advance. Release from kit purchases will not be granted. Allowance should be made for additional supplies and instruments that will be required during the educational program.

\*\*Fees for student body, class, ASDA and CDA memberships vary each year according to decisions of the student body and the respective classes.

### Store Refund Policy

A full refund is provided on non-kit items returned within five school days of the date of purchase and within University policy.

### Student Accounts

Student accounts are provided for payment of fees and student store charges. This privilege may be restricted for cause.

Student accounts are billed on a monthly basis and are due and payable prior to the next billing date to avoid a late fee.

Students who fail to make payments on accounts in a timely fashion and as billed are subject to suspension from the academic program without further action or procedures. In addition, a student will not be deemed to have met graduation requirements, nor will a diploma be issued, until a student's account with the university is paid in full.

Effective August 1, 2019, any student using CH31 (Vocational Rehabilitation and Employment benefits) or CH33 (Post-9/11 G.I. Bill) is protected from any penalties imposed by our University while waiting for the VA to make tuition and fee payments.

### Business Office

The business office manages student accounts, including posting of all charges; collecting payments; and issuing reimbursements.

### Patient Accounts

The student is responsible for financial management of assigned comprehensive care patients. This responsibility includes charging correct fees for procedures authorized. Students will not receive credit for a procedure if financial arrangements have not been made prior to initiating care.

### Foreign Students

In order to comply with regulations of the United States Immigration and Naturalization Service, the University of the Pacific requires applicants who are not citizens or permanent residents of the United States to submit a detailed certification of finances showing sufficient financial resources for study at the university. Other special information and

instructions regarding the admission of foreign students will be provided upon request.

### Disclaimer

The school reserves the right to modify or change admission standards or requirements at any time without prior notice and effective immediately. The information provided on this site cannot be regarded as creating a binding contract between the student and the school.

## University Administration

### The Administration

Title	Name
President	Chris Callahan
Provost and Executive Vice President for Academic Affairs	Maria G. Pallavicini
Vice President for Business and Finance	Kenneth Mullen
Vice President for Student Life	Carrie Lovelace Petr
Vice President for University Development and Alumni Relations	Burnie Atterbury
General Counsel	Kevin Mills
Vice President for Technology and Chief Information Officer	Art Sprecher
Associate Vice President for Marketing and Communications	Marge Grey
Associate Vice President for External Relations, Strategic Partnerships and Presidential Initiatives	Stacy McAfee
Associate Vice President for Planning	TBD
Director of Institutional Research	Mike Rogers
Director of Intercollegiate Athletics	Janet Lucas

### Office of the Provost

Title	Name
Provost and Executive Vice President for Academic Affairs	Maria G. Pallavicini
Chief of Staff to the Provost	Jared B. Gaynor
Vice Provost for Faculty Affairs	Joan Lin-Cereghino
Vice Provost for Undergraduate Education	Edith Sparks
Vice Provost for Strategy and Educational Effectiveness	Cyd Jenefsky
Associate Provost	Elisa Anders
Associate Provost of Research	James Uchizono
Assistant Provost for Budget and Finance	Yuhang Shi
Director, Center for Teaching and Learning	Lott Hill

Director, International Programs and Services	Ryan Griffith
University Registrar	TBD

## School and College Deans

Title	Name
Dean, College of the Pacific	Rena Fraden
Senior Associate Dean	Gregg Jongeward
Associate Dean	Scott Jensen
Dean, Conservatory of Music	Peter Witte
Dean, Eberhardt School of Business (Interim)	Tim Carroll
Associate Dean, Academic Programs	Cynthia Eakin
Dean, Benerd College	Patricia Campbell
Senior Associate Dean	Linda Webster
Associate Dean	Farley Staniec
Associate Dean	Rod Githens
Assistant Dean	Kyle Harkness
Dean, School of Engineering and Computer Science	Steven Howell
Associate Dean	Michael Doherty
Dean, School of Health Sciences	Nicoleta Burnariu
Dean, Thomas J. Long School of Pharmacy	Rae Matsumoto
Associate Dean for Academic Affairs	Eric Boyce
Associate Dean for Graduate Education and Research	Xiaoling Li
Associate Dean for Student Affairs Enrollment Management	Marcus Ravnán
Associate Dean for Professional Programs	Allen Shek
Assistant Dean for External Relations	Nancy DeGuire
Associate Dean for Operations	Linda Norton
Assistant Dean for Pre-Pharmacy and Pre-Health Affairs	Marcus Ravnán
Dean, Graduate School	TBD
Dean, Pacific McGeorge School of Law	Michael Schwartz
Associate Dean, Academic Affairs	Mary-Beth Moylan
Associate Dean, Faculty Scholarship	Rachel Salccu
Associate Dean of Administration	Jeff Prose
Assistant Dean, Development	Mindy Danovaro
Assistant Dean, Law Library	James Wirrell

Assistant Dean, Student Affairs	Jennifer Carr
Assistant Dean, Admissions and Financial Aid	Tracy Simmons
Dean, Arthur A. Dugoni School of Dentistry	Nader A. Nadershahi
Dean Emeritus	Arthur A. Dugoni
Executive Associate Dean, Clinical Oral Health Care	Des Gallagher
Associate Dean, Clinical Services	Des Gallagher
Associate Dean, Fiscal Services	Edward Pegueros
Assistant Dean for Admissions, Student Life & Diversity	Stan Constantino
Assistant Dean, Academic Affairs	Daniel J. Bender
Dean, University Library	Mary Somerville

## Office of Vice President for Business and Finance

Title	Name
Vice President for Business and Finance	Kenneth M. Mullen
Associate Vice President for Business and Finance	Ron Ellison
Assistant Vice President, Chief Investment Officer	Jol Manilay
Assistant Vice President, Chief Facilities Officer	Graeme Mitchell
Assistant Vice President, Human Resources	Linda Jeffers
Associate Controller	Audrey George
Executive Director, Facilities Planning and Construction	Priscilla Meckley-Archuleta
Director, Budget	Jonallie Parra
Director, Internal Audit	Randy Schwantes
Director, Procurement Services	Ronda Marr
Director, Risk Management	Roberta Martoza
Director, Sacramento Campus	Patrick Faverty
Director, San Francisco Campus	Kara Bell
Director, Student Business Services	Vacant
Director, University Payroll Services	Tara Juano
Assistant Director, Learning and Development	Shani Richards

## Office of Vice President for External Relations

Title	Name
Associate Vice President for External Relations, Strategic Partnerships and Presidential Initiatives	TBD
Events Manager, Development	Steve Whyte

## Office of the Vice President for Development and Alumni Relations

Title	Name
Vice President	Burnie Atterbury
Senior Associate Vice President, Development	Cathy Wooten
Senior Associate Vice President, Leadership Initiatives and Planning	Scott Biedermann
Assistant Vice President, Alumni Relations	Kelli Page

## Office of Vice President for Student Life

Title	Name
Vice President for Student Life	Carrie Lovelace Petr
Associate Vice President for Student Well-Being/Dean of Students	Rhonda Bryant
Associate Vice President for Student Involvement and Equity	Allison Dumas
Associate Vice President/Executive Director, Career Development	Tom Vecchione
Executive Director, Public Safety	Grant Bedford
Executive Director, Residential Life, Housing, and Dining Auxiliary	Joe Berthiaume
Executive Director, Assessment and Student Development Services	Sandra Mahoney
Executive Director, Campus Life	Marc Falkenstein
Executive Director, Community Involvement & Educational Equity Programs	TBD
Associate Dean of Students (Sacramento and San Francisco)	Heather Dunn-Carlton
Assistant Dean of Students	Anne Eastlick
Director, Campus Career Partnerships	Deb Crane
Director, Corporate & Employer Engagement	Robin MacEwan
Director, Counseling & Psychological Services	Kimberlee DeRushia
Director, Dining Services	Sia Mohsenzadegan
Director, SUCCESS	TBD
Director, Finance and Administration	Breann Northcutt
Director, Intercultural Student Success	TBD



Director, Orientation and Transition Programs	Ashton Ricketts
Director, Public Safety (Sacramento)	Jason Darling
Director, Public Safety (San Francisco)	John Feeney
Director, Religious and Spiritual Life/Multifaith Chaplain	Laura Steed
Director, Services for Students with Disabilities	Danny Nuss
Director, Student Health Services	Dayna Cerruti-Barbero
Director, University Bookstore	Jeremy Levenberg
Director, Upward Bound Program	Rosa Montes

## University Policy on Disclosure of Student Records

### Family Educational Rights and Privacy Act (Buckley Amendment)

The University of the Pacific complies with The Family Educational Rights and Privacy Act (abbreviated FERPA and formerly known as the Buckley Amendment). Educational institutions are required to annually notify enrolled students of their rights under the Federal Family Educational Rights and Privacy Act of 1974 (FERPA), as amended. This page fulfills this obligation and serves as the annual FERPA notification to students at the University of the Pacific, by providing information about the university policy and students' rights with respect to their education records.

"Student" means an individual who is or who has been in attendance at University of the Pacific. A student or resident's FERPA rights begin when the student or resident registers and attends his/her first class. It does not include any applicant for admission to the university who does not matriculate, even if he or she previously attended the university. (Please note, however, that such an applicant would be considered a "student" with respect to his or her records relating to that previous attendance. Students or residents who originally sought admission to one program of study at the university and are denied, but subsequently are admitted and enrolled in a different program of study, have FERPA rights only in their admitted and enrolled program of study.) "Education records" include those records that contain information directly related to a student and that are maintained as official working files by the University. Examples of records that are **not** education records are records about students made by instructors, professors and administrators for their own use and not shown to others; campus police records maintained solely for law enforcement purposes and kept separate from the education records described above; employment records, except where a currently enrolled student is employed as a result of his or her status as a student; records of a physician, psychologist, or other recognized professional or paraprofessional made or used only for treatment purposes and available only to persons providing treatment; records that contain only information relating to a person's activities after that person is no longer a student at the university.

It is the policy of the university (1) to permit students to inspect their education records, (2) to limit disclosure of personally identifiable information from education records without students' prior written

consent, and (3) to provide students the opportunity to seek correction of their education records where appropriate. A student alleging university noncompliance with the Family Educational Rights and Privacy Act has the right to file a written complaint with the Family Policy Compliance Office:

Family Policy Compliance Office  
 U.S. Department of Education  
 400 Maryland Avenue, SW  
 Washington, D.C. 20202-5920

#### **1. Students have the right to inspect and review their education records within 45 days after the day that University of the Pacific receives the request for access.**

Each student has a right of access to his or her education records, except confidential letters of recommendation received prior to January 1, 1975, and financial records of the student's parents. A student may, by a signed writing, waive his or her right of access to confidential recommendations in three areas: admission to any educational institution, job placement, and receipt of honors and awards. The university does not require such waivers as a condition for admission or receipt of any service or benefit. If the student chooses to waive his or her right of access, he or she is notified, upon written request, of the names of all persons making confidential recommendations. Such recommendations are used only for the purpose for which they were specifically intended. A waiver may be revoked in writing at any time, and the revocation applies to all subsequent recommendations, but not to recommendations received while the waiver was in effect.

#### **Procedure to be Followed:**

Requests for access should be made in writing to the Office of the Registrar, and should specify the record(s) the student wishes to inspect. The University complies with a request for access within a reasonable time, at least within 45 days. The Registrar's Office will make arrangements for access and notify the student of the time and place where the records may be inspected.

#### **2. University of the Pacific limits disclosure of personally identifiable information from education records unless it has the student's prior written consent, subject to the following limitations and exclusions.**

**Directory Information.** In accordance with the FERPA, the University has the right to release Directory Information without the student's or resident's prior written consent. The University gives annual public notice to students of the categories of information designated as directory information. This information may appear in public documents or otherwise be disclosed even in the absence of consent unless the student files written notice requesting the University not to disclose any of the categories by the opt-out date, which is three weeks after the first day of the first term of enrollment. While students may opt out at any point subsequent to the opt-out date, late opt-outs will not apply retroactively to information previously released. To block the release of this information ('opt out'), a student must submit a Request for Non-Release of Directory Information (<https://www.pacific.edu/Documents/registrar/acrobat/Non-Release%20of%20Directory%20Information7112018.pdf>) Form (<http://www.pacific.edu/Documents/registrar/acrobat/ferpa-non-release-directory-info.pdf>). The University of the Pacific has designated as "directory information" the following items.

- Student's name
- University ID number
- Mailing and local address
- Telephone number

- E-mail address
- Photograph/Video
- Date and place of birth
- Degrees, honors, and awards
- Major field of study
- Grade level
- Campus of study (Stockton, Sacramento, or San Francisco)
- Dates of attendance, including matriculation and graduation
- Enrollment status (undergraduate, predoctoral, graduate, full-, part-time)
- Most recent educational agency or institution attended
- Participation in officially recognized activities and sports
- Weight and height of members of athletic teams

**University Officials.** One exception, which permits disclosure without consent, is disclosure to University officials with legitimate educational interests. At Pacific, "University official" is defined as (1) a person employed by the University or in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); (2) a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); (3) a person serving on the Board of Regents; (4) a student serving on an official University committee (academic, grievance, or disciplinary) or assisting another University official in performing his or her tasks. A university official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for University of the Pacific.

**Prior Consent Not Required.** FERPA allows additional exceptions to the written consent requirement for disclosure of education records to third parties. Some of these exceptions are listed below:

- To officials of another school in which a student seeks or intends to enroll, or where the student is already enrolled so long as the disclosure is for purposes related to the student's enrollment or transfer.
- To an alleged victim of any crime of violence of the results of any institutional disciplinary proceeding against the alleged perpetrator of that crime with respect to that crime.
- In response to a court order or subpoena, the University makes reasonable efforts to notify the student before complying with the court order.
- Appropriate parties in connection with an emergency, where knowledge of the information is necessary to protect the health or safety of the student or other individuals;
- Parents of a student who is a dependent for income tax purposes. (Note: The University may require documentation of dependent status such as copies of income tax forms.)
- Accrediting organizations for purposes necessary to carry out their functions;
- Organizations conducting educational studies for the purpose of developing, validating, or administering predictive tests, administering student aid programs, and improving instruction. The studies are conducted so as not to permit personal identification of students to outsiders, and the information is destroyed when no longer needed for these purposes;
- State and local officials to which such information is specifically required to be reported.
- Authorized persons and organizations that are given work in connection with a student's application for, or receipt of, financial aid, but only to the extent necessary for such purposes as determining

eligibility, amount, conditions, and enforcement of terms and conditions;

- Authorized representatives of the Comptroller General of the U.S., the Secretary of Education, the Secretary of the Department of Health and Human Services, the Director of the National Institute of Education, the Administrator of the Veterans' Administration, but only in connection with the audit or evaluation of federally supported education programs, or in connection with the enforcement of or compliance with Federal legal requirements relating to these programs. Subject to controlling Federal law or prior consent, these officials protect information received so as not to permit personal identification of students to outsiders and destroy such information when it is no longer needed for these purposes;

**Prior Consent Required.** Where FERPA does not allow exceptions to the written consent requirement, the University does not release personally identifiable information in education records or allow access to those records without prior consent of the student. Unless disclosure is to the student himself or herself, the consent must be written, signed, and dated, and must specify the records to be disclosed, the identity of the recipient, and the purpose of disclosure. A copy of the record disclosed is provided to the student upon request and at his or her expense.

The University, along with the student's education records, maintains a record for each request and each disclosure, except for the following:

1. disclosures to the student himself or herself;
2. disclosures pursuant to the written consent of the student (the written consent itself suffices as a record);
3. disclosures to school officials of the University.
4. disclosures of directory information.

This record of disclosures may be inspected by the student, the official custodian of the records, and other university and governmental officials.

### **3. University of the Pacific provides students the opportunity to seek correction of their education records.**

A student who believes that information contained in his or her education records is inaccurate, misleading, or violative of privacy or other rights may submit a written request to the Office of the Registrar specifying the document(s) being challenged and the basis for the complaint. The request will be sent to the person responsible for any amendments to the record in question. Within a reasonable period of time of receipt of the request, the University decides whether to amend the records in accordance with the request. If the decision is to refuse to amend, the student is so notified and is advised of the right to a hearing. He or she may then exercise that right by written request to the Office of the Registrar. Within a reasonable time of receipt of the request, the student will be notified in writing of the date, place, and time reasonably in advance of the hearing. The hearing will be conducted by a university official who does not have a direct interest in the outcome. The student will have a full and fair opportunity to present evidence relevant to the issues raised and may be assisted or represented by individuals of his or her choice at his or her own expense, including an attorney. Within a reasonable period of time after the conclusion of the hearing, the University will notify the student in writing of its decision. The decision will be based solely upon evidence presented at the hearing and will include a summary of the evidence and the reasons for the decision. If the University decides that the information is inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student, the University will amend the records accordingly. If, as a result of the hearing, the University decides that the information is not inaccurate, misleading, or otherwise in violation of the student's rights,

the University will inform the student of the right to place in his or her record a statement commenting on the information and/or explaining any reasons for disagreeing with the University's decision. Any such explanation will be kept as part of the student's record as long as the contested portion of the record is kept and will be disclosed whenever the contested portion of the record is disclosed.

## Work Study

University of the Pacific participates in the Federal Work-Study program, which provides employment opportunities for students who demonstrate financial need.

## Arthur A. Dugoni School of Dentistry

### Purpose

#### Our Purpose is to Help People Lead Healthy Lives

We grow and inspire a diverse community of learners through our humanistic culture. Building on a distinguished tradition, we provide exceptional education; offer personalized quality patient care; support collaborative research; and foster commitment to service.

### Vision

#### Improving Health and Wellness through Innovation in Programs, Partnerships and People

The University of the Pacific Arthur A. Dugoni School of Dentistry is an innovative and renowned leader in health and wellness. As a leader, our programs prepare healthcare providers for current, future and evolving practice models. The Dugoni School integrates inter-professional education with patient care, keeping humanism at its core. We educate beginning and established healthcare professionals for an array of career paths.

Signature partnerships support our programs and enhance health, education, research, and service. Partnerships reduce tuition dependence and create opportunities for students, faculty, and staff development.

Powered by its people, the Dugoni School sets the standard for humanistic education and leadership that serve the needs of its students, patients, alumni, the organized profession, and the public.

### Commitments

**We commit to the following values to support the defining characteristic of our education model – humanism.**

**By accentuating the positive, setting high standards, and respecting the individual, we provide the best possible learning, working and healthcare environment for every member of our community.**

Courage – willing to take risks, doing what is right not easy

Empowerment – supporting and inspiring individuals to fulfill their potential

Excellence – achieving the highest quality in all that we do

Innovation – imagining and applying bold, creative approaches

Integrity – exemplifying the highest personal and professional ethical principles

Leadership – inspiring through vision and challenging others to effect positive change

## Clinic Mission Statement

The mission of the school's clinics is to provide patient-centered, evidence-based, quality oral healthcare in a humanistic educational environment.

The goal of the clinic mission statement is to focus faculty, staff, and students on the delivery of excellent patient care. In all clinical interactions we will strive to provide excellent care to our patients and excellent educational experiences for our students. At those times when we must make a choice between patient care and teaching effectiveness, patient care will take precedence.

There are four parts to the mission statement. *Patient-centered care* means being prompt, efficient, responsible, engaging, focused, and adaptable, among other things. The private practice model is the patient care model to which we aspire. *Evidence-based decision making* involves the use of scientific evidence to help make treatment decisions. It is used in conjunction with individual patient values to determine the best course of action for each patient. *Quality oral healthcare* involves providing treatment to our patients that meets community standards of care in all disciplines. It means providing that care to patients of varying needs and expectations. *Humanistic education* is based on honest communication of clear expectations along with positive support for diligent effort.

Faculty and staff must be models of the profession's highest standards. Students are expected to set equally high standards for their behavior. The educational environment will be intellectually stimulating, progressive in scope, outcomes-focused, and competency-based.

## History of Arthur A. Dugoni School of Dentistry

One of the world's most distinctive metropolitan centers, San Francisco has been the home of the School of Dentistry since its incorporation in 1896 as the College of Physicians and Surgeons. The school has been recognized since its inception as a major resource for dental education in the Western states.

- In 1962 the College of Physicians and Surgeons joined the University of the Pacific.
- In 1967 an eight-story building was completed for the teaching of clinical dentistry and for conducting dental research.
- In 1996 the school opened a state-of-the-art preclinical simulation laboratory combining the latest in educational technology with a simulated patient experience.
- In 2002 three new state-of-the-art classrooms were completed.
- In 2003 a new Health Science Center was opened on the Stockton campus combining facilities for dentistry, dental hygiene, physical therapy, and speech pathology.
- In 2004 the university named the dental school in honor of its long-standing dean, Dr. Arthur A. Dugoni.
- In 2011 the school was awarded the prestigious Gies Award for Vision by the American Dental Education Association.
- In 2014 the dental school moved to a completely renovated and updated facility in downtown San Francisco, setting the pace for new and better methods of educating students and providing care to patients.
- In 2015 the dental school became the first school in California and in the United States to have students be licensured through a portfolio exam process.

The Alumni Association provided a twelve operatory dental clinic which has served as the school's major extended campus in southern Alameda County since 1973. The clinic currently serves as the clinic site for the school's Advanced Education in General Dentistry residency program.

## Accreditation

The University of the Pacific is fully accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC). The dental educational programs are fully accredited by the Commission on Dental Accreditation (CODA). The School of Dentistry is a member of the American Dental Education Association (ADEA).

CODA will review complaints that relate to a program's compliance with accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeal for treatment received by patients or individuals in matters of admission, appointment, promotion or dismissal of faculty, staff or students.

A copy of accreditation standards and/or the Commission's policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611-2678 or by calling 1-800-621-8099, extension 4653.

## Humanistic Education

It is the goal of the School of Dentistry to educate the highest quality practitioners who can practice independently and successfully in their patients' best interests. It is our belief that a humanistic approach to education best accomplishes this goal. Our view of humanism is based upon honest communication of clear expectations along with positive support for diligent effort. Although kindness is valued, humanism is not interpreted to mean softness, weakness, or superficial niceness. In fact, humanism places great responsibility on each member of the dental school community.

In order for this approach to work, faculty members must be models of the profession's highest standards, and they must teach in a way that encourages and energizes students. Students, in turn, are expected to set very high standards, to work hard, and to take personal responsibility for their own learning process.

Examples of humanistic student-faculty Interaction at the Dugoni School:

### Includes

- Good work ethic
- Constructive feedback
- Maintaining confidentiality
- Addressing the issue
- Celebrating achievement
- Excellence
- High ethical standards
- Professional responsibility
- Increasing independence
- Attainment of competency

### Excludes

- Minimum effort
- Authoritarian behavior
- Public criticism

- Ignoring the problem
- Dwelling on the negative
- Expedience
- Ethical compromise
- Avoiding responsibility
- Continued dependence
- Tolerance of inability

## Standing Committees

In keeping with sound shared governance principles, the School of Dentistry incorporates the expertise and perspective of students, faculty, and administrators in the decision-making process through use of the committee system. Committees are designated according to areas of concern and authority as "faculty," "administrative," or "joint faculty-administrative" committees. Standing committees are listed below.

### Faculty Committees

The faculty has primary responsibility for recommending policy in the following areas: curriculum, subject matter and methods of instruction, research, faculty status, and those aspects of student life which are related to the educational process. Final review and decision rest with the dean, president, and Board of Regents.

- Academic Advisory Committee
- Admissions Committee, DDS
- Admissions Committee, IDS
- Curriculum Committee
- Dental Faculty Council
- Faculty Appointment, Promotion, and Tenure Committee
- Research Committee
- Student Academic Performance and Promotions Committee
- Advisors Committee

### Joint Faculty-Administrative Committees

Joint committees consider areas of major importance to faculty and administration. Administrative officials hold ultimate authority, but faculty members' and students' consultation and advice are of great importance.

- Ethics Committee
- Clinical Quality Assurance Committee
- Student Appeals Committee

### Administrative Committees

The administration has primary responsibility for maintenance of existing institutional resources and the creation of new resources. The dean plans, organizes, directs, and represents the School of Dentistry with general support from the faculty, the president, and the Board of Regents. The dean initiates, innovates, and assures that School of Dentistry standards and procedures conform to policy established by the Board of Regents and to standards of sound academic practice. Administrative committees are those in which administrative responsibility is primary and members appointed by the dean serve in an advisory capacity.

- A. W. Ward Museum Committee
- Infection Control Committee
- Managers and Directors Committee
- Strategic Plan Outcomes Committee
- Committee on Continuing Dental Education
- Store Committee

- Student Clinic Advisory Committee
- Student Financial Aid Committee

## School of Dentistry Alumni Association

The Alumni Association of the University of the Pacific, Arthur A. Dugoni School of Dentistry, has five membership categories:

1. Alumni Members — all graduates of the dental school, including dental hygienists and post-doctoral program graduates
2. Associate Members — dentists and hygienists who graduated from other schools and who join the Association
3. Dugoni School Family Members — non-dentists who are valued members of our community
4. Life Members - Members who have attained their 50th graduation anniversary and who have been active dues-paying members for 30 years, or who were designated this distinction prior to 1976
5. Honorary Members - non-Alumni Members and non-Associate Members who are recipients of the Medallion of Distinction Award

The Alumni Association's mission is to engage and inspire its members in meaningful relationships with students, the School of Dentistry and with each other for life. The purpose of the Association is to promote the welfare of the School, the graduates of the School, and the profession of dentistry. The excellent reputation of our school and its unequalled physical facilities are the direct result of the loyalty and active support of its alumni and the Alumni Association.

The Alumni Association sponsors, or co-sponsors, many educational and social events throughout the year for alumni and students, and additionally supports students at events such as the city softball league and golf, basketball, and softball tournaments.

### 2020-2021 Officers

Alan W. Budenz, Associate  
*President*

Richard F. Creaha '86  
*President-Elect*

Jamie J. Sahouria '04  
*Vice President*

Peter C. Liu '89  
*Secretary*

William A. van Dyk '73  
*Treasurer*

David Ehsan '95  
*Immediate Past President*

Arthur A. Dugoni '48  
*Dean Emeritus*

Joanne Fox  
*Director*

### Board of Directors

Carsen J. Bentley '11

Gina S. Chann '89

Shareen Char-Fat '86

Amro A. H. Elkhatieb '16 IDS

Jasmine R. Flake '19

William D. Gilbert '85

Amanda Rae Kronquist '15

Marc H. Lai '13  
Kimberly Mahood '10 Ortho  
Mustafa S. Radif '12 DH  
Akhil S. Reddy '08  
Michael R. Ricupito '83  
R. Alexander Schmotter '15  
Roxanna R. Shafiee '09 Ortho  
Tracey A. Taddey '98  
Lynn E. Watanabe '95  
Wesley E. Wong '98

### Student Representatives

Marwa Elkharsity '20 DDS  
Stephanie Tu '20 DH  
Timothy S. Yu '20 Ortho

### Ex-Officio

Lory Laughter, RDH, MS  
*Director, Dental Hygiene Program*

Nader A. Nadershahi '94  
*Dean*

Dr. Craig S. Yarborough  
*Associate Dean for Institutional Advancement*

Elizabeth J. Fleming '84  
*Chair, Annual Meeting Committee*

### Foundation Representative

Steven E. Tired, CPA  
*Dental Foundation President*

### Staff

Anastasia Damyan  
*Administrative Assistant, Alumni and Development*

Rowena R. O'Connor  
*Manager*

Andrea J. Woodson-Davis  
*Coordinator*

## Dugoni School Foundation

The Dugoni School Foundation is a group of volunteers working closely with the Dean and the Development team to promote philanthropy at the School of Dentistry. The mission of the Foundation is to ensure that the University of the Pacific, Arthur A. Dugoni School of Dentistry has the resources it needs to realize its visions and goals.

The Foundation shares the school's commitment to excellence and measures success by the joy it brings to donors, by the funds it raises, by the fundraising programs it initiates, and by the continuing recruitment and retention of new, effective board members.

### Dugoni School Foundation

#### Executive Committee

Mr. Steven Tired  
*President*

Dr. Nader Nadershahi '94  
*Dean*

Dr. Janet Andrews '83  
*President-Elect*

Chair, Special Events

Dr. Nava Fathi '95  
Chair, Annual Fund

Dr. John Young Jin Kim '04  
Co-Chair, External Regions

Mr. Gary Mitchell  
Chair, Membership

Dr. W. Ronald Redmond '66  
Campaign Co-Chair

Dr. Craig Yarborough '80  
Executive Director  
Assoc. Dean for Institutional Advancement

Dr. M. Gabrielle "Gabby" Thodas '77, '95 Ortho  
Past President

Dr. Gary Weiner '66  
Campaign Co-chair

Dr. Saam Zarrabi '08  
Co-Chair, External Regions

### **Board**

Dr. Edmond Bedrossian '86

Dr. Gerald "Jerry" Bittner, Jr. '85

Dr. Susan Bittner '74A

Dr. Joseph Bronzini '66

Dr. Michael Campbell '79

Dr. Elisa LoBue-Campbell '84

Dr. Arthur Dugoni '48

Dr. David Ehsan '95

Dr. Joseph Errante '80

Dr. Brian Grey '91 Ortho

Dr. Michael Lasky '95

Dr. Jill Lasky '98

Dr. Gary Low '76

Dr. Aneet Randhawa

Dr. V. Dean Salo '92

Dr. Kenneth Shimizu '85, '87 Ortho

Mr. Andrew J. Stout, WMS

Dr. Colin Wong '65

Dr. Douglas Yarris '83

## **Development**

The Development team drives the Dugoni School's fundraising efforts, accounting for almost 10% of revenue necessary for school operations. Thousands of alumni, students, faculty, staff, friends, foundations, and

corporate donors have helped to build clinics and classrooms, fund scholarships and programs, provide dental care to patients, and support numerous projects that keep the Dugoni School strong.

## **Marketing & Communication**

The Office of Marketing & Communication directs communications and marketing programs to increase the visibility of the dental school and to enhance its identity to various constituents. The marketing and communications team promotes not only the dental school, but also the school's students, faculty, staff, alumni, and clinics, through effective media relations, Web communications, event planning, publication development, and marketing strategies.

## **Continuing Dental Education**

The Division of Continuing Dental Education (CDE) provides dynamic and multidisciplinary continuing education programs for all members of the dental profession. CDE offers a variety of programs, including lecture courses, hands-on workshops, mini residency programs, certification programs, and online courses. Program lengths vary, and include half-day, full-day, and multiple session programs. CDE courses are presented by the profession's outstanding leaders and educators and classes are held at the dental school in San Francisco as well as select locations throughout California and the United States. The division also sponsors travel CE programs abroad, the next being planned for 2020 is a trip to Peru.

Dugoni School of Dentistry students, faculty, and staff receive discounted rates, up to 50% off regular tuition, to attend continuing dental education courses offered by the division. Dues-paying members of the Alumni Association receive a 15% discount on most CDE programs offered by the division and recent graduates, from the last five years, receive a 20% discount off of regular tuition.

For more information, visit [dental.pacific.edu/ce1](https://dental.pacific.edu/ce1) (<https://www.dental.pacific.edu/continuing-education/>) or contact Continuing Dental Education at (415) 929-6486 or [cedental@pacific.edu](mailto:cedental@pacific.edu). To register for courses, please click here (<https://reg.abcsignup.com/view/cal1a.aspx?ek=&ref=&aa=&sid1=&sid2=&as=36&wp=197&tz=>

## **Dental Hygiene**

As is the case for all programs within the Pacific Dugoni School of Dentistry, the Dental Hygiene Program strives to be a global leader in our field, focusing on evidence-based practice while creating an environment of innovation, dynamism, and diversity. Similarly, the Program shares the School of Dentistry's commitment to values that reflect distinguishing features of our program, most notably:

## **Mission**

**THE MISSION OF THE DENTAL HYGIENE PROGRAM** is to:

- Educate individuals who will be professionally competent to provide quality preventive oral health care in an evolving profession;
- Provide culturally aware, patient-centered, quality care within the context of an efficient clinical model that demonstrates the highest standards of service achievable;
- Provide opportunities for inter-professional and community-based oral health education and health promotion in a variety of settings.

- Apply principles of critical thinking and evidence-based decision making to all aspects of dental hygiene practice.
- Articulate the value of continued competence, lifelong learning and pursuit of advanced degrees.

## PURPOSE

Our purpose is to help people lead healthy lives.

We grow and inspire a diverse community of learners through our humanistic culture. Building on a distinguished tradition, we provide exceptional education; offer personalized quality patient care; support collaborative research; and foster commitment to service.

## The Study of Dental Hygiene

The dental hygiene course of study is a professional program where students learn to provide preventive clinical care for patients with emphasis on recognition, treatment, and prevention of oral diseases. In addition to performing a variety of preventive and therapeutic functions, the dental hygienist also has a major role in counseling and educating patients, community groups, and other health professionals. The curriculum helps students build the educational, communication, and clinical skills necessary to work in co-therapy with the dental team.

## Admission Requirements

Admission to the Dental Hygiene Program is competitive and based on merit. Students may apply either as a freshman student, doing prerequisite coursework at Pacific, or as a transfer student, completing prerequisites at another institution. After review of the completed application, the Office of Admissions will invite qualified candidates to participate in interviews on campus. In addition to a personal interview, applicants are invited to take part in orientation and financial aid seminars, meet informally with current students, and tour the campus. Admission will be based on the combination of application information and interview.

Please click here (<http://www.pacific.edu/Admission/Undergraduate/Applying/Dental-Hygiene.html>) to see detailed admissions information.

**GPA:** Special emphasis is placed on coursework selected, the grades achieved in those courses, and the cumulative grade point average.

**SAT or ACT Exams:** The Admissions Committee reviews the results of the student's SAT or ACT scores only for freshman admission.

**Essay:** An essay may be required of University applicants.

**Recommendation:** Two letters of recommendation are required. They may be from a faculty member, counselor or advisor or from health care or job related professionals.

**Dental Experience:** Job shadowing (20 hours) or dental office employment are expected so that the applicant is familiar with the role of the practicing dental hygienist.

**Extracurricular Activities:** Other factors considered (but not required) in selecting the class include community service and involvement and volunteer activities.

## Transfer Student Application:

Transfer application deadline for entry into the program is August 1 for the following spring semester. Applicants are notified by December 1. SAT or ACT exam scores are NOT required.

Sixty-four units of lower division college courses that are Pacific transferable and include the following prerequisites or equivalents are required:

- General Biology and lab (one semester or 2 quarters) must articulate to Pacific BIOL 061
- General Chemistry and lab (2 semesters or 3 quarters) must articulate to Pacific CHEM 025 and CHEM 027 and include content in biochemistry.
- Microbiology (minimum of one 3 unit semester course or one 4 unit quarter class). The course may articulate to Pacific BIOL 145 but other microbiology courses are accepted. All Microbiology courses must include a lab.
- General (Introductory) Psychology (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific PSYC 031
- Introductory Sociology (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific SOCI 051
- Mathematics (Statistics) (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific MATH 035 or MATH 037
- English Composition (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific ENGL 025 or WRIT 021
- Communication (Speech) (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific COMM 027
- Anatomy and Physiology (2 semesters or 4 quarters) must articulate to Pacific BIOL 170 and BIOL 180. Separate Anatomy and Physiology courses are required and all courses must include a lab.
- Elective courses should be added so that the total units equal 64 semester units or more.
- One course that must articulate with Pacific General Education Category I-C Societies and Cultures Outside the United States
- One course that must articulate with Pacific General Education Category II-B Fundamental Concerns
- One course that must articulate with Pacific General Education Category II-C Practice and Perspectives in the Visual and Performing Arts or another course in the II-B category

For applicants with a baccalaureate degree, the GE course requirement is waived.

## Health Requirements:

Prior to entry into the professional portion of the program (final 4 semesters), health requirements must be met and documentation submitted to the University's Cowell Wellness Center as follows:

- **Medical Examination:** Following acceptance for admission, students submit the University's "Entrance History and Physical," form signed by a physician which confirms that a medical examination was completed within 3 months of the date of matriculation into the professional portion of the Dental Hygiene program. Current Pacific students who submitted a physical exam form upon matriculation, do not require another physical.
- **Measles, Rubella (German Measles), and Mumps:** Students provide documentation of presence of positive titres. Documented vaccination with two dose series MMR given one month apart with live attenuated measles and rubella virus is adequate. A history of measles and rubella as childhood diseases is not sufficient.
- **Tuberculosis:** ALL Students must submit the report of a two-step PPD tuberculosis skin test done within 3 months of entering professional program. With a history of tuberculosis OR a positive skin test, students submit the physician's report of a chest X-ray taken within

the year prior to matriculation. Chest X-rays may be required at intervals, and suppressive medication may be recommended.

- **Hepatitis B:** Every student is required to submit documented proof of presence of antibodies to the Hepatitis B virus or to complete the Hepatitis B three-dose vaccination series and Hepatitis B antigen test at least one month after completion of series. It is recommended that this be done prior to matriculation; in all cases, however, it must be done before a student is allowed to treat patients which occurs in the first month of the program. If a student does not have documented proof of having antibodies to this virus, the vaccination series is available at the school for a fee.
- **Tetanus Diphtheria (Tdap)** Vaccination is required within past 10 years.
- **Varivax** (Chicken Pox) Students provide documentation of 2 dose vaccination series or presence of titer if history of having chicken pox.
- **Influenza vaccine** is required each year of enrollment

Inquiries about health requirements and supporting documentation are handled through the University's Cowell Wellness Center (209) 946-2315.

## Program Description

The bachelor of science degree in dental hygiene is a professional program presented in an accelerated year-round format of eight semesters including summer sessions. Students accepted into the program as freshmen complete all sessions with the University. Transfer level program entrants, with prerequisites fulfilled, complete the final four semesters of professional coursework only.

Program applicants must complete prerequisite general education courses either at Pacific or another institution to provide a strong science background, and a broad base in the humanities. The prerequisites are designed to strengthen dental hygiene science and clinical practice. Students undertake this portion of their course work, in the College of the Pacific, with the general undergraduate student population on the main campus. The student must maintain a 2.7 GPA or better in lower division coursework and a grade of C or higher in all science courses to be considered for the professional portion of the program.

The professional portion of the program is a highly structured four consecutive semesters of upper division coursework that includes both didactic and clinical experience. This portion of the program is presented by the Arthur A. Dugoni School of Dentistry, Dental Hygiene Program on the San Francisco campus.

### The program and its graduates will be distinguished by the following attributes:

- Continuous enhancement through professional development
- Humanistic values that respect the dignity of each individual and foster the potential for growth in all of us
- Application of theory and data for continuous improvement
- Leadership in addressing the challenges facing the profession of dental hygiene, education and our communities

### Core Competencies (C)

- C.1 Apply a professional code of ethics in all endeavors.
- C.2 Adhere to state and federal laws, recommendations, and regulations in the provision of oral health care.
- C.3 Use critical thinking skills and comprehensive problem-solving to identify oral health care strategies that promote patient health and wellness.

- C.4 Use evidence-based decision making to evaluate emerging technology and treatment modalities to integrate into patient dental hygiene care plans to achieve high-quality, cost-effective care.
- C.5 Assume responsibility for professional actions and care based on accepted scientific theories, research, and the accepted standard of care.
- C.6 Continuously perform self-assessment for lifelong learning and professional growth.
- C.7 Integrate accepted scientific theories and research into educational, preventive, and therapeutic oral health services.
- C.8 Promote the values of the dental hygiene profession through service-based activities, positive community affiliations, and active involvement in local organizations.
- C.9 Apply quality assurance mechanisms to ensure continuous commitment to accepted standards of care.
- C.10 Communicate effectively with diverse individuals and groups, serving all persons without discrimination by acknowledging and appreciating diversity.
- C.11 Record accurate, consistent, and complete documentation of oral health services provided.
- C.12 Initiate a collaborative approach with all patients when developing individualized care plans that are specialized, comprehensive, culturally sensitive, and acceptable to all parties involved in care planning.
- C.13 Initiate consultations and collaborations with all relevant health care providers to facilitate optimal treatments.
- C.14 Manage medical emergencies by using professional judgment, providing life support, and utilizing required CPR and any specialized training or knowledge.

### Health Promotion and Disease Prevention (HP)

- HP.1 Promote positive values of overall health and wellness to the public and organizations within and outside the profession.
- HP.2 Respect the goals, values, beliefs, and preferences of all patients.
- HP.3 Refer patients who may have physiological, psychological, or social problems for comprehensive evaluation.
- HP.4 Identify individual and population risk factors, and develop strategies that promote health-related quality of life.
- HP.5 Evaluate factors that can be used to promote patient adherence to disease prevention or health maintenance strategies.
- HP.6 Utilize methods that ensure the health and safety of the patient and the oral health professional in the delivery of care.

### Community Involvement (CM)

- CM.1 Assess the oral health needs and services of the community to determine action plans and availability of resources to meet the health care needs.
- CM.2 Provide screening, referral, and educational services that allow patients to access the re-sources of the health care system.
- CM.3 Provide community oral health services in a variety of settings.
- CM.4 Facilitate patient access to oral health services by influencing individuals or organizations for the provision of oral health care.
- CM.5 Evaluate reimbursement mechanisms and their impact on the patient's access to oral health care.
- CM.6 Evaluate the outcomes of community-based programs, and plan for future activities.
- CM.7 Advocate for effective oral health care for underserved populations.

### Patient Care (PC)

#### Assessment

- PC.1 Systematically collect, analyze, and record diagnostic data on the general, oral, and psychosocial health status of a variety of patients using methods consistent with medicolegal principles.
- PC.2 Recognize predisposing and etiologic risk factors that require intervention to prevent disease.



PC.3 Recognize the relationships among systemic disease, medications, and oral health that impact overall patient care and treatment outcomes.  
 PC.4 Identify patients at risk for a medical emergency, and manage the patient care in a manner that prevents an emergency.

#### Dental Hygiene

##### Diagnosis

PC.5 Use patient assessment data, diagnostic technologies, and critical decision making skills to determine a dental hygiene diagnosis, a component of the dental diagnosis, to reach conclusions about the patient's dental hygiene care needs.

##### Planning

PC.6 Utilize reflective judgment in developing a comprehensive patient dental hygiene care plan.

PC.7 Collaborate with the patient and other health professionals as indicated to formulate a comprehensive dental hygiene care plan that is patient-centered and based on the best scientific evidence and professional judgment.

PC.8 Make referrals to professional colleagues and other health care professionals as indicated in the patient care plan.

PC.9 Obtain the patient's informed consent based on a thorough case presentation.

##### Implementation

PC.10 Provide specialized treatment that includes educational, preventive, and therapeutic services designed to achieve and maintain oral health. Partner with the patient in achieving oral health goals.

##### Evaluation

PC.11 Evaluate the effectiveness of the provided services, and modify care plans as needed.

PC.12 Determine the outcomes of dental hygiene interventions using indices, instruments, examination techniques, and patient self-reports as specified in patient goals.

PC.13 Compare actual outcomes to expected outcomes, reevaluating goals, diagnoses, and services when expected outcomes are not achieved.

### Professional Growth and Development (PGD)

PGD.1 Pursue career opportunities within health care, industry, education, research, and other roles as they evolve for the dental hygienist.

PGD.2 Develop practice management and marketing strategies to be used in the delivery of oral health care.

PGD.3 Access professional and social opportunities to foster career growth and development.

## Dental Hygiene Licensure

Completion of the program enables graduates to take national and regional or state licensure examinations. For California examination information contact:

Dental Hygiene Board of California  
 2005 Evergreen Street, Suite 2050  
 Sacramento, CA 95815  
<https://www.dhbc.ca.gov/>  
 (916) 263-1978

### Degree Requirements

#### General Education Curriculum

PACS 001	What is a Good Society	4
PACS 002	Topical Seminar on a Good Society	4
General Education: (4 units) Gen. Ed. II, section b or c		4
BIOL 061	Principles of Biology	5
BIOL 170	Human Anatomy	5
BIOL 180	Human Physiology	5

BIOL 145	Microbiology	5
CHEM 025	General Chemistry	5
CHEM 027	General Chemistry	5
CHEM 033	Elements of Organic Chemistry	3
COMM 027	Public Speaking	3
ENGL 025	English 25	4
MATH 035	Elementary Statistical Inference	4
	or MATH 037 Introduction to Statistics and Probability	
PSYC 031	Introduction to Psychology	4
SOCI 051	Introduction to Sociology	4

#### Dental Hygiene Curriculum

DHYG 110	Oral Health Education	1
DHYG 111	Head and Neck Anatomy	2
DHYG 112	Dental Anatomy	2
DHYG 113	Oral Radiology Lecture	1
DHYG 114	Oral Histology and Embryology	2
DHYG 115	Dental Hygiene Practice	3
DHYG 116	Pre-Clinical Dental Hygiene	3
DHYG 118	Oral Radiology Lab	1
DHYG 120	Periodontics I	2
DHYG 121	Pharmacology	3
DHYG 122	Pathology	3
DHYG 123	Medical and Dental Emergencies I	1
DHYG 124	Local Anesthesia/Pain Management	2
DHYG 125	Dental Hygiene Clinic I	2
DHYG 126	Dental Hygiene Clinic I	5
DHYG 130	Periodontics II	2
DHYG 131	Community Oral Health and Research	4
DHYG 132	Patient Management/Special Needs	2
DHYG 133	Medical and Dental Emergencies II	1
DHYG 135	Dental Hygiene Clinic II	2
DHYG 136	Dental Hygiene Clinic II	7
DHYG 141	Dental Materials	2
DHYG 142	Ethics and Jurisprudence	2
DHYG 143	Biochemistry and Nutrition	2
DHYG 144	Senior Project	3
DHYG 145	Dental Hygiene Practice III	2
DHYG 146	Dental Hygiene Clinical Practice III	7
PACS 003	What is an Ethical Life?	3

Total Hours 72

### Course Descriptions

#### Predoctoral Courses

##### DHYG 110. Oral Health Education. 1 Unit.

Students are introduced to principles and practices of prevention and control of dental disease. The course emphasizes oral health promotion, to include plaque control, patient education and behavior modification.

##### DHYG 111. Head and Neck Anatomy. 2 Units.

This course is designed to expand student knowledge of the anatomical structures of the head and neck. Students examine clinical correlations relevant for dental professionals.

**DHYG 112. Dental Anatomy. 2 Units.**

Students study dental terminology, tooth morphology and the relationship of teeth in form and function to each other and to supporting structures. Root morphology, hard tissue charting, occlusion and dental anomalies correlated to basic clinical applications.

**DHYG 113. Oral Radiology Lecture. 1 Unit.**

This course is designed to examine the fundamentals of dental radiography. Topics include history, principles, legal considerations, and radiation safety. Clinical applications include exposure technique, film processing, preparing and interpreting dental radiographs. Students learn how to correct technical errors.

**DHYG 114. Oral Histology and Embryology. 2 Units.**

This course offers lectures, clinical examples, classroom discussions and slide materials designed to help students develop a knowledge of oral histology and embryology that is applied to the clinical practice of dental hygiene.

**DHYG 115. Dental Hygiene Practice. 3 Units.**

Students are introduced to the contemporary role of the dental hygienist, the evolving profession of dental hygiene, and procedures and techniques that are utilized in the dental hygiene process of care. Emphasis is placed on development of a comprehensive medical and dental database and history, diagnostic tools, oral cancer examination, clinical systems and protocol, infection control, basic instrumentation and polishing, and patient communication.

**DHYG 116. Pre-Clinical Dental Hygiene. 3 Units.**

This course provides the opportunity for application of the information presented concurrently in DHYG 115. Students practice infection control, vital signs, oral cancer examination, instrumentation and other clinical skills using manikins and student partners.

**DHYG 118. Oral Radiology Lab. 1 Unit.**

Clinical applications of the concepts delivered in DHYG 113 take place during the laboratory experience. Content includes radiographic exposure technique, film processing, preparing and interpreting film and digital radiographs, and correcting of technical errors.

**DHYG 120. Periodontics I. 2 Units.**

Students are introduced to periodontology. Emphasis is placed on etiology, histology and epidemiology, diagnosis and classification of periodontal disease. Principles of periodontal disease preventive therapy, treatment planning, reassessment and supportive periodontal therapy are also introduced. Students learn under which circumstances referral to periodontal specialty practices is appropriate. Prerequisite: Admission into the Baccalaureate Dental Hygiene program.

**DHYG 121. Pharmacology. 3 Units.**

This course is designed to classify and study therapeutic agents commonly encountered and/or utilized in the practice of dentistry. Students learn chemical and physical properties, therapeutic effects, methods of administration, dosage, contraindications and side effects of these agents.

**DHYG 122. Pathology. 3 Units.**

Students study the etiology, pathogenesis, and clinical features of diseases. Students learn to recognize basic tissue, reactions and lesions and describe them using professional medical terminology, and through data collection, learn to assist in the preliminary diagnosis of oral conditions. Emphasis is placed on lesions that occur in the oral and maxillofacial regions. However, general pathology introductions necessary to understand the pathologic processes of oral lesions and conditions will be discussed. Common systemic diseases that may manifest in the mouth or impact oral healthcare delivery will also be presented. Prerequisite: Admission to the Dental Hygiene Program.

**DHYG 123. Medical and Dental Emergencies I. 1 Unit.**

Students learn basic methods of medical and dental emergency prevention and management in the dental office. Emphasis is on recognizing signs, symptoms, and treatment of the more common emergencies which may occur in the dental setting. Drugs and equipment that are utilized in the management of medical emergencies are outlined. Students are trained in Basic Life Support Systems (BLS).

**DHYG 124. Local Anesthesia/Pain Management. 2 Units.**

Students examine comprehensive information and skills that provide comfortable dental treatment. Local anesthesia and nitrous oxide-oxygen administration are explained and practiced.

**DHYG 125. Dental Hygiene Clinic I. 2 Units.**

This lecture/lab course is designed to provide students lecture and lab experience in the dental hygiene process of care for child, adolescent, adult and geriatric patients. Promotion of oral health and wellness is stressed through lecture and case studies. The principles, rationale and application of sealants and glass ionomers, area specific cures, advanced fulcrums, piezo and magnetostrictive ultrasonic scaling, air-powder polishing and desensitizing products are discussed as well as cariology and fluoride delivery options. Students integrate knowledge and skills developed in DHYG 110, DHYG 115, DHYG 116 and concurrent course DHYG 120.

**DHYG 126. Dental Hygiene Clinic I. 5 Units.**

This clinic course is designed to provide students beginning clinical experience in the treatment of child, adolescent, adult, and geriatric patients. Promotion of oral health and wellness is stressed through clinical experiences in: patient assessment, dental hygiene care treatment planning, case presentation and implementation and evaluation of treatment outcomes. The principles, rationale and application of sealants and glass ionomers, the use of ultrasonic scaling, area specific cures, advanced fulcrums, desensitizing products and other treatment modalities are implemented. Cariology considerations and additional fluoride delivery options are also discussed and implemented for patient care. Students integrate knowledge and skills developed in previous courses. Pertains to DHYG 126A, DHYG 126B, and DHYG 126C which implements the information learned in the concurrent courses: DHYG 125A, DHYG 125B and DHYG 125C.

**DHYG 130. Periodontics II. 2 Units.**

This course is designed to enable students to enhance and develop knowledge and skills applicable in the treatment of patients with advanced periodontal disease. Concepts and treatment techniques of surgical and non-surgical periodontal therapy are stressed.

**DHYG 131. Community Oral Health and Research. 4 Units.**

This course is designed to enable students to examine the principles and practices of oral health in diverse public health settings. Emphasis is placed on the role of the dental hygienist as an innovator and educator in community dental health programs with consideration to needs assessment, research study utilization, biostatistic application, program planning, and results evaluation. The social and professional responsibility of the dental professional with regard to public promotion of oral health and access to care is examined. Students design and implement a community-based research project that culminates in a class presentation and may be submitted in to the professional association's table clinic competition.

**DHYG 132. Patient Management/Special Needs. 2 Units.**

This course is designed to enlighten the viewer to the world of people with special needs, the issues they face, the programs in place to help them, and dental treatment modalities.

**DHYG 133. Medical and Dental Emergencies II. 1 Unit.**

This course provides a continuation of DHYG 123, Medical and Dental Emergencies I. Students review methods of medical and dental emergency prevention and management in the dental office. Emphasis is on recognizing signs, symptoms, and treatment of the more common emergencies which may occur in the dental setting. Drugs and equipment are utilized in the management of medical emergencies are outlined.

**DHYG 134. Senior Project I. 3 Units.**

This course is designed to provide students the opportunity for supervised practical application of previously studied theory in a variety of settings. Through outside agency affiliation, faculty assistance and mentorship, students choose a specific area of hygiene practice to explore in depth. Prerequisite: Admission into the Baccalaureate Dental Hygiene program.

**DHYG 135. Dental Hygiene Clinic II. 2 Units.**

This lecture/ lab/ clinic course is designed to enable students to expand their experience in treatment of the periodontally involved patient. Students refine techniques for patient assessment, treatment planning, patient communication, full mouth scaling, and non-surgical periodontal treatment. Desensitization techniques, and pit and fissure sealants, are introduced. Utilization of radiographs, local anesthesia and nitrous oxide sedation in patient care is further developed. Students integrate knowledge and skills developed in DHYG 130, DHYG 132, and all previous course work to-date.

**DHYG 136. Dental Hygiene Clinic II. 7 Units.**

This lecture/ lab/ clinic course is designed to enable students to expand their experience in treatment of the periodontally involved patient. Students refine techniques for treatment planning, root planing, and non-surgical periodontal treatment. Desensitization techniques, and pit and tissue sealants, are introduced. Utilization of radiographs, local anesthesia and nitrous oxide sedation in patient care is further developed. Students integrate knowledge and skills developed in DHYG 130, DHYG 132, and all previous course work to-date.

**DHYG 141. Dental Materials. 2 Units.**

This course is designed to examine structure and physical properties of dental materials utilized in the practice of dental hygiene. Emphasis on concepts and principles of clinical application.

**DHYG 142. Ethics and Jurisprudence. 2 Units.**

Students study ethical theories and issues related to the practice of dental hygiene and professionalism. A personal philosophy of professional conduct, continuous quality assurance and self-assessment is explored. Fundamental factors necessary to practice within existing regulatory frameworks are stressed.

**DHYG 143. Biochemistry and Nutrition. 2 Units.**

Students study basic principles of biochemistry and nutrition related to dentistry. Students complete patient dietary surveys and develop correctional nutritional plans.

**DHYG 144. Senior Project. 3 Units.**

This course offers students the opportunity for supervised practical application of previously studied theory in a variety of settings. Through outside program affiliation, faculty assistance, and mentorship, students choose a specific area of dental hygiene practice to explore in depth.

**DHYG 145. Dental Hygiene Practice III. 2 Units.**

This course offers advanced clinical experience in performing treatment for a variety of clinical patient cases. Students use local anesthesia, nitrous oxide, oral antimicrobials, and diet analysis. State Board Examination requirements and protocol, are reviewed and simulated through practical exercises. Identification of an appropriate patient for licensure examination is made. Students integrate knowledge and skills developed in all previous course work to-date.

**DHYG 146. Dental Hygiene Clinical Practice III. 7 Units.**

This course is designed to provide advanced clinical experience in performing treatment for a variety of clinical patient cases. Students use local anesthesia, nitrous oxide, oral antimicrobials, and diet analysis. State Board Examination requirements and protocol, are reviewed and simulated through practical exercises. Identification of an appropriate patient for licensure examination is made. Prerequisite: Admission into the Baccalaureate Dental Hygiene program.

## Advanced Education in General Dentistry

The University of the Pacific, Arthur A. Dugoni School of Dentistry houses its Advanced Education in General Dentistry (AEGD) residency program in Union City, approximately 35 miles southeast of San Francisco.

The AEGD program is a one-year accredited postgraduate residency in general dentistry with an optional second year. The core of the program involves advanced clinical treatment of patients requiring comprehensive general dental care to healthy as well as medically compromised patients. Rotations are strategically set for additional training in geriatrics, pediatrics, hospital dentistry, implant restorations and dental emergencies. The AEGD program has an emphasis in minimally invasive and prevention based dentistry such as CAMBRA (Caries Management By Risk Assessment). We feature CAD/CAM restorations, complex implant restoration, Invisalign, and Cone Beam technology. There is an all-encompassing seminar series which covers all dental specialties and participation in rotations at community clinics and in a hospital setting.

The start date for the program is July 1. Residents have time off during the school's winter break, holidays in addition to 10 days leave that can be scheduled with the approval of the program director.

Applicants must show record they have graduated from North American dental school. There is no tuition to participate in the program; residents receive an educational stipend. The program uses the American Dental Education Association's PASS application to receive application materials. For further information on the Pacific AEGD program application process, please click here (<http://dental.pacific.edu/academic-programs/residency-and-graduate-programs/advanced-education-in-general-dentistry/application-process/>). To learn more about the Union City Dental Care Center, please click here (<http://www.unioncitydentalcare.com/>).

## International General Dentist Educator Program

In this five-year program, the first two years consist of participation in the AEGD program, and the remaining three years consist of attaining a Master's or doctoral degree in professional education and leadership from the University's Benerd School of Education.

The clinical residency and graduate program for international general dentists is a dual-track program consisting of clinical and didactic education. The clinical track is mainly intended to prepare the candidate for a career in patient care and clinical education. The didactic track and teaching practicum are mainly intended to prepare the candidate for a full-time career in dental academia. However, each track may have overlapping features in terms of purpose.

Clinical education is provided under a two-year residency program leading to a clinical certificate upon completion of both years one and two. Didactic education is provided under the two-year graduate program leading to a Master's in Education. The final year of the program will consist of completing the thesis project if not completed in the previous year, and teaching practicum in didactic,

pre-clinical, and clinical education of doctoral students. Please click here ([http://www.dental.pacific.edu/Academic\\_Programs/International\\_General\\_Dentist\\_Educator\\_Program.html](http://www.dental.pacific.edu/Academic_Programs/International_General_Dentist_Educator_Program.html)) for more information about this program.

## Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

# Doctor of Dental Surgery

## Program Overview

Doctor of Dental Surgery ([http://catalog.pacific.edu/sanfrancisco/arthuradugonischoolofdentistry/doctorofdentalurgery/Program\\_Overview\\_DDS\\_2020-2021-030620.pdf](http://catalog.pacific.edu/sanfrancisco/arthuradugonischoolofdentistry/doctorofdentalurgery/Program_Overview_DDS_2020-2021-030620.pdf))

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## Personalized Instructional Program

Beginning with the DDS class of 2019 and IDS class of 2019, successful completion of a Personalized Instructional Program (PIP) is required for graduation. This is reflected on the transcript as a stand-alone course (BMS 394, COH 394, DS 394 etc.). Unit values will vary based upon contact hours.

## Curriculum

Biomedical, preclinical, and clinical science subjects are integrated and combined with applied behavioral sciences in a program to prepare graduates to provide excellent quality dental care to the public and to enter a changing world that will require them to be critical thinkers and lifelong learners. The 36-month curriculum leading to the degree of Doctor of Dental Surgery begins in July and is divided into twelve quarters, each consisting of ten weeks of instruction, one week of examinations, and a vacation period of between one and four weeks.

Integrated biomedical science instruction in anatomy, histology, biochemistry, physiology, pharmacology, and microbiology and

immunology is offered over the 10 quarters in increasing detail, followed by multidisciplinary presentations of basic science foundations for clinical topics such as the importance of saliva, tissue aging, nutrition, and infection control. Throughout the curriculum, students learn to apply basic science knowledge to clinical problems. Integrated preclinical instruction in direct and indirect restorative dentistry and dental anatomy is concentrated in the first four quarters with students learning to work from a seated position in a modern preclinical simulation laboratory. Preclinical instruction in removable prosthodontics, occlusion, and implants is offered in quarters 5-7. Clinical work with patients is initiated in the fifth quarter.

The school is a pioneer in competency-based education, an approach that replaces the traditional system of clinical requirements with experiences that ensure graduates possess the knowledge, skills, and values needed to begin the independent practice of general dentistry. Pacific is also known for its humanistic approach to dental education, stressing the dignity of each individual and his or her value as a person.

The Clinical Practice Strand supports comprehensive patient care which is based on the concept of private dental practice where the student assumes responsibility for assigned patients' overall treatment, consultation, and referral for specialty care. Second-year students practice clinical dentistry approximately 15 hours per week and third year students practice approximately 33 hours per week. Students learn to provide comprehensive dental care under the direction of a team of clinical faculty led by the Group Practice Leader (GPL). The GPL is responsible for mentoring students and ensuring they are receiving adequate clinical experiences to ensure competency upon graduation. In the second year, students treat patients in a discipline-based model where they are supervised by trained and calibrated faculty in specific clinical disciplines, including oral diagnosis and treatment planning, periodontics, endodontics, restorative dentistry, and removable prosthodontics. In the third year, students treat patients in a generalist model, where they provide all care for their patients under faculty supervision.

The second- and third-year class is divided alphabetically into six group practices. There are approximately 22 second-year and 22 third-year students in each group practice, which is managed by the GPL, who has overall responsibility for the care of patients by all students and faculty in the group practice. Specialists in endodontics manage complex cases in a specified area of the clinic, including test cases. Periodontists manage most periodontal procedures.

There are four exceptions to the comprehensive care model: oral and maxillofacial surgery, pediatric dentistry, oral medicine/facial pain, and radiology. Students are assigned to rotations for two to three weeks in each of these disciplines, except for the oral medicine/facial pain rotations which are one day each. In orthodontics, students participate with faculty and orthodontic residents in adjunctive orthodontic care and in oral development clinics. Third-year students also rotate through the Special Care Clinic where they treat perinatal patients, dental-phobic patients, and patients with developmental disabilities. In addition, each student provides care in the hospital operating room on patients with specific health issues.

Advanced clinical dentistry and evaluation of new developments and topics that involve several disciplines are learned in the third year in conjunction with patient care. Third- year students participate in patient care at extramural sites located in treatment facilities around the Bay Area, including acute care hospitals and community clinics. At extramural clinic sites, students are taught by Pacific faculty in conditions that more closely resemble private practice, and typically treat 4-6 patients per day. Rotations occur at a number of different times,

including weekdays during the academic year and vacation periods. Students find these experiences to be valuable, teaching them how to provide excellent patient care in a condensed time frame. Students may elect to participate in externships to specialty programs during academic break periods.

Behavioral science aspects of ethics, communication, human resource and practice management, and dental jurisprudence are integrated across the curriculum. Epidemiology and demography of the older population, basic processes of aging, and dental management of hospitalized patients, geriatric patients, and those with the most common disabling conditions are studied during the third year.

Students are counseled individually with regard to establishing a practice and applying for postgraduate education. A weekend conference in the senior year acquaints students with opportunities for postgraduate education and with alumni views of the realities of dental practice.

In the 1990s under the leadership of Dr. David W. Chambers, the school led the nation in the adoption of a competency-based education model for pre-doctoral dental programs. In contrast to the prevailing system of 'clinical requirements,' an approach that merely counted a pre-set number of procedures completed in each clinical discipline, competency (p. 93) implies an ongoing and broad-based measure of the developing knowledge, skills, abilities, and values essential to the beginning practice of general dentistry (p. 93). In a competency-based model, multiple faculty observers repeatedly evaluate independent student performance in a natural setting over time.

These competency statements were developed in 2016-17 by a representative group of faculty, students, and alumni to reflect the 'head-heart-hands' philosophy the school embraces: the integration of current and emerging biomedical and clinical knowledge (head); professionalism, ethical behavior, empathy, and communication skills (heart); and clinical skills (hands). For clarity and consistency in application and measurement, an appended glossary defines key terms highlighted in the statements.

1. Integrate biomedical (p. 93) and clinical knowledge to improve oral and systemic health.
2. Think critically (p. 93); use the scientific method (p. 94) to evaluate established and emerging biomedical and clinical science evidence (p. 93) to guide practice decisions.
3. Recognize manifestations of systemic disease and evaluate the impact on oral health (p. 93), oral health care, and well-being.
4. Recognize and evaluate the impact of comprehensive oral health care on systemic health and well-being.
5. Apply the principles of health promotion and disease prevention (p. 93) to individuals and communities.
6. Apply the principles of bioethics (p. 93) to practice.
7. Apply the principles of behavioral science (p. 92) to practice.
8. Establish and maintain trust and rapport with all stakeholders (p. 94) in patient care. Demonstrate empathy (p. 93).
9. Manage the oral health care needs of pediatric, adolescent, and adult patients, including geriatric patients and patients with complex needs (p. 93).
10. Perform comprehensive diagnostic evaluations and risk assessment on patients at all stages of life (p. 94).
11. Obtain, select, and interpret images and tests necessary for accurate differential diagnoses and correlate them with clinical findings.
12. Formulate and present comprehensive, sequenced treatment plans and prognoses in accordance with patient needs, values, and expectations.
13. Obtain and document informed consent or refusal.
14. Follow standard infection control guidelines.

15. Preserve and restore hard and soft tissue to support health, function, and esthetics:

- Screening and risk assessment for head and neck cancer;
- Local anesthesia and pain and anxiety control;
- Appropriate utilization of therapeutic and pharmacological agents used in patient care;
- Management of orofacial pain;
- Communicate with dental laboratory technicians and manage laboratory procedures to support patient care;
- Risk assessment, prevention, and management of caries, including minimally invasive dentistry;
- Restore and replace teeth, including operative, fixed, removable, and dental implant therapy;
- Periodontal therapy and recall strategies;
- Dental emergencies;
- Pulpal therapy and endodontics;
- Oral mucosal and osseous disorders;
- Bony and soft tissue surgery;
- Malocclusion and space management; and
- Evaluate treatment outcomes, prognosis, and continuing care strategies.

16. Recognize and manage medical emergencies in the dental setting.

17. Interact effectively with stakeholders from diverse cultures, backgrounds, and identities (p. 93).

18. Practice, delegate, or refer within the scope of practice (p. 94) and in alignment with patient needs, values, and expectations.

19. Apply current principles of business, financial, and human resource management to lead the oral health care team (p. 93).

20. Evaluate contemporary and emerging models of oral healthcare delivery, understand dentistry's role in the larger health care system, and strive to reduce barriers to care.

21. Collaborate with the interprofessional (p. 93) health care team to improve oral-systemic health, enhance the patient experience (p. 93), and reduce risk.

22. Evaluate and implement current and emerging technology to diagnose, prevent, and treat disease.

23. Engage in ongoing quality assurance (p. 93) to improve patient outcomes.

24. Behave professionally (p. 93): manage personal behavior and performance in accordance with standards of the school and the profession.

25. Practice in accordance with current local, state, and federal laws and regulations.

26. Demonstrate ongoing reflection (p. 94), self-assessment (p. 94), continuous learning, and professional development.

27. Demonstrate healthy coping and self-care (p. 94) strategies.

28. Participate in professional activities to promote the profession and serve individuals and communities.

## Competency Statements: Glossary of Terms

The purpose of this glossary is: (a) to define critical terms in the competency statements so that faculty can design, deliver, and assess targeted, sequenced learning experiences; and (b) to make transparent to students and faculty the goals of the educational program. The glossary is a critical component of the Competency Statement document.

**Behavioral science:** a branch of science that studies human action and investigates decision-making processes and communication strategies

that occur within and between organisms in a social system. Familiarity with major concepts of the discipline may provide solutions to an array of individual, family, and community challenges.

**Bioethics:** the shared discipline of reflective examination of ethical issues and implications in health care, health science, and health policy.

**Biomedical science:** the scientific knowledge base of human biology required for the treatment and prevention of oral and systemic disease.

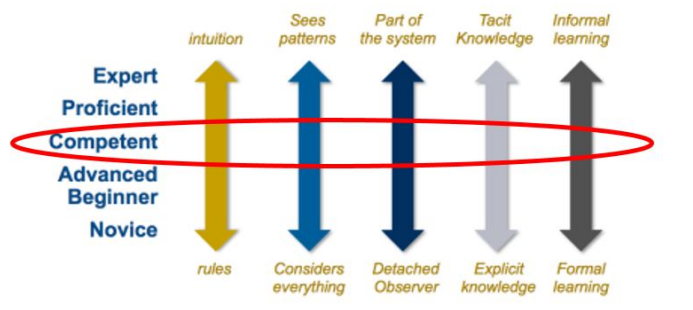
This includes knowledge of anatomy, biochemistry, molecular and cell biology, epidemiology, embryology, genetics, histology, immunology, microbiology, nutrition, pathology, pharmacology, physiology, and related knowledge domains.

**Competence (competency):** knowledge, skills, abilities, and values essential to the beginning practice of oral health care that are performed consistently and independently in natural settings. Competence is observable over time and therefore can be measured and assessed to ensure acquisition.



from: Patricia Benner, Novice to Expert Continuum

## Goal of the Educational Program



from: Patricia Benner, Novice to Expert Diagram

**Complex needs:** patients with moderate to severe medical, developmental, and/or psychosocial conditions that require of the practitioner additional information or knowledge to manage the patient's health.

**Critical thinking:** the ability to interpret, evaluate, and draw sound conclusions in sometimes complex situations where all information may not be present or apparent. In professional practice, critical thinking is the application of rational analysis to patient assessment, diagnosis, and treatment planning. The practitioner must be able to identify pertinent information, make decisions based on deliberate review of options, evaluate outcomes of diagnostic and therapeutic tests or decisions, and assess his or her own competence and ability.

**Empathy:** to understand the thinking, perspectives, and feelings of others. To be done correctly, empathy requires interest in others and a set of skills.

**Evidence-based dentistry (EBD):** an approach to oral health care that requires the judicious integration of clinically relevant scientific evidence relating to the patient's oral and medical condition and history, the dentist's clinical expertise, and the patient's treatment needs and preferences. (American Dental Association).

**General dentistry:** (a) the evaluation, diagnosis, prevention, and surgical and non-surgical treatment of diseases, disorders and conditions of the oral cavity, maxillofacial area, and the adjacent and associated structures, and their impact on the human body; (b) a service provided by a dentist within the scope of his/her education, training, and experience; and that is (c) in accordance with the ethics of the profession and applicable law.

A general dentist is an integral part of the healthcare system and is the primary oral health care provider for patients of all ages. (adapted from ADA House of Delegates, 1997).

**Identity:** the belief that a subject, person, or thing is the same as it is represented or claimed to be. Identity can encompass race, gender, sexual orientation, gender identity, age, ability, and other personal characteristics.

**Interprofessional education:** When students from two or more health professions learn about, from, and with each other to enable effective patient care collaboration and improve health outcomes.

Interprofessional collaborative practice exists when providers from different health backgrounds work together with patients, families, caregivers, and communities to deliver quality care (adapted from the World Health Organization, 2010).

**Oral health:** a functional, structural, aesthetic, physiologic, and psychosocial state of well-being that is essential to an individual's general health and quality of life (ADA House of Delegates, 2014).

**Oral health care team:** generally composed of the dentist, specialist dentist, dental therapist or dental health aide therapist, dental hygienist (with or without expanded function), dental assistant (with or without expanded function), office support staff, and the dental laboratory technician. Physicians, nurses, nurse practitioners, physician assistants, and other medical professionals are increasingly a critical component of the team.

**Patient experience:** all elements of the care experience that contribute to patient satisfaction: scheduling, reception, treatment and care, sensitive and empathetic interactions with staff and providers, billing, and follow up.

**Prevention:** procedures, processes, or strategies that reduce risk, promote disease prevention, and result in improved patient health.

**Professionalism (see also 2017 ADEA Statement on Professionalism in Dental Education (<http://www.jdentaled.org/content/81/7/885.full.pdf+html/>)):** the habitual and judicious use of communication skills, knowledge, technical skills, clinical reasoning, empathy, values, and reflection in daily practice for the benefit of the individual or community being served. (Epstein RM, Hundert EM. Defining and assessing professional competence. JAMA 2002; 287: 226–235). Professionalism is the foundation of the doctor-patient relationship. It requires integrity and a high level of skill. The professional assumes an obligation to sharpen and develop skills and judgment throughout a career.

**Quality assurance:** systematic and ongoing assessment and evaluation of the quality and appropriateness of a service, product, process, structure, or outcome. The process involves identifying strengths and weaknesses, designing and implementing solutions or strategies to improve performance, and careful monitoring to determine the effectiveness of a change or intervention.

**Reflection:** the active process of reviewing, analyzing, and evaluating experiences, drawing upon theoretical concepts or previous learning, to inform future action (Reid, 1993).

**Scientific method:** the foundation of the natural sciences that comprises some or all of the following: (a) systematic observation, measurement, and experimentation; (b) induction and the formulation of hypotheses; (c) the making of deductions from the hypotheses; (d) the experimental testing of the deductions; and (e) the modification of the hypotheses, if necessary.

**Scope of practice:** procedures, treatments, and actions that a practitioner is allowed to undertake as prescribed by professional licensure and that are within the practitioner's competence.

**Self-Assessment:** the evaluation of one's performance against current, defined, evidence-based standards and, ultimately, without external input.

**Self-Care:** activities and practices that are engaged in regularly that aim to reduce stress and to maintain and enhance health and well-being. Prioritizing emotional, physical, intellectual, occupational and environmental wellness is necessary to honor professional and personal commitments. Healthy self-care includes a realization of when to reach out for help or support.

**Stages of life:** pediatric (< 14 years), adult (15-65 years), and geriatric (>66 years), including the frail elderly and patients with complex needs.

**Stakeholder:** any person or party in the healthcare setting with an interest in the financing, implementation, or outcome of a service, practice, process, or decision made by another. Stakeholders include patients, care givers, family members, faculty and other practitioners, specialists, the dental school, and others consulting on or providing care.

Please note: Courses are taught on a permanent or interim (continuing) basis. Course numbers followed by the letter 'I' indicate interim courses which are taught over two or more quarters. Units assigned to interim courses build upon each preceding quarter's unit value and culminate in a final and permanent unit value. The final unit value is transcribed with the permanent course while interim courses and corresponding unit values can be found on report cards.

## Year 1

<b>Summer Quarter (1)</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
BMS 100	Introduction to BMS	2	0
BMS 120	Genetics	0.7	0
BMS 123I	Anatomy and Histology	2	0
BMS 124	Cells & Biochemistry	2.5	0
DS 101I	ICS I: Orientation to Clinical Practice	4	0
DS 106I	ICS I: Orientation to Clinical Practice Lab	0	1
PRD 131I	IPS I: Fundamentals in Restorative Dentistry	5	0
PRD 134I	Professionalism & Dentistry	0.5	0
PRD 146I	IPS I Technique: Direct Restorative	0	3
PRD 147I	IPS I Technique: Indirect Restorative	0	3
<b>Autumn Quarter (2)</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
BMS 123	Anatomy and Histology	4	0
BMS 130	Applied Physiology	3	0
BMS 131	Biochemistry & Nutrition	1	0

DS 101I	ICS I: Orientation to Clinical Practice	8	0
DS 103I	Integrated Case Based Discussions	2	0
DS 106I	ICS I: Orientation to Clinical Practice Lab	0	2
PRD 131I	IPS I: Fundamentals in Restorative Dentistry	10	0
PRD 134	Professionalism & Dentistry	1.5	0
PRD 146I	IPS I Technique: Direct Restorative	0	6
PRD 147I	IPS I Technique: Indirect Restorative	0	6
<b>Winter Quarter (3)</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
BMS 133	Applied Orofacial Anatomy	6	0
BMS 140	Sensory & Salivary Biology	1	0
DS 101	Integrated Clinical Sciences I: Orientation to the Clinical Practice of General Dentistry	10	0
DS 103I	Integrated Case Based Discussions	3	0
DS 106I	ICS I: Orientation to Clinical Practice Lab	0	3
DS 160	Dental Radiology	1	0
DS 230I	General Pathology	1	0
EN 154	Basic Endodontics	1	0
PRD 131	IPS I: Fundamentals in Restorative Dentistry	15	0
PRD 144I	Professionalism & Dentistry II	1	0
PRD 146	Integrated Preclinical Technique I: Direct Restorative	0	9
PRD 147	Integrated Preclinical Technique I: Indirect Restorative	0	10
<b>Spring Quarter (4)</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
BMS 220I	Pharmacology	1	0
BMS 232I	Immunology & Microbiology	1	0
COH 116	Preparation for Clinical Care	0	1
DS 103	Integrated Case Based Discussions	4	0
DS 106	Integrated Clinical Sciences I: Orientation to Clinical Practice Lab	0	4.5
DS 230I	General Pathology	3	0
OR 244I	Orthodontics	1	0
PR 150	Periodontal Diseases	1	0
PRD 144	Professionalism & Dentistry II	2	0
PRD 151	Integrated Preclinical Concepts I: Capstone	2	0
PRD 155	Integrated Preclinical Technique I: Capstone	0	3
PRD 172	Fundamentals and Application of Local Anesthesia	2	0
<b>Block Rotations</b>			
DS 166	Dental Radiographic Technique	0	1
EN 159	Preclinical Endodontics	0	2
PR 156	Preclinical Periodontics	0	1
PRD 137	Local Anesthesia	0	1
PRD 138	Advanced Restorative Technique	0	2
PRD 139	Clinical Transitions	0	1
Selective Instruction		variable	variable

<b>Year 2</b>				<b>Year 3</b>			
<b>Summer Quarter (5)</b>				<b>Winter Quarter (7)</b>			
		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>			<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
BMS 220I	Pharmacology	3	0	PRD 279I	Clinical Restorative Dentistry I	0	2
BMS 232	Immunology & Microbiology	3	0	COH 216I	Patient Management and Productivity I	0	3
COH 216I	Patient Management and Productivity I	0	1	COH 218I	Clinical Management and Judgment I	0	3
COH 218I	Clinical Management and Judgment I	0	1	DS 202	Integrated Clinical Sciences II: Application of Foundational Knowledge	4	0
DS 200	Practice Management I	1	0	DS 217I	Clinical Oral Diagnosis and Treatment Planning	0	3
DS 201I	Integrated Clinical Sciences II: Application of Foundational Knowledge	1	0	DS 266I	Clinical Radiology	0	1
DS 217I	Clinical Oral Diagnosis and Treatment Planning	0	1	EN 254	Endodontics	1	0
DS 230	General Pathology	5	0	EN 259I	Clinical Endodontics	0	3
DS 266I	Clinical Radiology	0	1	OS 239I	Clinical Oral and Maxillofacial Surgery I	0	1
EN 259I	Clinical Endodontics	0	1	PA 231	Oral Pathology	3	0
OR 244	Orthodontics	2	0	PD 346I	Dental Auxiliary Utilization	0	1
OS 239I	Clinical Oral and Maxillofacial Surgery I	0	1	PD 347I	Clinical Pediatric Dentistry	0	1
PD 240I	Pediatric Dentistry	1	0	PR 250	Periodontics	3	0
PR 250I	Periodontics	1	0	PR 256I	Clinical Periodontics I	0	4
PR 256I	Clinical Periodontics I	0	1	PRD 233	Integrated Preclinical Concepts II: Comprehensive Principles in Dentistry	3	0
PRD 230I	IPT II Concepts: Removable Prosthodontics	1	0	PRD 238	Integrated Preclinical Technique II: Comprehensive Principles in Dentistry	0	3
PRD 231	Integrated Preclinical Concepts II: Occlusion	1	0	PRD 277	Local Anesthesia	0	1
PRD 235I	IPT II Technique: Removable Prosthodontics	0	3	PRD 279I	Clinical Restorative Dentistry I	0	3
PRD 236	Integrated Preclinical Technique II: Occlusion	0	1	<b>Spring Quarter (8)</b>			
PRD 277I	Local Anesthesia	0	1	COH 216	Patient Management and Productivity I	0	4
PRD 279I	Clinical Restorative Dentistry I	0	1	COH 218	Clinical Management and Judgment I	0	4
<b>Autumn Quarter (6)</b>				COH 368I	Emergency Clinic	0	1
		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>	DS 203	Integrated Clinical Sciences II: Application of Foundational Knowledge	5	0
BMS 220	Pharmacology	5	0	DS 217	Clinical Oral Diagnosis and Treatment Planning	0	4
COH 216I	Patient Management and Productivity I	0	2	DS 266	Clinical Dental Radiology	0	2
COH 218I	Clinical Management and Judgment I	0	2	EN 259	Clinical Endodontics I	0	4
DS 201	Integrated Clinical Sciences II: Application of Foundational Knowledge	5	0	OR 249	Preclinical Orthodontics	0	1
DS 217I	Clinical Oral Diagnosis and Treatment Planning	0	2	OS 239	Clinical Oral and Maxillofacial Surgery I	0	1
DS 266I	Clinical Radiology	0	1	PA 232	Differential Diagnosis of Oral and Maxillofacial Lesions	3	0
EN 259I	Clinical Endodontics	0	2	PD 346I	Dental Auxiliary Utilization	0	1
OS 239I	Clinical Oral and Maxillofacial Surgery I	0	1	PD 347I	Clinical Pediatric Dentistry	0	2
PD 240	Pediatric Dentistry	2	0	PR 256	Clinical Periodontics I	0	6
PR 250I	Periodontics	2	0	PRD 279	Clinical Restorative Dentistry I	0	6
PR 256I	Clinical Periodontics I	0	2	PRD 281	Dental Implants	1	0
PRD 230	Integrated Preclinical Concepts II: Removable Prosthodontics	3	0	Selective Instruction		variable	variable
PRD 232	Integrated Preclinical Concepts II: Implant Dentistry	1	0	<b>Year 3</b>			
PRD 235	Integrated Preclinical Technique II: Removable Prosthodontics	0	5	<b>Summer Quarter (9)</b>			
PRD 237	Integrated Preclinical Technique II: Implant Dentistry	0	1	COH 316I	Patient Management and Productivity II	0	2
PRD 245	Integrated Preclinical Technique II: Applied Occlusion	0	1	COH 318I	Clinical Management and Judgment II	0	2
PRD 277I	Local Anesthesia	0	1	COH 368I	Emergency Clinic	0	1
				DS 302I	Clinical Care of Complex Needs Patients	1	0
				DS 303I	Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars	2	0



DS 307I	Extramural Patient Care	0	1
EN 359I	Clinical Endodontics II	0	2
OR 348I	Applied Orthodontics	0	1
OS 339I	Clinical Oral and Maxillofacial Surgery II	0	1
PD 346I	Dental Auxiliary Utilization	0	2
PD 347I	Clinical Pediatric Dentistry	0	3
PR 356I	Clinical Periodontics II	0	1
PRD 378I	Clinical Restorative Dentistry II	0	5
PRD 396I	Clinical Removable Prosthodontics	0	3

PRD 379	Clinical Restorative Dentistry III	0	12
PRD 396	Clinical Removable Prosthodontics	0	12

## International Dental Studies

### Program Overview

International Dental Studies ([http://catalog.pacific.edu/sanfrancisco/arthuradugonischoolofdentistry/internationaldentalstudies/Program\\_Overview\\_IDS\\_2020-2021.pdf](http://catalog.pacific.edu/sanfrancisco/arthuradugonischoolofdentistry/internationaldentalstudies/Program_Overview_IDS_2020-2021.pdf))

#### Autumn Quarter (10)

	Didactic Units	Lab/Clinic Units	
COH 316	Patient Management and Productivity II	0	4
COH 318	Clinical Management and Judgment II	0	4
COH 368I	Emergency Clinic	0	1
DS 302I	Clinical Care of Complex Needs Patients	2	0
DS 303I	Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars	4	0
DS 307I	Extramural Patient Care	0	1
EN 359I	Clinical Endodontics II	0	4
OR 348	Applied Orthodontics	0	1
OS 339I	Clinical Oral and Maxillofacial Surgery II	0	1
PD 346	Dental Auxiliary Utilization	0	2
PD 347	Clinical Pediatric Dentistry	0	4
PR 356I	Clinical Periodontics II	0	2
PRD 378	Clinical Restorative Dentistry II	0	11
PRD 396I	Clinical Removable Prosthodontics	0	6

#### Winter Quarter (11)

	Didactic Units	Lab/Clinic Units	
COH 317I	Patient Management and Productivity III	0	2
COH 319I	Clinical Management and Judgment III	0	2
COH 368	Emergency Clinic	0	3
DS 300	Practice Management II	3	0
DS 302	Clinical Care of Complex Needs	4	0
DS 303	Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars	6	0
DS 307I	Extramural Patient Care	0	1
EN 359I	Clinical Endodontics II	0	6
OS 339I	Clinical Oral and Maxillofacial Surgery II	0	2
PR 356I	Clinical Periodontics II	0	3
PRD 379I	Clinical Restorative Dentistry III	0	6
PRD 396I	Clinical Removable Prosthodontics	0	9
Selective Instruction	variable	variable	

#### Spring Quarter (12)

	Didactic Units	Lab/Clinic Units	
COH 317	Patient Management and Productivity III	0	4
COH 319	Clinical Management and Judgment III	0	4
DS 301	Jurisprudence	1	0
DS 307	Extramural Patient Care	0	4
EN 359	Clinical Endodontics II	0	8
OS 339	Clinical Oral and Maxillofacial Surgery II	0	2
PR 356	Clinical Periodontics II	0	4

### Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

### Personalized Instructional Program

Beginning with the DDS class of 2019 and IDS class of 2019, successful completion of a Personalized Instructional Program (PIP) is required for graduation. This is reflected on the transcript as a stand-alone course (BMS 394, COH 394, DS 394 etc.). Unit values will vary based upon contact hours.

Designed specifically for foreign-trained dentists who possess a dental degree from abroad, the IDS program integrates preclinical and clinical science subjects with applied behavioral sciences to prepare graduates to provide high quality dental care and to enter a changing world that will require them to be critical thinkers and lifelong learners. The 24-month curriculum leading to the degree of Doctor of Dental Surgery begins in July and is divided into eight quarters, each consisting of ten weeks of instruction, one week of examinations, and a vacation period of between one and four weeks. Students in the IDS program are held to the same competency standards as their peers in the DDS program.

Integrated preclinical instruction is concentrated in the first three quarters with students learning to work from a seated position in a modern preclinical simulation laboratory and with a chair-side assistant in conjunction with pediatric dental practice. Clinical work with patients is initiated in the second quarter.

The school is a pioneer in competency-based education, an approach that replaces the traditional system of clinical requirements with experiences that ensure graduates possess the skills, understanding, and professional values needed for the independent practice of general dentistry. Pacific is also known for its humanistic approach to dental education, stressing the dignity of each individual and his or her value as a person.

The Clinical Practice Strand of the Helix curriculum supports comprehensive patient care based on the concept of private dental practice where the student assumes responsibility for assigned patients' overall treatment, consultation, and referral for specialty care. IDS students begin seeing patients in the second quarter, and practice clinical dentistry approximately 8 hours per week starting

in October. The number of clinical practice hours increased in January and April to 15 and 18 per week, respectively. Second-year IDS students practice approximately 33 hours per week. Students learn to provide comprehensive dental care under the direction of a team of clinical faculty led by the Group Practice Leader (GPL). The GPL is responsible for mentoring students and ensuring they are receiving adequate clinical experiences to ensure competency upon graduation. In the first year, students treat patients in a discipline-based model where they are supervised by trained and calibrated faculty in specific clinical disciplines, including oral diagnosis and treatment planning, periodontics, endodontics, restorative dentistry, and removable prosthodontics. In the second year, students treat patients in a generalist model, where they provide all care for their patients under faculty supervision.

There are four discipline exceptions to the comprehensive care model: oral and maxillofacial surgery, pediatric dentistry, oral medicine/facial pain, and radiology. Students are assigned to rotations for two to three weeks in each of these disciplines, except for the oral medicine/facial pain rotations which is one day. In orthodontics, students participate with faculty and orthodontic residents in adjunctive orthodontic care and in oral development clinics. Second-year students also rotate through the Special Care Clinic where they treat perinatal patients, dental-phobic patients, and patients with developmental disabilities. In addition, each student provides care in the hospital operating room on patients with specific health issues.

Advanced clinical dentistry and evaluation of new developments and topics that involve several disciplines are learned in the second year in conjunction with patient care. Second-year IDS students participate in patient care at extramural sites in numerous treatment facilities around the Bay Area, including acute care hospitals, community clinics, and skilled nursing facilities. At extramural clinic sites, students are taught by Pacific faculty in conditions that more closely resemble private practice and typically treat 4-6 patients per day. Rotations at these sites occur at a number of different times, including weekdays during the academic year and vacation periods. Students find these experiences to be highly educational, teaching them how to provide excellent patient care in a more condensed time frame. IDS students may elect to participate in externships to specialty programs during academic break periods.

Behavioral science aspects of ethics, communication, human resource and practice management, and dental jurisprudence are integrated throughout the curriculum. Epidemiology and demography of the older population, basic processes of aging, and dental management of hospitalized patients, geriatric patients, and those with the most common disabling conditions are studied during the final year.

Students are counseled individually with regard to establishing a practice and applying for postgraduate education. A weekend conference acquaints IDS students with opportunities for postgraduate education and with alumni views of the realities of dental practice.

In the 1990s under the leadership of Dr. David W. Chambers, the school led the nation in the adoption of a competency-based education model for pre-doctoral dental programs. In contrast to the prevailing system of 'clinical requirements,' an approach that merely counted a pre-set number of procedures completed in each clinical discipline, competency (p. 98) implies an ongoing and broad-based measure of the developing knowledge, skills, abilities, and values essential to the beginning practice of general dentistry (p. 98). In a competency-based model, multiple faculty observers repeatedly evaluate independent student performance in a natural setting over time.

These competency statements were developed in 2016-17 by a representative group of faculty, students, and alumni to reflect the 'head-

heart-hands' philosophy the school embraces: the integration of current and emerging biomedical and clinical knowledge (head); professionalism, ethical behavior, empathy, and communication skills (heart); and clinical skills (hands). For clarity and consistency in application and measurement, an appended glossary defines key terms highlighted in the statements.

1. Integrate biomedical (p. 98) and clinical knowledge to improve oral and systemic health.
2. Think critically (p. 98); use the scientific method (p. 99) to evaluate established and emerging biomedical and clinical science evidence (p. 98) to guide practice decisions.
3. Recognize manifestations of systemic disease and evaluate the impact on oral health (p. 99), oral health care, and well-being.
4. Recognize and evaluate the impact of comprehensive oral health care on systemic health and well-being.
5. Apply the principles of health promotion and disease prevention (p. 99) to individuals and communities.
6. Apply the principles of bioethics (p. 98) to practice.
7. Apply the principles of behavioral science (p. 98) to practice.
8. Establish and maintain trust and rapport with all stakeholders (p. 99) in patient care. Demonstrate empathy (p. 98).
9. Manage the oral health care needs of pediatric, adolescent, and adult patients, including geriatric patients and patients with complex needs (p. 98).
10. Perform comprehensive diagnostic evaluations and risk assessment on patients at all stages of life (p. 99).
11. Obtain, select, and interpret images and tests necessary for accurate differential diagnoses and correlate them with clinical findings.
12. Formulate and present comprehensive, sequenced treatment plans and prognoses in accordance with patient needs, values, and expectations.
13. Obtain and document informed consent or refusal.
14. Follow standard infection control guidelines.
15. Preserve and restore hard and soft tissue to support health, function, and esthetics:
  - Screening and risk assessment for head and neck cancer;
  - Local anesthesia and pain and anxiety control;
  - Appropriate utilization of therapeutic and pharmacological agents used in patient care;
  - Management of orofacial pain;
  - Communicate with dental laboratory technicians and manage laboratory procedures to support patient care;
  - Risk assessment, prevention, and management of caries, including minimally invasive dentistry;
  - Restore and replace teeth, including operative, fixed, removable, and dental implant therapy;
  - Periodontal therapy and recall strategies;
  - Dental emergencies;
  - Pulpal therapy and endodontics;
  - Oral mucosal and osseous disorders;
  - Bony and soft tissue surgery;
  - Malocclusion and space management; and
  - Evaluate treatment outcomes, prognosis, and continuing care strategies.
16. Recognize and manage medical emergencies in the dental setting.
17. Interact effectively with stakeholders from diverse cultures, backgrounds, and identities (p. 98).
18. Practice, delegate, or refer within the scope of practice (p. 99) and in alignment with patient needs, values, and expectations.

19. Apply current principles of business, financial, and human resource management to lead the oral health care team (p. 99).
20. Evaluate contemporary and emerging models of oral healthcare delivery, understand dentistry's role in the larger health care system, and strive to reduce barriers to care.
21. Collaborate with the interprofessional (p. 98) health care team to improve oral-systemic health, enhance the patient experience (p. 99), and reduce risk.
22. Evaluate and implement current and emerging technology to diagnose, prevent, and treat disease.
23. Engage in ongoing quality assurance (p. 99) to improve patient outcomes.
24. Behave professionally (p. 99): manage personal behavior and performance in accordance with standards of the school and the profession.
25. Practice in accordance with current local, state, and federal laws and regulations.
26. Demonstrate ongoing reflection (p. 99), self-assessment (p. 99), continuous learning, and professional development.
27. Demonstrate healthy coping and self-care (p. 99) strategies.
28. Participate in professional activities to promote the profession and serve individuals and communities.

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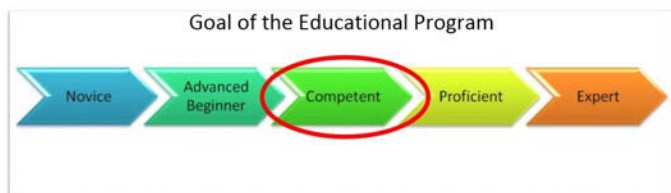
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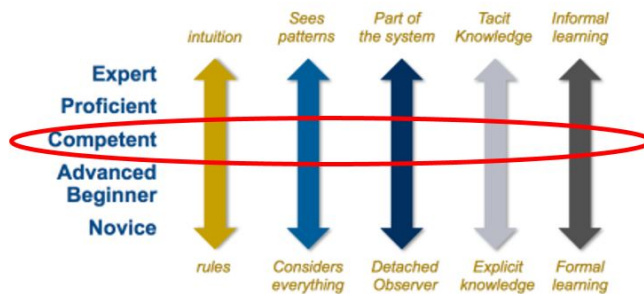
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**Empathy:** to understand the thinking, perspectives, and feelings of others. To be done correctly, empathy requires interest in others and a set of skills.

**Evidence-based dentistry (EBD):** an approach to oral health care that requires the judicious integration of clinically relevant scientific evidence relating to the patient's oral and medical condition and history, the dentist's clinical expertise, and the patient's treatment needs and preferences. (American Dental Association).

**General dentistry:** (a) the evaluation, diagnosis, prevention, and surgical and non-surgical treatment of diseases, disorders and conditions of the oral cavity, maxillofacial area, and the adjacent and associated structures, and their impact on the human body; (b) a service provided by a dentist within the scope of his/her education, training, and experience; and that is (c) in accordance with the ethics of the profession and applicable law. A general dentist is an integral part of the healthcare system and is the primary oral health care provider for patients of all ages. (adapted from ADA House of Delegates, 1997).

**Identity:** the belief that a subject, person, or thing is the same as it is represented or claimed to be. Identity can encompass race, gender, sexual orientation, gender identity, age, ability, and other personal characteristics.

**Interprofessional education:** When students from two or more health professions learn about, from, and with each other to enable effective patient care collaboration and improve health outcomes. Interprofessional collaborative practice exists when providers from different health backgrounds work together with patients, families, caregivers, and communities to deliver quality care (adapted from the World Health Organization, 2010).

**Oral health:** a functional, structural, aesthetic, physiologic, and psychosocial state of well-being that is essential to an individual's general health and quality of life (ADA House of Delegates, 2014).

**Oral health care team:** generally composed of the dentist, specialist dentist, dental therapist or dental health aide therapist, dental hygienist (with or without expanded function), dental assistant (with or without expanded function), office support staff, and the dental laboratory technician. Physicians, nurses, nurse practitioners, physician assistants, and other medical professionals are increasingly a critical component of the team.

**Patient experience:** all elements of the care experience that contribute to patient satisfaction: scheduling, reception, treatment and care, sensitive and empathetic interactions with staff and providers, billing, and follow up.

**Prevention:** procedures, processes, or strategies that reduce risk, promote disease prevention, and result in improved patient health.

**Professionalism (see also 2017 ADEA Statement on Professionalism in Dental Education (<http://www.jdentaled.org/content/81/7/885.full.pdf+html/>)):** the habitual and judicious use of communication skills, knowledge, technical skills, clinical reasoning, empathy, values, and reflection in daily practice for the benefit of the individual or community being served. (Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA* 2002; 287: 226–235). Professionalism is the foundation of the doctor-patient relationship. It requires integrity and a high level of skill. The professional assumes an obligation to sharpen and develop skills and judgment throughout a career.

**Quality assurance:** systematic and ongoing assessment and evaluation of the quality and appropriateness of a service, product, process, structure, or outcome. The process involves identifying strengths and weaknesses, designing and implementing solutions or strategies to improve performance, and careful monitoring to determine the effectiveness of a change or intervention.

**Reflection:** the active process of reviewing, analyzing, and evaluating experiences, drawing upon theoretical concepts or previous learning, to inform future action (Reid, 1993).

**Scientific method:** the foundation of the natural sciences that comprises some or all of the following: (a) systematic observation, measurement, and experimentation; (b) induction and the formulation of hypotheses; (c) the making of deductions from the hypotheses; (d) the experimental testing of the deductions; and (e) the modification of the hypotheses, if necessary.

**Scope of practice:** procedures, treatments, and actions that a practitioner is allowed to undertake as prescribed by professional licensure and that are within the practitioner's competence.

**Self-Assessment:** the evaluation of one's performance against current, defined, evidence-based standards and, ultimately, without external input.

**Self-Care:** activities and practices that are engaged in regularly that aim to reduce stress and to maintain and enhance health and well-being. Prioritizing emotional, physical, intellectual, occupational and environmental wellness is necessary to honor professional and personal commitments. Healthy self-care includes a realization of when to reach out for help or support.

**Stages of life:** pediatric (< 14 years), adult (15-65 years), and geriatric (>66 years), including the frail elderly and patients with complex needs.

**Stakeholder:** any person or party in the healthcare setting with an interest in the financing, implementation, or outcome of a service, practice, process, or decision made by another. Stakeholders include patients, care givers, family members, faculty and other practitioners, specialists, the dental school, and others consulting on or providing care.

Please note: Courses are taught on a permanent or interim (continuing) basis. Course numbers followed by the letter 'I' indicate interim courses which are taught over two or more quarters. Units assigned to interim courses build upon each preceding quarter's unit value and culminate in a final and permanent unit value. The final unit value is transcribed with the permanent course while interim courses and corresponding unit values can be found on report cards.

## Year 1

### Summer Quarter (1)

		Didactic Units	Lab/Clinic Units
BMS 121I	Clinical Pharmacology and Pathology	1	0
DS 102I	Integrated Clinical Sciences I Concepts: Orientation to the Clinical Practice of General Dentistry	5	0
DS 107	Integrated Clinical Sciences I Lab: Orientation to Clinical Practice in General Dentistry	0	4
DS 160I	Dental Radiology	1	0
PRD 137I	Local Anesthesia	0	1
PRD 173I	IPS I Concepts: Direct & Indirect Restorative	5	0
PRD 175I	IPS I Technique: Direct & Indirect Restorative	0	5
PRD 230I	IPT II Concepts: Removable Prosthodontics	1	0
PRD 235I	IPT II Technique: Removable Prosthodontics	0	3

### Autumn Quarter (2)

		Didactic Units	Lab/Clinic Units
BMS 121I	Clinical Pharmacology and Pathology	2	0
COH 216I	Patient Management and Productivity I	0	1
COH 218I	Clinical Management and Judgment I	0	1
DS 102	Integrated Clinical Sciences I Concepts: Orientation to the Clinical Practice of General Dentistry	9	0
DS 160	Dental Radiology	2	0
DS 217I	Clinical Oral Diagnosis and Treatment Planning	0	1
EN 154	Basic Endodontics	1	0
OS 139	Preclinical Multidisciplinary Surgery	0	1
PR 251I	Periodontics	1	0
PR 256I	Clinical Periodontics I	0	1
PRD 137	Local Anesthesia	0	2
PRD 173	Integrated Preclinical Concepts I: Direct and Indirect Restorative	7	0
PRD 175	Integrated Preclinical Technique I: Direct and Indirect Restorative	0	8
PRD 230	Integrated Preclinical Concepts II: Removable Prosthodontics	3	0
PRD 232	Integrated Preclinical Concepts II: Implant Dentistry	1	0

PRD 235	Integrated Preclinical Technique II: Removable Prosthodontics	0	5	DS 266I	Clinical Radiology	0	1
PRD 237	Integrated Preclinical Technique II: Implant Dentistry	0	1	DS 302I	Clinical Care of Complex Needs Patients	1	0
PRD 279I	Clinical Restorative Dentistry I	0	1	DS 303I	Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars	2	0
<b>Winter Quarter (3)</b>				DS 307I	Extramural Patient Care	0	1
		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>	EN 359I	Clinical Endodontics II	0	2
BMS 120	Genetics	0.7	0	OR 244	Orthodontics	2	0
BMS 121	Clinical Pharmacology and Pathology	3	0	OR 348I	Applied Orthodontics	0	1
COH 216I	Patient Management and Productivity I	0	2	OS 339I	Clinical Oral and Maxillofacial Surgery II	0	1
COH 218I	Clinical Management and Judgment I	0	2	PD 240I	Pediatric Dentistry	1	0
DS 166I	Dental Radiographic Technique	0	2	PR 356I	Clinical Periodontics II	0	1
DS 217I	Clinical Oral Diagnosis and Treatment Planning	0	2	PRD 378I	Clinical Restorative Dentistry II	0	5
EN 254	Endodontics	1	0	PRD 396I	Clinical Removable Prosthodontics	0	3
PD 146	Preclinical Pediatric Dentistry	0	1	<b>Autumn Quarter (6)</b>			
PR 251	Periodontics	2	0			<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
PR 256I	Clinical Periodontics I	0	2	COH 316	Patient Management and Productivity II	0	4
PRD 174	Integrated Preclinical Concepts I: Advanced Direct and Indirect Restorative	2	0	COH 318	Clinical Management and Judgment II	0	4
PRD 176	Integrated Preclinical Technique I: Advanced Direct and Indirect Restorative	0	6	COH 368I	Emergency Clinic	0	1
PRD 231	Integrated Preclinical Concepts II:: Occlusion	2	0	DS 266I	Clinical Radiology	0	1
PRD 239	Integrated Preclinical Technique II: Clinical Occlusion	0	2	DS 302I	Clinical Care of Complex Needs Patients	2	0
PRD 277	Local Anesthesia	0	1	DS 303I	Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars	4	0
PRD 279I	Clinical Restorative Dentistry I	0	2	DS 307I	Extramural Patient Care	0	1
<b>Spring Quarter (4)</b>				EN 359I	Clinical Endodontics II	0	4
		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>	OR 348	Applied Orthodontics	0	1
BMS 122	A Multidisciplinary Approach to Clinical Diagnosis and Treatment Planning	1	0	OS 339I	Clinical Oral and Maxillofacial Surgery II	0	1
COH 216	Patient Management and Productivity I	0	3	PD 240	Pediatric Dentistry	2	0
COH 218	Clinical Management and Judgment I	0	3	PR 356I	Clinical Periodontics II	0	2
COH 368I	Emergency Clinic	0	1	PRD 378	Clinical Restorative Dentistry II	0	11
DS 166	Dental Radiographic Technique	0	2	PRD 396I	Clinical Removable Prosthodontics	0	6
DS 203	Integrated Clinical Sciences II: Application of Foundational Knowledge	4	0	<b>Winter Quarter (7)</b>			
DS 217	Clinical Oral Diagnosis and Treatment Planning	0	3			<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
EN 159	Preclinical Endodontics	0	3	COH 317I	Patient Management and Productivity III	0	2
OR 244I	Orthodontics	1	0	COH 319I	Clinical Management and Judgment III	0	2
PR 256	Clinical Periodontics I	0	5	COH 368	Emergency Clinic	0	3
PRD 279	Clinical Restorative Dentistry I	0	4	DS 266I	Clinical Radiology	0	1
PRD 281	Dental Implants	1	0	DS 300	Practice Management II	3	0
Selective Instruction		variable	variable	DS 302	Clinical Care of Complex Needs	4	0
<b>Year 2</b>				DS 303	Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars	6	0
<b>Summer Quarter (5)</b>				DS 307I	Extramural Patient Care	0	1
		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>	EN 359I	Clinical Endodontics II	0	6
COH 316I	Patient Management and Productivity II	0	2	OS 339I	Clinical Oral and Maxillofacial Surgery II	0	2
COH 318I	Clinical Management and Judgment II	0	2	PD 346I	Dental Auxiliary Utilization	0	1
COH 368I	Emergency Clinic	0	1	PD 347I	Clinical Pediatric Dentistry	0	1
DS 200	Practice Management I	1	0	PR 356I	Clinical Periodontics II	0	3
				PRD 379I	Clinical Restorative Dentistry III	0	6
				PRD 396I	Clinical Removable Prosthodontics	0	9
				Selective Instruction		variable	variable
				<b>Spring Quarter (8)</b>			
						<b>Didactic Units</b>	<b>Lab/Clinic Units</b>

COH 317	Patient Management and Productivity III	0	4
COH 319	Clinical Management and Judgment III	0	4
DS 266	Clinical Dental Radiology	0	2
DS 301	Jurisprudence	1	0
DS 307	Extramural Patient Care	0	4
EN 359	Clinical Endodontics II	0	8
OS 339	Clinical Oral and Maxillofacial Surgery II	0	2
PD 346	Dental Auxiliary Utilization	0	1
PD 347	Clinical Pediatric Dentistry	0	1
PR 356	Clinical Periodontics II	0	4
PRD 379	Clinical Restorative Dentistry III	0	12
PRD 396	Clinical Removable Prosthodontics	0	12

## Endodontics

### Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

Endodontic residents participate in a comprehensive 27-month program designed to provide in-depth clinical training in endodontics, supported by a solid foundation of coursework in the biologic principles that uphold the specialty. In addition to a curriculum that nurtures the clinician-scientist, the program offers clinical experiences with an extensive patient demographic supported by the School of Dentistry and a community dental clinic that is part of an expansive health care network in the East San Francisco Bay Area. Each resident will also engage in an investigative project and complete an acceptable thesis to qualify for the Master of Science in Dentistry degree. The thesis is typically submitted for publication in scientific journals. Classes begin each July. Residents are scheduled for classroom and clinical instruction five full days (and some evenings) per week and full participation is required.

The graduate program in endodontology is fully accredited by the Commission on Dental Accreditation.

More information on the program, including admissions requirements, curriculum and schedule, graduation and certification requirements are available here (<http://dental.pacific.edu/academic-programs/residency-and-graduate-programs/advanced-education-program-in-endodontology/>).

### Graduates of Advanced Education Program in Endodontology will:

- Achieve a full range of endodontic care experiences, including but not limited to diagnosis and treatment planning for patients of all ages.
- Be equipped with the necessary manual and cognitive skills for the changing marketplace in private practice now and in the foreseeable future.

- Incorporate during their practice an in-depth knowledge of the biologic and technical aspects of maintaining, replacing, and enhancing the natural dentition, including mechanisms for enhanced tissue healing and tissue regeneration on areas relevant to endodontics.
- Emphasize the interrelationship among the biomedical and clinical sciences and their application to clinical practice.
- Be prepared to practice evidence-based endodontics in both simple and complex cases.
- Exercise the five principles of ethics in their practice.
- Have detailed knowledge in:
  - Anatomy (gross and micro) of soft and hard tissues of the head and neck relevant for endodontic diagnostics, successful anesthesia and surgical procedures.
  - Pathophysiology of the pulpal/periradicular disease
  - Infectious and immunologic processes in oral health and disease
  - Embryology
  - Wound healing
  - Oral medicine and oral pathology
  - Pharmacotherapeutics
  - Research methodology and statistics
  - Neurosciences
  - Biomaterials
- Have in-depth proficiency in:
  - Diagnosis, treatment planning and prognosis
  - Non-surgical and surgical endodontic treatment and retreatment
  - A variety of endodontic techniques
  - Outcome evaluation
  - Radiography and other diagnostic imaging technologies
  - Management of endodontic treatment of medically compromised patients
  - Emergency treatment for endodontic conditions for consultations and treatment if needed.
  - Management of patients with orofacial pain and anxiety
  - Preparation of space for intraradicular restorations in endodontically treated teeth
  - Communication with patients and health care professionals to effectively and formally verbalize knowledge of endodontics, clinical therapies, treatment plans and related diseases to others
  - Use of magnification technologies such as operating microscopes and cameras for documentation.
- Have in-depth proficiency in:
  - Vital pulp management
  - Endodontic management of developing permanent teeth
  - Revascularization/regenerative endodontics
  - Intracoronary bleaching procedures
  - Endodontic management of traumatic dental injuries
- Have in-depth competency in:
  - Diagnosis and treatment of periodontal disease and defects in conjunction with the treatment of the specified tooth undergoing endodontic therapy; treatment provided in consultation with the individuals who will assume the responsibility for the completion or supervision of any additional periodontal maintenance or treatment
  - Placement of intraradicular restorations and cores in endodontically treated teeth; and when the patient is referred, this treatment is accomplished in consultation with the restorative dentist

- Implant dentistry
- Extrusion procedures
- Have in-depth knowledge of the:
  - History of endodontics
  - Teaching methodology
  - Jurisprudence and risk management
  - Practice management
  - Medical emergencies
- Acquire in-depth knowledge of classic and contemporary literature to help graduates critically evaluate the dental literature and provide theoretical bases for diagnostics, techniques and procedures, management, successes, and failures/complications in the clinical practice of non-surgical and surgical endodontic therapy.
- Make or respond to all appropriate consultation requests and demonstrate professionalism, rapport and cooperation with professional colleagues.
- Maintain a patient list in the approved electronic health record for follow-up of patients to enable graduates to assess the outcome of their treatment.
- Demonstrate competency in using clinical management software like axiUm to maintain a comprehensive records of history, diagnosis and treatment of each patient.
- Teach endodontics to predoctoral and/or postdoctoral students in a clinical setting.
- Possess sufficient knowledge and clinical experiences to become proficient in diagnostic data collection, pulpal and periradicular diagnosis treatment planning and treatment sequencing for complicated patients.
- Accomplish a research project and present a thesis monograph in written form, submitted for publication in a peer-reviewed endodontic journal and present a summary of the findings in oral form and defense of the thesis in a colloquium
- Develop and update treatment approach documents for each of the board case categories that must be evidence based.
- Submit 10 board level cases that follows current ABE criteria; both an electronic and a print-out version
- Be eligible to sit for the certifying Boards of the American Board of Endodontists

Please note: Courses are taught on a permanent or interim (continuing) basis. Course numbers followed by the letter 'I' indicate interim courses which are taught over two or more quarters. Units assigned to interim courses build upon each preceding quarter's unit value and culminate in a final and permanent unit value. The final unit value is transcribed with the permanent course.

#### Year 1

Summer Quarter (1)		Didactic Units	Lab/Clinic Units
AN 410	Advanced Head and Neck Anatomy I	1	0
BMS 401	Research Philosophy and Design I	1	0
BMS 450I	Research Project I	1	0
DS 430	Advanced Oral Pathology I	1	0
DS 460	Advanced Radiology I	1	0
EN 401	Endodontic Technology I	1	0
EN 402I	Endodontic Therapy Seminar I	1	0
EN 403I	Endodontic Biology and Pathology I	2	0
EN 405	Advanced Endodontic Technique	0	8
EN 411I	Case Seminar I	3	0

EN 412I	Classic Literature I	3	0
EN 413I	Current Literature I	1	0
EN 424	Pain/Neuro Seminar I	1	0
EN 457	Endodontic Clinic: Assisting	0	1
MC 404	Host Response I	1	0
OS 434I	Implant Seminar I	1	0
PG 420	Advanced Pharmacology I	1	0

Autumn Quarter (2)		Didactic Units	Lab/Clinic Units
BC 414	Biochemistry and Bioengineering I	1	0
BMS 411	Stem Cell Biology I	1	0
BMS 414I	Oral Biol Journal I	1	0
BMS 440	Thesis Protocol	1	0
BMS 450I	Research Project I	1	0
EN 402	Endodontic Therapy Seminar I	2	0
EN 403I	Endodontic Biology and Pathology I	4	0
EN 411I	Case Seminar I	6	0
EN 412I	Classic Literature I	6	0
EN 413I	Current Literature I	2	0
EN 422	Clinical Transition: Evidence-based Endodontics	4	0
EN 423	Anesthesia and Pain Management I	1	0
EN 440I	Special Topics in Endodontology I	1	0
EN 458I	Clinical Endodontics I	0	6
EN 459I	Clinical Endodontics: Surgery I	0	1
MC 424	Oral Microbiology I	1	0
OS 434I	Implant Seminar I	2	0
PRD 484	Biomaterials I	1	0

Winter Quarter (3)		Didactic Units	Lab/Clinic Units
BMS 414I	Oral Biol Journal I	2	0
BMS 450I	Research Project I	2	0
DS 402	Statistical Methods I	1	0
EN 403I	Endodontic Biology and Pathology I	6	0
EN 411I	Case Seminar I	9	0
EN 412I	Classic Literature I	9	0
EN 413I	Current Literature I	3	0
EN 440	Special Topics in Endodontology I	2	0
EN 458I	Clinical Endodontics I	0	15
EN 459I	Clinical Endodontics: Surgery I	0	2
EN 466	Special Care Clinic Rotation	0	1
OS 434I	Implant Seminar I	3	0
OS 439I	Advanced Oral Surgery and Implantology I	3	0

Spring Quarter (4)		Didactic Units	Lab/Clinic Units
BMS 412	Topics in Oral Biology I	1	0
BMS 414	Oral Biology Journal Club I	3	0
BMS 450	Research Project I	3	0
EN 403	Endodontic Biology and Pathology I	8	0
EN 411	Case Seminar I	12	0
EN 412	Classic Literature I	12	0
EN 413	Current Literature I	4	0
EN 430	Clinic Connections I	1	0

EN 458	Clinical Endodontics I	0	25
EN 459	Clinical Endodontics: Surgery I	0	3
OS 434	Implant Seminar I	4	0
OS 439	Advanced Oral Surgery and Implantology I	6	0

## Year 2

Summer Quarter (5)		Didactic Units	Lab/Clinic Units
BMS 550I	Research Project II	1	0
DS 530	Advanced Oral Pathology II	1	0
EN 503I	Endodontic Biology and Pathology II	2	0
EN 511I	Case Seminar II	3	0
EN 512I	Classic Literature II	3	0
EN 513I	Current Literature II	1	0
EN 558I	Clinical Endodontics II	0	9
EN 559I	Clinical Endodontics: Surgery II	0	1
EN 567I	Endodontics at La Clinica II	0	7
MC 504	Host Response II	1	0
OS 534I	Implant Seminar II	1	0
PG 520	Advanced Pharmacology II	1	0

Autumn Quarter (6)		Didactic Units	Lab/Clinic Units
BMS 514I	Oral Biol Journal II	1	0
BMS 550I	Research Project II	1	0
EN 503I	Endodontic Biology and Pathology II	4	0
EN 511I	Case Seminar II	6	0
EN 512I	Classic Literature II	6	0
EN 513I	Current Literature II	2	0
EN 558I	Clinical Endodontics II	0	20
EN 559I	Clinical Endodontics: Surgery II	0	2
EN 567I	Endodontics at La Clinica II	0	14
EN 571I	Predoctoral Instruction	1	0
OS 534I	Implant Seminar II	2	0

Winter Quarter (7)		Didactic Units	Lab/Clinic Units
BMS 514I	Oral Biol Journal II	2	0
BMS 550I	Research Project II	2	0
EN 503I	Endodontic Biology and Pathology II	6	0
EN 511I	Case Seminar II	9	0
EN 512I	Classic Literature II	9	0
EN 513I	Current Literature II	3	0
EN 558I	Clinical Endodontics II	0	31
EN 559I	Clinical Endodontics: Surgery II	0	3
EN 567I	Endodontics at La Clinica II	0	21
EN 571I	Predoctoral Instruction	3	0
OS 534I	Implant Seminar II	3	0

Spring Quarter (8)		Didactic Units	Lab/Clinic Units
BMS 512	Topics in Oral Biology II	1	0
BMS 514	Oral Biology Journal Club II	3	0
BMS 550	Research Project II	3	0
EN 503	Endodontic Biology and Pathology II	8	0
EN 511	Case Seminar II	12	0
EN 512	Classic Literature II	12	0

EN 513	Current Literature II	4	0
EN 530	Clinic Connections II	1	0
EN 558	Clinical Endodontics II	0	42
EN 559	Clinical Endodontics: Surgery II	0	4
EN 567	Endodontics at La Clinica II	0	28
EN 571	Predoctoral Instruction	4	0
OS 534	Implant Seminar II	4	0

## Year 3

Summer Quarter (9)		Didactic Units	Lab/Clinic Units
BMS 651	Manuscript Preparation	3	0
EN 611	Case Seminar III	3	0
EN 613	Current Literature III	1	0
EN 658	Clinical Endodontics III	0	9
EN 659	Clinical Endodontics: Surgery III	0	1
EN 671	Residency Instruction	2	0
EN 684	ABE Seminar	3	0
OS 634	Implant Seminar III	1	0

# Orthodontics

## Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

Pacific's orthodontics residency program, instituted in 1971, is fully accredited by the Commission on Dental Accreditation, and is recognized for educational eligibility by the American Board of Orthodontics. The program's courses prepare the resident to provide excellent treatment based on contemporary biologic orthodontic principles.

Faculty members foster the humanistic atmosphere with informal professional relationships and mutual respect with the residents. Clinical instruction and practice are conducted in the orthodontic clinic.

Didactic courses include principles of orthodontics, cephalometrics and 3D imaging and airway consideration, facial growth, biomechanics, craniofacial biology, cleft lip and palate, research methodology, appliance laboratory, pediatrics, statistics, anatomy, bone biology and clinical use of temporary anchorage device, TMD, orthognathic surgery, restorative-orthodontic relationships, practice management, and periodontic/orthodontic care. The faculty fosters a collegial atmosphere and mutual respect between residents and faculty.

Clinical instruction and practice are conducted in the school's orthodontic clinic in six half-day clinics per week which include treatment for children, adolescents, adults, and multidisciplinary (integrated with periodontal and restorative procedures) patients. Adult patients constitute about one fourth of a student's caseload. Each resident starts approximately



50-55 new patients and 50-60 transfer patients during the residency program. Residents are also rotated through the Children's Hospital Oakland Craniofacial Panel as well as the Stanford Sleep Surgery clinic. Fixed appliance treatment employs the edgewise technique, although instruction permits a wide latitude of clinical variation based on patient needs and special faculty expertise. Experience in treating the entire range of orthodontic problems is provided. Each resident also starts multiple cases utilizing micro-implant anchorage, including MARPE (microimplant-assisted rapid palatal expander) appliances. From 1998 to 2002 the orthodontic department was the initial testing site for the new Invisalign technology, and today provides a state-of-the-art approach to treating a wide variety of patients with Invisalign. Each resident generally starts more than 10 patients with this clear appliance. Complete 3D digital records are obtained from Cone Beam Computed Tomography (CBCT) scan, iTero intra-oral scan, and 3D facial scan. Digital orthodontics and 3D printing technology also allows residents to perform 3D digital set-up, 3D printed indirect bonding, and in-house clear aligner treatment.

Each resident engages in a research project and completes a thesis to qualify for the Master of Science in Dentistry degree. These are submitted for publication in scientific journals.

Residents are scheduled for didactic and clinical instruction five full days per week and full participation is required. While there is no prohibition of weekend private dental practice, residents' commitments during the program seriously limit this opportunity.

More information on the program, including admissions requirements, curriculum and schedule, graduation and certification requirements is available here (<http://dental.pacific.edu/academic-programs/residency-and-graduate-programs/graduate-orthodontics-program/>).

#### **MSD (Master of Science in Dentistry) / Certificate in Orthodontics**

- Initiate and complete a research project to include critical review of the literature, development of a hypothesis and the design, statistical analysis and interpretation of data
- Research expertise under the guidance of a faculty member and thesis committee, culminating in a thesis and its defense

#### **A graduate of an advanced specialty education program in orthodontics is competent to:**

1. Integrate biomedical and clinical knowledge to improve oral health.
2. Think critically; use the scientific method to evaluate established and emerging biomedical and clinical science evidence to guide practice decisions.
3. Practice Evidence based Orthodontics - critically evaluate the literature and other information pertaining to this field.
4. Treat all types of malocclusion, whether in the permanent or transitional dentitions
5. Treat and manage developing dentofacial problems which can be minimized by appropriate timely intervention
6. Use dentofacial orthopedics in the treatment of patients when appropriate
7. Treat and manage major dentofacial abnormalities and coordinate care with oral and maxillofacial surgeons and other healthcare providers
8. Provide all phases of orthodontic treatment including initiation, completion and retention
9. Manage patients with functional occlusal and temporomandibular disorders

10. Treat or manage the orthodontic aspects of patients with moderate and advanced periodontal problems
11. Coordinate and document detailed interdisciplinary treatment plans which may include care from other providers, such as restorative dentists and oral and maxillofacial surgeons or other dental specialists
12. Develop and document treatment plans using sound principles of appliance design and biomechanics
13. Use dental materials knowledgeably in the fabrication and placement of fixed and removable appliances
14. Develop and maintain a system of long-term treatment records as a foundation for understanding and planning treatment and retention procedures
15. Practice orthodontics in full compliance with accepted Standards of ethical behavior
16. Understand current three dimensional (3D) imaging techniques to evaluate the developmental and functional inter-relationships between TMJ, occlusions, airway, and facial growth
17. Understand the following supporting knowledge:
  - Biostatistics
  - History of Orthodontics and Dentofacial Orthopedics
  - Jurisprudence
  - Oral Physiology
  - Pain and Anxiety Control
  - Pediatrics
  - Periodontics
  - Pharmacology
  - Preventive Dentistry
  - Psychological Aspects of Orthodontic and Dentofacial Orthopedic Treatment
  - Public Health Aspects of Orthodontics and Dentofacial Orthopedics
  - Speech Pathology and Therapy
  - Sleep physiology and Sleep Disordered Breathing
18. Engage in ongoing quality assurance to improve patient outcomes.
19. Behave professionally: manage personal behavior and performance in accordance with standards of the school and the profession.
20. Practice in accordance with current local, state, and federal laws and regulations.
21. Demonstrate ongoing reflection, self-assessment, continuous learning, and professional development.
22. Participate in professional activities to promote the profession and serve individuals and communities.

Please note: Courses are taught on a permanent or interim (continuing) basis. Course numbers followed by the letter 'I' indicate interim courses which are taught over two or more quarters. Units assigned to interim courses build upon each preceding quarter's unit value and culminate in a final and permanent unit value. The final unit value is transcribed with the permanent course.

#### **Year 1**

<b>Summer Quarter (1)</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
OR 400	Craniofacial Biology & Genetics	1	0
OR 401I	Cephalometrics	2	0
OR 404I	Research Practicum and Thesis I	1	0
OR 410I	Biomechanics	1	0

OR 414I	Introduction to Contemporary Orthodontics	2	0	OR 423I	Comprehensive Case Analysis Seminar I	3	0
OR 421I	Current Literature Seminar I	1	0	OR 424I	Treatment Planning Seminar I	3	0
OR 422	Anatomy	1	0	OR 430	Surgical-Orthodontic Treatment	4	0
OR 423I	Comprehensive Case Analysis Seminar I	1	0	OR 431I	Orthognathic Surgery Seminar I	3	0
OR 424I	Treatment Planning Seminar I	1	0	OR 432I	Multidisciplinary Seminar I	3	0
OR 426I	Principles of Orthodontic Technique	0	2	OR 440	Imaging in Orthodontics, TMJ & Airway Consideration	4	0
OR 430I	Surgical-Orthodontic Treatment	1	0	OR 441I	Orthodontic Treatment of Craniofacial Anomolies	2	0
OR 431I	Orthognathic Surgery Seminar I	1	0	OR 456I	Clinical Orthodontics I	0	23
OR 432I	Multidisciplinary Seminar I	1	0	OR 457I	Mixed Dentition Orthodontics I	0	6
OR 434	Introduction to Invisalign	1	0	OR 458I	Surgical Orthodontics I	0	2
OR 456I	Clinical Orthodontics I	0	8	OR 459I	Clinical Orthodontics in Craniofacial Anomalies	0	2
OR 457I	Mixed Dentition Orthodontics I	0	2				
OR 458I	Surgical Orthodontics I	0	1				
OR 459I	Clinical Orthodontics in Craniofacial Anomalies	0	1				
<b>Autumn Quarter (2)</b>				<b>Spring Quarter (4)</b>			
		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>			<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
OR 401	Cephalometrics	4	0	OR 402	Facial Growth	4	0
OR 403I	Critical Thinking	1	0	OR 403	Critical Thinking - Research Design	3	0
OR 404I	Research Practicum and Thesis I	1	0	OR 404	Research Practicum and Thesis I	2	0
OR 410I	Biomechanics	3	0	OR 410	Biomechanics	7	0
OR 411I	Craniofacial Biology & Genetics - Genetics in Orthodontics	1	0	OR 412	Cleft Lip & Palate/Craniofacial Anomalies - Orofacial Clefts and Abnormal Craniofacial Development	2	0
OR 414I	Introduction to Contemporary Orthodontics	3	0	OR 420	Bone Biology	3	0
OR 421I	Current Literature Seminar I	2	0	OR 421	Current Literature Seminar I	4	0
OR 423I	Comprehensive Case Analysis Seminar I	2	0	OR 423	Comprehensive Case Analysis Seminar I	4	0
OR 424I	Treatment Planning Seminar I	1	0	OR 424	Treatment Planning Seminar I	2	0
OR 426	Principles of Orthodontic Technique	0	5	OR 431	Orthognathic Surgery Seminar I	4	0
OR 430I	Surgical-Orthodontic Treatment	2	0	OR 432	Multidisciplinary Seminar I	4	0
OR 431I	Orthognathic Surgery Seminar I	2	0	OR 433	Retention Seminar I	1	0
OR 432I	Multidisciplinary Seminar I	2	0	OR 441	Orthodontic Treatment of Craniofacial Anomolies	2	0
OR 440I	Imaging in Orthodontics, TMJ & Airway Consideration	2	0	OR 456	Clinical Orthodontics I	0	30
OR 441I	Orthodontic Treatment of Craniofacial Anomolies	1	0	OR 457	Mixed Dentition Orthodontics I	0	8
OR 456I	Clinical Orthodontics I	0	15	OR 458	Surgical Orthodontics I	0	2
OR 457I	Mixed Dentition Orthodontics I	0	4	OR 459	Clinical Orthodontics in Craniofacial Anomalies I	0	2
OR 458I	Surgical Orthodontics I	0	1				
OR 459I	Clinical Orthodontics in Craniofacial Anomalies	0	1				
<b>Winter Quarter (3)</b>				<b>Year 2</b>			
		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>	<b>Summer Quarter (5)</b>			
OR 402I	Facial Growth	2	0			<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
OR 403I	Critical Thinking	2	0	OR 501I	Principles of Orthodontics	2	0
OR 404I	Research Practicum and Thesis I	1	0	OR 502	Microimplant I	2	0
OR 410I	Biomechanics	5	0	OR 503I	Research Design I	1	0
OR 411	Craniofacial Biology & Genetics - Genetics in Orthodontics	2	0	OR 504I	Research Practicum and Thesis II	1	0
OR 414	Introduction to Contemporary Orthodontics	4	0	OR 510I	Periodontic-Orthodontic Relations	3	0
OR 421I	Current Literature Seminar I	3	0	OR 521I	Current Literature Seminar II	1	0
				OR 523I	Comprehensive Case Analysis Seminar II	1	0
				OR 524I	Treatment Planning Seminar II	1	0
				OR 531I	Orthognathic Surgery Seminar II	1	0
				OR 532I	Multidisciplinary Seminar II	1	0
				OR 556I	Clinical Orthodontics II	0	10
				OR 557I	Mixed Dentition Orthodontics II	0	2

OR 558I	Surgical Orthodontics II	0	1
OR 559I	Clinical Orthodontics in Craniofacial Anomalies II	0	1

<b>Autumn Quarter (6)</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
OR 501I	Principles of Orthodontics	4	0
OR 503I	Research Design I	2	0
OR 504I	Research Practicum and Thesis II	3	0
OR 510	Periodontic-Orthodontic Relations	6	0
OR 512I	Preparation for Specialty Examination	1	0
OR 521I	Current Literature Seminar II	2	0
OR 523I	Comprehensive Case Analysis Seminar II	2	0
OR 524I	Treatment Planning Seminar II	1	0
OR 531I	Orthognathic Surgery Seminar II	2	0
OR 532I	Multidisciplinary Seminar II	2	0
OR 556I	Clinical Orthodontics II	0	19
OR 557I	Mixed Dentition Orthodontics II	0	4
OR 558I	Surgical Orthodontics II	0	1
OR 559I	Clinical Orthodontics in Craniofacial Anomalies II	0	1

<b>Winter Quarter (7)</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
OR 501I	Principles of Orthodontics	6	0
OR 503I	Research Design I	3	0
OR 504I	Research Practicum and Thesis II	4	0
OR 511I	Practice Management I	2	0
OR 512	Preparation for Specialty Examination	2	0
OR 514	Temporomandibular Joint Disorders	1	0
OR 521I	Current Literature Seminar II	3	0
OR 523I	Comprehensive Case Analysis Seminar II	3	0
OR 524I	Treatment Planning Seminar II	2	0
OR 531I	Orthognathic Surgery Seminar II	3	0
OR 532I	Multidisciplinary Seminar II	3	0
OR 556I	Clinical Orthodontics II	0	30
OR 557I	Mixed Dentition Orthodontics II	0	6
OR 558I	Surgical Orthodontics II	0	2
OR 559I	Clinical Orthodontics in Craniofacial Anomalies II	0	2

<b>Spring Quarter (8)</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
OR 501	Principles of Orthodontics	8	0
OR 503	Research Design I	4	0
OR 504	Research Practicum and Thesis II	5	0
OR 511	Practice Management I	4	0
OR 521	Current Literature Seminar II	4	0
OR 523	Comprehensive Case Analysis Seminar II	4	0
OR 524	Treatment Planning Seminar II	2	0
OR 531	Orthognathic Surgery Seminar II	4	0
OR 532	Multidisciplinary Seminar II	4	0
OR 533	Retention Seminar II	1	0
OR 556	Clinical Orthodontics II	0	38

OR 557	Mixed Dentition Orthodontics II	0	8
OR 558	Surgical Orthodontics II	0	3
OR 559	Clinical Orthodontics in Craniofacial Anomalies II	0	3

<b>Year 3</b>		<b>Didactic Units</b>	<b>Lab/Clinic Units</b>
<b>Summer Quarter (9)</b>			
OR 602	Microimplant II	1	0
OR 603	Research Design II	1	0
OR 604	Research Practicum and Thesis III	6	0
OR 611	Practice Management II	2	0
OR 612	Ethics	1	0
OR 613	Orthodontics Speaker Series	2	0
OR 621	Current Literature Seminar III	1	0
OR 623	Comprehensive Case Analysis Seminar III	1	0
OR 624	Treatment Planning Seminar III	1	0
OR 631	Orthognathic Surgery Seminar III	1	0
OR 632	Multidisciplinary Seminar III	1	0
OR 656	Clinical Orthodontics III	0	9
OR 657	Mixed Dentition Orthodontics III	0	2
OR 658	Surgical Orthodontics III	0	1
OR 659	Clinical Orthodontics in Craniofacial Anomalies III	0	1

## Course Descriptions and Faculty



Course descriptions are grouped by department. Courses are numbered by year: first-year predoctoral courses in the 100s, second-year predoctoral courses in the 200s, and third-year predoctoral courses in the 300s. Graduate courses are similarly numbered by year: first-year graduate courses in the 400s, second-year graduate courses in the 500s, and third-year graduate courses in the 600s. Quarters during which a course is offered in the DDS and graduate orthodontics and endodontics programs are indicated in parentheses following the course descriptions. (For the sequence of courses in the IDS program, please see Distribution of Instruction). Units of credit are listed separately for clinical courses offered during second and third years, e.g. EN 259 Clinical Endodontics I (4 units). Otherwise the unit value is listed after the course title. More than a single unit value is reported when there is a difference in contact hours between DDS and IDS courses.

Beginning in the fourth quarter, DDS and IDS students must enroll in selective instruction each year which serves to extend basic knowledge and skills in a discipline. A listing of selective course offerings is distributed during the winter and spring quarters. Advanced topics and experiences in selected basic, clinical, and behavioral science disciplines are offered (10 to 40 hours per year, 0.1-1.0 units per course). If additional work is needed to reach competency in previously completed courses, supplemental instruction offering additional customized and intensive instruction in targeted didactic, laboratory, and clinical competencies will be offered by the faculty.

## Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

# Biomedical Sciences (BMS)

## Department Chairperson

**David M. Ojcius**

*Professor of Biomedical Sciences*

## Faculty

### A

**Homayon (Homer) Asadi**

*Associate Professor of Biomedical Sciences*

B.A., San Jose State University, Biology, 1984

D.D.S., University of the Pacific, 1988

Other, San Jose City College, 1982

### B

**Alan Budenz**

*Professor of Biomedical Sciences*

Oregon State University, 1972

University of California, Los Angeles, 1977

University of California, San Francisco, 1982

University of Redlands, 1970

University of the Pacific, 2000

**Dorothy T. Burk**

*Professor of Biomedical Sciences*

BA, University of New Hampshire, Zoology, 1972

MA, University of the Pacific, Educational Counseling Psychology, 1994

PhD, University of Michigan, Anatomy, 1976

University of Virginia, Craniofacial Development, Postdoctoral Fellowship, 1979

### C

**Takahiro Chino**

*Associate Professor of Biomedical Sciences*

DDS, Japanese Ministry of Public Health, Dentistry, 1991

DDS, Matsumoto Dental University, Dentistry, 1991

Indiana University School of Dentistry, Oral Surgery, Medicine Pathology, 1995

Matsumoto Dental University, Japan, Oral Maxillofacial Surgery, 1993

MSD, Indiana University School of Dentistry, Dental Diagnostic Sciences, 1999

Other, Indiana University School of Dentistry, Oral Diagnosis, 1996

PhD, University of Washington, Oral Biology, 2008

University of Medicine Dentistry of New Jersey, Postdoctoral Fellow, Periodontics, 2010

### D

**Nejat A. Duzgunes**

*Professor of Biomedical Sciences*

BS, Middle East Technical University, Ankara, Turkey, Physics, 1972

Diploma, Noble and Grenough School, Deham, Mass., 1968

Other, University of California, San Francisco, Membrane Biophysics, 1981

PhD, State University of New York at Buffalo, Biophysical Sciences, 1978

### H

**Xiaoyuan Han**

*Assistant Professor of Biomedical Sciences*

BS, China Pharmaceutical University, Nanjing, China, Basic Pharmacy, 2006

MS, China Pharmaceutical University, Nanjing, China, Pharmacology, 2009

Other, Stanford University, Stanford, CA, Postdoctoral Scholar, Anesthesia, 2019

Other, Stanford University, Stanford, CA, Postdoctoral Scholar, Urology, 2017

PhD, University of the Pacific, Stockton, CA, Pharmaceutical and Chemical Sciences (Molecular-Cellular Pharmacology and Toxicology), 2014

**Stefan Highsmith**

*Professor of Biomedical Sciences*

BA, University of California, Berkeley, Chemistry, 1966

Brandeis University, Physical Chemistry, 1974

PhD, Massachusetts Institute of Technology, Organic Chemistry, 1972

University of California, San Francisco, Biophysical Chemistry, 1978

### K

**Roman Karp**

*Assistant Professor of Biomedical Sciences*

Certificate, ASCP, Pathologists's Assistance, 2009

MD, Ivano-Frankivsk State Medical Institute, Ukraine, General Medicine, 1988

### M

**Ana Carolina Morandini**

*Assistant Professor of Biomedical Sciences*

DDS, University of São Paulo, Bauru School of Dentistry, 2006

Federal University of Rio de Janeiro, Postdoctoral Fellow -

Immunobiology, 2014

Medical University of South Carolina, Research Visiting Scholar - Oral Health Sciences, 2016

MS, University of São Paulo, Bauru School of Dentistry, Periodontology, 2009

PhD, University of São Paulo, Bauru School of Dentistry, Oral Biology, 2012

University of São Paulo, Bauru School of Dentistry, Postdoctoral Fellow - Oral Biology, 2015

**Alexander J. Murphy**

*Professor of Biomedical Sciences*

BS, Brooklyn College, Chemistry, 1962

PhD, Yale University, Biochemistry, 1967

University of California, San Francisco, Biophysical Chemistry, 1970

## O

### **David M. Ojcius**

*Professor of Biomedical Sciences*

BA, University of California, Berkeley, Biophysics, 1979

PhD, University of California, Berkeley, Biophysics, 1986

## R

### **Erivan Schnaider Ramos Junior**

*Assistant Professor of Biomedical Sciences*

DDS, UEPG (State University of Ponta Grossa), Dentistry, 2000

MS, USP, Stomatology/Oral Biology, 2009

PhD, UFRJ (Federal University of Rio de Janeiro, Institute of Biophysics

Carlos Chagas Filho), Biological Science (Biophysics), 2014

### **Gary D. Richards**

*Professor of Biomedical Sciences*

B.A., University of California at Berkeley, Anthropology, 1980

M.A., University of California at Berkeley, Anthropology, 1984

PhD, University of California at Berkeley, Anthropology, 2007

## T

### **Norina Tang**

*Assistant Professor of Biomedical Sciences*

BA, University of Chicago, Chicago, IL, 1998

BS, University of the Pacific, Stockton, CA, 2007

City College of San Francisco, San Francisco, CA.

PhD, University of WA, Seattle, 1986

### **Der Thor**

*Assistant Professor of Biomedical Sciences*

BS, University of the Pacific, Biological Sciences, 2000

MS, University of the Pacific, Biological Sciences, 2003

PhD, University of the Pacific, Physiology and Pharmacology, 2009

### **Scott P. Turner**

*Assistant Professor of Biomedical Sciences*

A.B., Columbia University, Anthropology, 1994

M.A., University of California, Berkeley, Anthropology, 1997

University of California, Berkeley

## X

### **Nan Xiao**

*Assistant Professor of Biomedical Sciences*

BS, Peking University, Stomatology, 2003

MS, Peking University - School of Stomatology, Orthodontics, 2005

PhD, Hong Kong University of Science and Technology, Biochemistry, 2009

## Z

### **Benjamin D. Zeitlin**

*Associate Professor of Biomedical Sciences*

BSc, University of Strathclyde, Immunology and Pharmacology, 1992

PhD, Sheffield Hallam University, Immunopharmacology, 2000

## Adjunct Faculty

## C

### **Luis A. Cordova**

*Adjunct Assistant Professor of Biomedical Sciences*

BS, University of Chile, School of Dentistry, Dental Science, 1996

DDS, University of Chile, School of Dentistry, Dentistry, 1996

DDS, University of Chile, School of Dentistry, Oral and Maxillofacial Surgery Internship, 2002

PhD, University of Nantes, School of Medicine/INSERM, Orthopaedic Bone Research, 2014

## D

### **Dorothy Dechant**

*Adjunct Associate Professor of Biomedical Sciences*

BA, University of California, Berkeley, Anthropology, 1973

MA, University of California, Berkeley, Anthropology, 1978

PhD, University of California, Berkeley, Anthropology, 1982

## H

### **Robert Francis Halliwell**

*Adjunct Professor of Biomedical Sciences*

BSc, University of Stirling, Biology and Psychology, 1983

Fellowship, University of California, Irvine, Post-Doctoral Research Fellow, Neuroscience, 1999

MSc, University of London, Neurological Science, 1986

PhD, University of Dundee, Neuropharmacology, 1992

### **Jill Helms**

*Adjunct Professor of Biomedical Sciences*

Baylor College of Medicine, Postdoctoral fellowship, Molecular Control of Patterning and Morphogenesis in Vertebrate Limb Tissue, 1995

BS, University of Minnesota, Minneapolis, MN, Biological Sciences major, 1978

Certificate, U. Connecticut, Health Sciences Center, Certificate Periodontics, 1993

DDS, University of Minnesota, Minneapolis, MN, Doctor of Dental Surgery, 1986

Other, Roosevelt High School, Minneapolis, MN, 1975

PhD, Connecticut, Health Sciences Center, Biomedical, Sciences/Neuroscience, 1993

Salk Institute, Laboratory of David Cheresch, PhD, Sabbatical, 2003

## K

### **Krystyna Konopka**

*Adjunct Professor of Biomedical Sciences*

Bieganski Hospital, Lodz Poland, Clinical Pathology, 1965

High School, Lodz, Poland, 1954

Jonscher Hospital, Lodz Poland, Rotating Internship, 1962

MD, School of Medicine, Lodz, Poland, Medicine, 1961

MS, University of Lodz, Biochemistry, 1966

PhD, University of Lodz, Biochemistry, 1969

## M

### **Matthew Milnes**

*Adjunct Instructor of Biomedical Sciences*

BS, California Lutheran University, Biology, 1997

DDS, University of the Pacific School of Dentistry, General Dentistry, 2003

MS, University of the Pacific, Biology, 2000

## Course Descriptions

### Predoctoral Courses

#### **BMS 100. Introduction to BMS. 2 Units.**

This course presents introductory information, foundational knowledge, and faculty expectations of the BMS strand: purpose, policies, and grading in BMS courses; relationship to ICS and IPS strands; assessment of knowledge of prerequisites and remediation; basic statistics; and research methodology.

#### **BMS 120. Genetics. 0.7 Units.**

Introduction to genetics, hereditary medicine, genetics assessment, and genetics and diseases.

#### **BMS 121. Clinical Pharmacology and Pathology. 3 Units.**

This course focuses on the action of therapeutic drugs on dental patients. In addition, the most commonly found pathologic lesions (red and white, ulcerative, etc) will be discussed. This three-quarter course covers the general principles of drug action, including drug absorption, distribution, metabolism, elimination, and pharmacodynamics of important therapeutic drug categories in combination with the most commonly found oral lesions. The dental implications of therapeutic drugs and commonly found oral lesions will be emphasized and discussed using a seminar, case-based format. (IDS Quarters 1, 2 and 3).

#### **BMS 122. A Multidisciplinary Approach to Clinical Diagnosis and Treatment Planning. 1 Unit.**

This course is meant to integrate and apply various disciplines to the diagnosis and treatment planning process. In this interactive class, students will be presented cases with medical-dental, anatomic, pain problems, and psychological issues to discuss. Students in small groups will workup cases and present their diagnostic conclusions and treatment plans to the larger group. The faculty will facilitate and provide feedback on the student conclusions and plans. Students will learn: Commonly encountered medical problems, system disorders, and potential drug interactions in practice and the modifications to be considered in treatment decisions. The anatomy of the oromaxillofacial complex and its relationship to diagnosis and treatment. Diagnosis of orofacial lesions and TMD dysfunction and their effect on treatment. The role of the specialist in the diagnostic process and when to consult or refer patients to specialists in patient care. (IDS Quarter 4).

#### **BMS 123. Anatomy and Histology. 4 Units.**

The student will gain an understanding of functional histology and gross anatomy of the human body as appropriate for professional health care providers. Emphasis will be on the integration of anatomical knowledge at all levels and its correlation with basic clinical medicine relevant to dentistry.

#### **BMS 124. Cells & Biochemistry. 2.5 Units.**

The study of major molecular structures and processes of the human organism. Muscles, neurons, action potentials, extracellular matrix. Additional topics covered are enzymes, pharmacology, pharmacodynamics, pharmacokinetics, anesthesia, and pain.

#### **BMS 130. Applied Physiology. 3 Units.**

Clinical Application of Physiology based on integrated biomedical science, including Physiology, Biochemistry, Anatomy and Histology; with specific focus on urinary system, blood vessels and lymphoid organs, heart, GI tract, liver, pancreas, gall bladder, airways and endocrinology.

#### **BMS 131. Biochemistry & Nutrition. 1 Unit.**

An integrated systems-based biomedical review of metabolism of digestion, carbohydrate metabolism, lipid metabolism, hemoglobin and myoglobin, oxidative metabolism, nucleotide metabolism, vitamins. Introduction to clinically applied nutrition related to support of oral systemic health.

#### **BMS 133. Applied Orofacial Anatomy. 6 Units.**

The student will gain a fundamental understanding of head and neck embryology, gross anatomy, and oral histology as is appropriate for dental healthcare providers. Emphasis will be placed on the integration of anatomical and histological knowledge of the orofacial complex at all levels with basic clinical dentistry and medicine. The establishment of clinical correlations with radiographic interpretation, local anesthesia administration and the overall health will be a strength of this course.

#### **BMS 140. Sensory & Salivary Biology. 1 Unit.**

This course focuses on vision, sleep, central nervous system, hearing, taste and smell, salivary glands, biochemistry of saliva, structure of hydroxyapatite, mineralization, effect of fluoride, and salivary diagnostics.

#### **BMS 220. Pharmacology. 5 Units.**

Introduction to pharmacology. Pharmacodynamics; pharmacokinetics; local anesthesia; analgesics; prescription writing; anxiolytics; cardiovascular pharmacology; drug interactions; antibiotics; autonomic; immunopharmacology; drugs and hematology, pregnancy, aging; asthma and COPD; antihistamines; corticosteroids; calcium regulation; antifungals, antivirals; alternative therapy; gastrointestinal pharmacology; nitrous; anticancer drugs; general anesthetics; thyroid drugs; neuromuscular; anti-Parkinsons, anti-Alzheimers; psychosis; anti-seizures; anti-sporadic; substance abuse; opioid crisis; diabetes.

#### **BMS 232. Immunology & Microbiology. 3 Units.**

Introduction to immunology and microbiology, immunity to infection, oral microbiology and immunology, and dental plaque.

#### **PG 220. Pharmacology and Therapeutics. 6 Units.**

Rationale of drug use in dental practice, and mechanisms of action of drugs used for the medical management of dental patients; pharmacodynamics and drug kinetics; quantitative pharmacology; drug laws and regulations; prescription writing; emergency drugs, autonomic, respiratory, cardiovascular, psychotropic, hormonal, gastrointestinal, antianxiety, antiparkinson, antidiabetic, antineoplastic drugs; neuromuscular blockers, histamine antagonists, inflammatory mediators, sedative- hypnotics, anticonvulsants, general and local anesthetics, analgesics, antibiotics, antifungal and antiviral agents, substance abuse, toxicology, drug interactions, and therapeutic decision making. (60 hours lecture. Quarters 6-8.).

### Graduate Courses

#### **AN 410. Advanced Head and Neck Anatomy I. 1 Unit.**

This course presents head and neck anatomy in depth to provide residents essential foundation for dental procedures. The development of normal and pathological craniofacial shapes, as well as anatomical structures relevant for implant placement, are discussed in detail. (Quarter 1.).

#### **BC 414. Biochemistry and Bioengineering I. 1 Unit.**

Residents learn how to assess biocompatibility and longevity of various materials in contact with body fluid and tissues. This course also covers biofilm formation and removal from oral biomaterials. (Quarter 2.).

#### **BMS 401. Research Philosophy and Design I. 1 Unit.**

In this two-quarter foundational course, students learn about hypothesis-driven research, including hypothesis development and significance testing. (Quarter 1.).

#### **BMS 411. Stem Cell Biology I. 1 Unit.**

In this two-quarter course, residents discuss in detail current research on cell populations, their properties, and possible application routes--the foundation of modern biology-driven endodontic therapy. Treatment possibilities for immature teeth and other applications in regenerative endodontics are presented. (Quarter 2.).

**BMS 412. Topics in Oral Biology I. 1 Unit.**

This course covers the interaction of pulpal and periapical tissues with medicaments such as bisphosphonates or TNF-alpha blocking antibodies, the effects of systemic diseases such as HIV, diabetes or sclerodermia on oral tissues, and other common issues in endodontics. (Quarter 4.).

**BMS 414. Oral Biology Journal Club I. 3 Units.**

This course features discussion of papers on a variety of topics in oral biology. (Quarters 2-4.).

**BMS 440. Thesis Protocol. 1 Unit.**

In this independent-study research course, residents work with mentor(s) to develop research questions, formulate hypotheses, and write a formal research proposal that includes a full literature review, statement of material and methods, execution of the research, and appropriate analysis and interpretation of data. (Quarter 2.).

**BMS 450. Research Project I. 3 Units.**

In this independent-study research course, residents work with research mentors to perform the research project, including data gathering, compilation, and interpretation of the results. The course will culminate in a publishable manuscript. (Quarters 1-4.).

**BMS 512. Topics in Oral Biology II. 1 Unit.**

This course covers the interaction of pulpal and periapical tissues with medicaments such as bisphosphonates or TNF-alpha blocking antibodies, the effects of systemic diseases such as HIV, diabetes or sclerodermia on oral tissues, and other common issues in endodontics. (Quarter 8.).

**BMS 514. Oral Biology Journal Club II. 3 Units.**

Residents read and discuss current literature on a range of oral biology topics. (Quarters 6-8.).

**BMS 550. Research Project II. 3 Units.**

In this independent-study research course, residents work with research mentors to perform the research project, including data gathering, compilation, and interpretation of the results. The course will culminate in a publishable manuscript. (Quarters 5-8.).

**BMS 651. Manuscript Preparation. 3 Units.**

Residents prepare the final version of a publishable manuscript. (Quarter 9.).

**MC 404. Host Response I. 1 Unit.**

This course extends basic immunology to the etiology of pulpal and periapical disease focusing on the host response. The role of inflammatory mediators and the cells that elaborate them is discussed. (Quarter 1.).

**MC 424. Oral Microbiology I. 1 Unit.**

Residents learn about microbial structure, metabolism, genetics, and virulence factors; molecular diagnostics and recombinant DNA technology; pathogenesis, epidemiology, clinical syndromes, laboratory diagnosis, treatment, and prevention of infectious diseases. (Quarter 2.).

**MC 504. Host Response II. 1 Unit.**

This course extends from basic immunology to the etiology of pulpal and periapical disease focusing on the host response. The role of inflammatory mediators and the cells that elaborate them will be discussed. (Quarter 5.).

**PG 420. Advanced Pharmacology I. 1 Unit.**

Local anesthesia and pain management of acute and chronic pain are main components of this lecture series, with specific emphasis on endodontics. Infection control, including biochemistry and side effects, is also presented. (Quarter 1.).

**PG 520. Advanced Pharmacology II. 1 Unit.**

Local anesthesia and pain management of acute and chronic pain are two main components of this lecture series, with specific emphasis on endodontics. Infection control, including biochemistry and side effects, is also presented. (Quarter 5.).

# Clinical Oral Health Care (COH)

## Interim Department Chairperson

**Des Gallagher***Assistant Professor of Clinical Oral Health*

## Faculty

### A

**Mark McGregor Abzug***Assistant Professor of Clinical Oral Health*

BA, University of California Santa Barbara, Geography, 1975

DDS, University of the Pacific School of Dentistry, General Dentistry, 1980

**Zainab Ali-Rubaie***Instructor of Clinical Oral Health*

DDS, University of Baghdad, Dentistry, 1991

**Janet E. Andrews***Assistant Professor of Clinical Oral Health*

BS, University of the Pacific/Marquette University, Dental Hygiene, 1975

DDS, University of the Pacific, Dentistry, 1983

MA, University of the Pacific, Education, 1979

### B

**Rene A. Bagus***Instructor of Clinical Oral Health*

DDS, University of the Pacific, 2001

**Mark T. Booth***Assistant Professor of Clinical Oral Health*

BA, Stanford University, Human Biology, 1995

CERT, University of the Pacific School of Dentistry, Advanced Clinical

Experience, Resident, 2002

CERT, University of the Pacific School of Dentistry, Advanced Education in General Dentistry, 2003

DDS, University of the Pacific School of Dentistry, Dentistry, 2001

### C

**Pedro A. Caturay***Assistant Professor of Clinical Oral Health*

BS, San Francisco State University, Nursing, 1985

DDS, University of the Pacific School of Dentistry, Dentistry, 1991

University of the Pacific School of Dentistry, AEGD, 1992

**Armando Chang***Instructor of Clinical Oral Health*

BA, University of California, Berkeley, Biology, 1979

DDS, Northwestern University, Dentistry, 1983

**Gina S. Chann***Assistant Professor of Clinical Oral Health*

BS, University of California, Davis, 1986

DDS, University of the Pacific School of Dentistry, 1989

**Chih (Shane) Chou***Instructor of Clinical Oral Health*

BS, University of California, Irvine, Biology, 2010

DDS, University of California, Los Angeles School of Dentistry, Dentistry, 2015

**Russell G. Choy**

*Assistant Professor of Clinical Oral Health*  
BA, University of California at Berkeley, Biology, 1984  
DDS, University of the Pacific, 1987

**Carlos A Correa**

*Instructor of Clinical Oral Health*  
City College of San Francisco, 2015  
College of Marin, 1983

## D

**Lori Doran-Garcia**

*Assistant Professor of Clinical Oral Health*  
BS, University of California, Los Angeles, Psychology, 1987  
DDS, University of the Pacific School of Dentistry, General Dentistry, 1991

## E

**Lynn Edwards**

*Assistant Professor of Clinical Oral Health*  
BA, University of the Pacific, Biology, 1978  
DDS, UOP School of Dentistry, Dentistry, 1981

## F

**Richard Farrell**

*Instructor of Clinical Oral Health*  
BS, University of San Francisco, 1967  
DDS, University of Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1974  
San Diego State University, Secondary Education courses, 1970  
University of California, Berkeley, Graduate courses, Department of Zoology, 1968

## G

**Des Gallagher**

*Assistant Professor of Clinical Oral Health*  
DDS, University of Wales, College of Medicine, Dental Surgery, 1994  
MA, UoP Bernerd School of Education/AAL, Dental Education, 2016  
Other, Army, Advance Education in General Dentistry, 1995  
Trinity College Dublin Dental School, Postgraduate diploma  
Clinical Dentistry, 2004

**Michael V. Gamboa**

*Assistant Professor of Clinical Oral Health*  
BA, University of the Pacific, Biology, 1985  
DDS, University of the Pacific, Dentistry, 1988

**Shika Gupta**

*Associate Professor of Clinical Oral Health*  
BDS, Goa Dental College and Hospital, Dentistry, 1997  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2007  
MDS, University of Malaya, Faculty of Dentistry, Restorative Dentistry, 2009

## H

**Farida Hakimi**

*Assistant Professor of Clinical Oral Health*  
BS, Golden Gate University, Health Services Management, 1990  
BS, San Francisco State University, Biology and Health Services, 1993

DMD, Tufts University, 1997

**Glen F Hebert**

*Assistant Professor of Clinical Oral Health*  
BA, California State University, Northridge, Biology, 1985  
California State University, Fresno, 1983  
DDS, University of California, San Francisco, Dentistry, 1990

**Brion Hu**

*Instructor of Clinical Oral Health*  
BSc, University of California, Berkeley, Zoology, 1978  
DDS, University of the Pacific, 1981

**Vivian Huang**

*Assistant Professor of Clinical Oral Health*  
BA, Creighton University, Communication Arts, 2000  
DMD, Tufts University, Dentistry, 2005  
University of California Los Angeles, AEGD Residency, 2006

## I

**Lisa E Itaya**

*Associate Professor of Clinical Oral Health*  
BS, Cal Poly State University, Computer Science, 1987  
CERT, University of the Pacific, AEGD, 2000  
DDS, University of the Pacific, 1998

## J

**Harry S. Jew**

*Assistant Professor of Clinical Oral Health*  
BA, Golden Gate University, 1981  
DDS, Northwestern University, 1982  
MS, University of New Haven, Human Nutrition, 2002

**Leslie Jue**

*Instructor of Clinical Oral Health*  
BS, University of California Davis, Physiology, 1984  
DDS, University of the Pacific Dental School, Dentistry, 1987

## K

**Brian J. Kenyon**

*Associate Professor of Clinical Oral Health*  
BA, Brown University, Human Biology, 1979  
DMD, Tufts University, Dentistry, 1982

**Alexander Kogan**

*Instructor of Clinical Oral Health*  
BA, University of San Francisco, Biology, 1996  
DDS, University of the Pacific School of Dentistry, 1999

## L

**William W. Lee**

*Assistant Professor of Clinical Oral Health*  
BS, University of Pittsburgh, Neuroscience, 1993  
Cert, San Francisco VA Hospital, GPR Dentistry, 1999  
DDS, State University of New York, Buffalo, Dentistry, 1998  
Fellowship, San Francisco VA Hospital, Prosthodontics, 2000

**Stephen C. Lindblom**

*Assistant Professor of Clinical Oral Health*  
BS, University of California, San Diego, Molecular Biology, 1996  
DDS, University of the Pacific, 2001

**Xiaosong (Steven) Liu**



*Assistant Professor of Clinical Oral Health*

BS, University of Minnesota College of Biological Sciences, Biology, 2006  
DDS, University of Minnesota School of Dentistry, Dentistry, 2008  
MD, Tianjin Medical University, Medicine, 1996

**Elliot Low**

*Instructor of Clinical Oral Health*

DDS, University of the Pacific School of Dentistry, Dentistry, 1977  
UCSF Postgraduate Temporomandibular Joint Disorder Program, 1989  
UCSF, Implantology Study Group - (One Year Program), 1984  
University of California, Berkeley, 1974

## M

**Richard Marill**

*Instructor of Clinical Oral Health*

BS, California State College, Los Angeles, Zoology, Entomology, 1963  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry,  
General Dentistry, 1968

**Roberto S. Masangkay**

*Assistant Professor of Clinical Oral Health*

BA, Letran College, Manilla Philippines, 1961  
DDS, University of the Pacific, 1989  
Dental Intern, Veterans Memorial Hospital, Manilla Philippines, Oral  
Surgery, 1968  
DMD, University of the East, School of Dentistry, 1965

**Anita Biju Mathews**

*Instructor of Clinical Oral Health*

BDS, Manipal Academy of Higher Education, College of Dental Surgery,  
Dental Surgery, 1997  
DMD, Harvard School of Dental Medicine, Dental Medicine, 2012  
MSD, A.B. Shetty Memorial Institute of Dental Sciences, Department of  
Prosthodontics, Prosthodontics, 1999

**Jason Matsushino**

*Instructor of Clinical Oral Health*

BA, UC Santa Barbara, Japanese, 2003  
DDS, UOP Dugoni Dental School, General Dentistry, 2008  
Other, Weill Cornell, PGY-1 6PR, 2009

**Olga Matveyeva**

*Instructor of Clinical Oral Health*

Cert., Health Department of Odessa Regional State Boars of Certification,  
Dental Technician, 2013  
Cert., Odessa Training School for Health Workers, Certificate of  
Completion, 1986  
Other, Odessa Medical College #1, Dental Technician, 1977

**Sandra McLaren**

*Assistant Professor of Clinical Oral Health*

BA, U.C. Berkeley, Biology, 1978  
DDS, University of Pacific School of Dentistry, Dentistry, 1981  
MA, Pepperdine University, Clinical Psychology, 2013

**Xiomara Aldina Mejia**

*Instructor of Clinical Oral Health*

DDS, Universidad Evangélica de El Salvador, Dentistry, 1996

## N

**Farbod Bob Nadjibi**

*Instructor of Clinical Oral Health*

AEGD, University of the Pacific, School of Dentistry, 2000  
BS, University of California, Davis, Genetics, 1996

DDS, University of the Pacific, 1999

**Daniel Nam**

*Instructor of Clinical Oral Health*

BA, University of California, Los Angeles, Music-Piano, 1996  
DDS, University of the Pacific School of Dentistry, General Dentistry, 2002

**Namrata Nayyar**

*Assistant Professor of Clinical Oral Health*

BDS, Manipal College of Dental Sciences, Manipal Academy of Higher  
Education (MAHE), Dentistry, 2005  
Certificate, State University of New York, Advanced Prosthodontics, 2011  
MS, State University of New York at Buffalo, School of Dental Medicine,  
Oral Biology, 2008

**Josephine Ng**

*Instructor of Clinical Oral Health*

BS, University of the Pacific, Biological Sciences, 2006  
DDS, University of the Pacific School of Dentistry, Dentistry, 2010

## O

**Edward Orson**

*Instructor of Clinical Oral Health*

DDS, University of the Pacific Arthur A. Dugoni School of Dentistry,  
Dentistry, 1994  
Progressive Ortho, Orthodontics, 2008

## P

**Susan Park**

*Instructor of Clinical Oral Health*

DDS, University of the Pacific, 1982  
VA Palo Alto, General Practice Residency, 1983

**Tim J. Patel**

*Instructor of Clinical Oral Health*

BA, UC Berkeley, Psychology, 1991  
DMD, Boston University Dental School, Dentistry, 1996

**Erika Peterson**

*Assistant Professor of Clinical Oral Health*

BS, San Jose State University, Molecular Biology, 1976  
DDS, University of the Pacific School of Dentistry, Dentistry, 1979  
Other, USC School of Dental Hygiene, 1967

## S

**Shirin Salehinia**

*Instructor of Clinical Oral Health*

B.A., California State University, Northridge, 1990  
D.D.S., University of California at San Francisco, 1995  
Tufts University, Dental Sleep Medicine, 2013

**Edward L. Shaw**

*Assistant Professor of Clinical Oral Health*

BS, University of British Columbia, 1977  
Cert, University of California, San Francisco, GPR, 1983  
Cert, University of California, San Francisco, Prosthodontics, 1986  
DDS, University of the Pacific, 1982

**Raymond Joseph Sheridan**

*Assistant Professor of Clinical Oral Health*

BS, LeMoyne College, Biology, 1966  
DDS, New York University College of Dentistry, Doctor of Dental Surgery,  
1970

**Jennifer Silvers**

*Instructor of Clinical Oral Health*

BS, Univ. of Mary Mardin - Baylor, Cellular Biology, 2008

DDS, University of the Pacific, Dentistry, 2012

**James Stephens**

*Instructor of Clinical Oral Health*

BA, Stanford University, Human Biology, 1979

Butte Community College, 1976

DDS, University of Pacific School of Dentistry, 1982

**T****David T. Thornton**

*Assistant Professor of Clinical Oral Health*

BS, University of the California, Berkeley, Nutrition/Dietetics, 1980

DDS, University of the Pacific School of Dentistry, 1986

Other, V. A. Hospital Martinez, CA GPR, 1988

**Cynthia Tong**

*Instructor of Clinical Oral Health*

BS, University of California, Berkeley, Physiology, 1989

DDS, University of California, San Francisco, School of Dentistry, Dentistry,

1994

**Mary Michael Turoff**

*Assistant Professor of Clinical Oral Health*

BS, UC Davis, Biological Sciences, 1974

DDS, UOP School of Dentistry, General Dentistry, 1977

**V****Michael Viale**

*Assistant Professor of Clinical Oral Health*

BS, UC Berkeley, Genetics, 1975

DDS, University of the Pacific Arthur A. Dugoni School of Dentistry,

Dentistry, 1979

**W****Walter Weber**

*Assistant Professor of Clinical Oral Health*

DDS, UOP, Dentistry, 1976

De Paul Hospital, General Practice, 1977

MA, Golden Gate University, Masters in business admin, Finance, 1988

University of Santa Clara, Economics, 1973

**George J. Wolff**

*Assistant Professor of Clinical Oral Health*

DDS, University of Washington, 1966

University of California(Berkeley), 1961

**Debra A. Woo**

*Assistant Professor of Clinical Oral Health*

BS, University of California, Davis, Human Biology, 1979

DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry,

Dentistry, 1986

MA, San Jose State University, Health Sciences, 1983

**Adjunct Faculty****B****William C. Barthold**

*Adjunct Instructor of Clinical Oral Health*

BA, Indiana University, 1971

DDS, University of Michigan, 1975

**F****Lawrence E. Fong**

*Adjunct Instructor of Clinical Oral Health*

BA, University of California, Berkeley, Zoology, 1967

DDS, Northwestern University Dental School, Dentist, 1971

**G****Jamshid James Ghafourpour**

*Adjunct Assistant Professor of Clinical Oral Health*

BS, University of California, Los Angeles, CA, Chemistry and Geophysics,  
1981

D.D.S., University of the Pacific, Arthur A. Dugoni School of Dentistry, 1986

MBA, University of the Pacific, Arthur A. Dugoni School of Dentistry,

Business Administration, 2000

MS, University of California, Los Angeles, CA, Geophysics, 1983

**Keith Grote**

*Adjunct Instructor of Clinical Oral Health*

DMD, Boston University, General Dentistry, 1996

Other, Boston University, CAGS in AEGD, 1997

University of California Davis, History, 1989

**L****Michael B. Lambert**

*Adjunct Assistant Professor of Clinical Oral Health*

BA, University of California, 1971

DMD, Washington University School of Dentistry, Dentistry, 1984

VA Hospital, Palo Alto, Certificate, 1985

**Timothy Daren Lee**

*Adjunct Instructor of Clinical Oral Health*

DDS, University of the Pacific, School of Dentistry, Dentistry: Invisalign

Certified, Oral Sedation Certified, 2007

University of California, Irvine, 2004

**O****Susan Oh**

*Adjunct Instructor of Clinical Oral Health*

BS, University of Washington, Biochemistry, 2003

DDS, Columbia University College of Dental Medicine, Dentistry, 2008

**P****Sanjay Patel**

*Adjunct of Clinical Oral Health*

BDS, Gujarat University, 1982

Dept. of Prosthodontics, Government Dental College and Hospital,

Gujarat, India, Clinical Residency, 1983

MSD, Gujarat University, Operative Dentistry Endodontics, 1985

**R****Kiran Rapal**

*Adjunct Instructor of Clinical Oral Health*

BSc, San Jose State University, Biology and Chemistry, 1996

DDS, University of the Pacific, 2001

MA, University of Santa Monica, Spiritual Psychology, 2016

**S****Shiva Salehi**

*Adjunct Instructor of Clinical Oral Health*

BS, King's College London, Computer Science, 2004  
DDS, UoP, Dentistry, 2014

## W

### Yvonne Wong

*Adjunct Instructor of Clinical Oral Health*

BSc, San Francisco State University, Microbiology, 1997

DDS, University of Southern California, 2001

## Course Descriptions

### Predocotoral Courses

#### COH 116. Preparation for Clinical Care. 1 Unit.

This course prepares first-year students to understand and apply clinic policy, protocols, and the standard of care necessary for success in a competency-based clinical education. Practitioner wellness, mental and physical, is also to be addressed. Together with additional courses in the second and third years, this series prepares the student to independently provide patient care.

#### COH 216. Patient Management and Productivity I. 3-4 Units.

Development of competency in patient management skills to maximize patient satisfaction. Students learn to use proper verbal and non-verbal communication and listening skills; to respond appropriately to patient and non-patient concerns; to be organized and prepared for tasks and contingencies related to patient care; to complete tasks and treatment in a timely manner; to provide patients with relevant information about prevention of dental disease and treatment options; and to obtain proper informed consent for procedures. (Quarters 5-8.).

#### COH 218. Clinical Management and Judgment I. 3-4 Units.

Students will learn comprehensive diagnostic care for assigned patients in the disciplines of endodontics, fixed prosthodontics, operative dentistry, oral diagnosis and treatment planning, periodontics, removable prosthodontics and orthodontics. For each assigned patient, the student will examine and evaluate the patient, identify and list dental problems, complete an appropriate treatment plan and schedule, provide all dentistry required in the disciplines, and recognize need for and refer the patient to specialty areas when such treatment is required. (Quarters 5-8.).

#### COH 316. Patient Management and Productivity II. 4 Units.

Development of competency in patient management skills to maximize patient satisfaction. Students learn to use proper verbal and non-verbal communication and listening skills; to respond appropriately to patient and non-patient concerns; to be organized and prepared for tasks and contingencies related to patient care; to complete tasks and treatment in a timely manner; to provide patients with relevant information about prevention of dental disease and treatment options; and to obtain proper informed consent for procedures. (Quarters 9-10.).

#### COH 317. Patient Management and Productivity III. 4 Units.

Development of competency in patient management skills to maximize patient satisfaction. Students learn to use proper verbal and non-verbal communication and listening skills; to respond appropriately to patient and non-patient concerns; to be organized and prepared for tasks and contingencies related to patient care; to complete tasks and treatment in a timely manner; to provide patients with relevant information about prevention of dental disease and treatment options; and to obtain proper informed consent for procedures. (Quarters 11-12.).

#### COH 318. Clinical Management and Judgment II. 4 Units.

Students will learn comprehensive diagnostic care for assigned patients in the disciplines of endodontics, fixed prosthodontics, operative dentistry, oral diagnosis and treatment planning, periodontics, removable prosthodontics and orthodontics. For each assigned patient, the student will examine and evaluate the patient, identify and list dental problems, complete an appropriate treatment plan and schedule, provide all dentistry required in the disciplines, and recognize need for and refer the patient to specialty areas when such treatment is required. (Quarters 9-10).

#### COH 319. Clinical Management and Judgment III. 4 Units.

Students will learn comprehensive diagnostic care for assigned patients in the disciplines of endodontics, fixed prosthodontics, operative dentistry, oral diagnosis and treatment planning, periodontics, removable prosthodontics and orthodontics. For each assigned patient, the student will examine and evaluate the patient, identify and list dental problems, complete an appropriate treatment plan and schedule, provide all dentistry required in the disciplines, and recognize need for and refer the patient to specialty areas when such treatment is required. (Approximately 700 hours in clinical disciplines listed. Quarters 11-12.).

#### COH 368. Emergency Clinic. 3 Units.

The diagnosis and treatment of patients who require immediate attention. (70 hours clinical rotation. Quarters 9-12.).

## Diagnostic Sciences (DS)

### Department Chairperson

Paul Subar

*Associate Professor of Diagnostic Sciences*

## Faculty

### B

#### Brenda Barrientos

*Instructor of Diagnostic Sciences*

BS Dental Hygiene, University of the Pacific, 2015

#### Carsen Bentley

*Assistant Professor of Diagnostic Sciences*

BA Chemistry/Pol Sci, University of New Mexico, 2008

Certificate, Lutheran Medical Center Brooklyn New York, Advanced

Education in General Dentistry, 2012

DDS, University of the Pacific, 2011

MPH, Medical College of Wisconsin, 2016

#### Kim Lucas Benton

*Instructor of Diagnostic Sciences*

DDS, Meharry Medical College School of Dentistry, 1988

#### John Berk

*Assistant Professor of Diagnostic Sciences*

DDS, University of California, San Francisco School of Dentistry, Dentistry, 1970

#### Michelle Brady

*Assistant Professor of Diagnostic Sciences*

BDS, Cardiff Dental School, Dentistry, 1994

Other, Dublin Dental School, Clinic Dentistry, 2004

Other, Dublin Dental School, Conscious Sedation, 2011

#### Alan Budenz

*Professor of Diagnostic Sciences*

BS Dental Science, University of California Los Angeles, 1977

DDS, University of California San Francisco, 1982  
MBA, University of the Pacific, 2000

## C

### Elisa M. Chavez

*Professor of Diagnostic Sciences*

BS, Saint Mary's College of California, Biology, Cum Laude, 1990  
Certificate, University of Michigan, Geriatric Dentistry Fellowship, 2000  
DDS, BS, University of California, San Francisco, School of Dentistry, Dentistry, 1994

### Irene Chen

*Instructor of Diagnostic Sciences*

BA, Barnard College/Columbia University, Chemistry, 1995  
DMD, Boston University, 2004  
University of the Pacific, School of Dentistry, Advanced Education in General Dentistry, 2006

### Janice Chou

*Instructor of Diagnostic Sciences*

BS, University of San Diego, Biochemistry/Cell Biology, 2006  
DDS, University of the Pacific, School of Dentistry, 2010  
University of the Pacific, School of Dentistry, Advanced Education in General Dentistry, 2011

### Darren P Cox

*Professor of Diagnostic Sciences*

BS Zoology, Louisiana State University, Zoology, 1985  
DDS, LSU School of Dentistry, 1990  
Emory University Hospital, Atlanta, GA, Oral, Head and Neck Pathology Residency, 2000  
Loyola University Hospital, Chicago, IL, General Practice Residency, 1991  
MBA, University of Pittsburgh, 2004

### Eve Cuny

*Associate Professor of Diagnostic Sciences*

BA, St. Mary's College, Management, 1998  
MS, St. Mary's College, Health Service Administration, 2001

## F

### Leticia Ferreira

*Associate Professor of Diagnostic Sciences*

Certificate, Baylor College of Dentistry, Texas AM University, Oral and Maxillofacial Pathology, 2011  
DDS, Universidade Federal da Bahia College of Dentistry, 2006  
MS, Baylor College of Dentistry, Texas AM University, Biomedical Sciences, 2011

### Maria Flores

*Instructor of Diagnostic Sciences*

BS, Mount St. Mary's College, 1982  
DDS, University of California, San Francisco, 1987

### Barbara J. Fong-Hori

*Assistant Professor of Diagnostic Sciences*

BA, University of California, Berkeley, Physiology, 1974  
DDS, UCSF School of Dentistry, 1978

### Nick Farzin Forooghi

*Instructor of Diagnostic Sciences*

BA, San Jose State University, Industrial Arts, 1987  
Other, Lincoln Law School of San Jose, Law, 2006

## G

### Paul Glassman

*Professor of Diagnostic Sciences*

BA, University of California, Los Angeles, Zoology, 1968  
CERT, University of California, San Francisco, General Practice Residency, 1975  
DDS, University of California, San Francisco, Dentistry, 1972  
MA, University of the Pacific, Educational and Counseling Psychology, 1994  
MBA, University of the Pacific, 1999

## H

### Kenneth Han

*Instructor of Diagnostic Sciences*

BS, University of San Francisco, School of Arts and Sciences, Biology, Chemistry Minor, 2008  
DDS, New York University, College of Dentistry, Dentistry, 2016  
PGY-1, University of the Pacific Arthur A. Dugoni School of Dentistry, Advanced Education in General Dentistry, 2017  
PGY-2, University of the Pacific Arthur A. Dugoni School of Dentistry, Advanced Education in General Dentistry, 2018

### Thi Hoang

*Assistant Professor of Diagnostic Sciences*

BS, University of the Pacific, Stockton, Biological Sciences, 2004  
DDS, University of the Pacific, School of Dentistry, 2007  
University of the Pacific, Union City, Advanced Education in General Dentistry, 2008

### Terry Edwin Hoover

*Associate Professor of Diagnostic Sciences*

BA, Stanford University, Biology, 1968  
Certificate, Rotating Hospital Dental Internship, VA Hospital, Portland, OR, 1973  
DDS, University of California, San Francisco, 1972

## I

### Parvati H. Iyer

*Assistant Professor of Diagnostic Sciences*

BDS, Madras Dental College (India), Dentistry, 1989  
DDS, University of Michigan, Dentistry, 1998  
Other, AEGD, UCSF School of Dentistry, Hospital Dentistry, 1999

## J

### Justin H Jellin

*Instructor of Diagnostic Sciences*

BA, University of the Pacific, College of the Pacific, Sports Sciences, 2010  
DPT, University of the Pacific, Thomas J. Long School Pharmacy Health Sciences, 2012

### Jessica Jorquera

*Instructor of Diagnostic Sciences*

BS, Loyola Marymount University, Natural Science, 2011  
BS, University of Southern California, Herman Ostrow School of Dentistry, Dental Hygiene, 2014

### Dani Joudi

*Instructor of Diagnostic Sciences*

BS, University of California, Davis, Biological Sciences, 2013  
BS, University of the Pacific, Dental Hygiene, 2018

## L

### Natasha Lee

*Assistant Professor of Diagnostic Sciences*

BA, University of California, Santa Cruz, Anthropology, 1994  
DDS, University of the Pacific Dugoni School of Dentistry, 2000

### Lucinda J. Lyon

*Professor of Diagnostic Sciences*

BS, University of Southern California, Dental Hygiene, 1978  
DDS, University of the Pacific, 1986  
EdD, University of the Pacific, 2009

## M

### Leslie McGarvey

*Instructor of Diagnostic Sciences*

BS, University of Scranton, Biology, 1998  
DDS, University of Michigan, School of Dentistry, Dentistry, 2014

### Stephen A. Mikulic

*Assistant Professor of Diagnostic Sciences*

BA, University of Arizona, Psychology, 1971  
DDS, University of Southern California, 1975

### Christine E Miller

*Associate Professor of Diagnostic Sciences*

BS, University of Oregon Health Sciences Center, Dental Hygiene, 1975  
MA, University of the Pacific, Education, 1994  
MHS, University of San Francisco, 1987

### Irina Mirkina

*Instructor of Diagnostic Sciences*

DDS, Medical University USSR, 1986  
DDS, University of the Pacific, 1995

### Helen Patricia Mockler

*Instructor of Diagnostic Sciences*

BS, University of California, Santa Barbara, Mathematical Sciences, 2006  
DDS, University of the Pacific School of Dentistry, 2010

## N

### Nader A. Nadershahi

*Professor of Diagnostic Sciences*

CERT, Palo Alto Veterans Administration Hospital, Hospital Dentistry, 1995  
DDS, University of the Pacific, 1994  
EdD, University of the Pacific, Education and Leadership, 2011  
MBA, University of the Pacific, 1999

## P

### Bruce Peltier

*Professor of Diagnostic Sciences*

BS, US Military Academy, West Point, Engineering, 1970  
M.Ed., Wayne State University, West Berlin, Psychology, 1974  
MBA, Eberhardt School of Business, University of the Pacific, 1999  
PhD, Wayne State University, Detroit, Counseling, 1979

## S

### Eric S. Salmon

*Assistant Professor of Diagnostic Sciences*

BS, Harvey Mudd College, Biology, 1993  
DDS, University of the Pacific, 1999

MS, University of the Pacific, Data Analytics, 2017

### William C. Sands

*Assistant Professor of Diagnostic Sciences*

BA, University of the Pacific, Stockton, CA, Chemistry, 1967  
DDS, University of the Pacific, School of Dentistry, San Francisco, CA, 1971

### Monica Sasaki

*Instructor of Diagnostic Sciences*

BS, California State University, Fresno, Physical Therapy, 1994  
MA, California State University, Fresno, Physical Therapy, 1996

### Timothy Sheu

*Instructor of Diagnostic Sciences*

BS, University of British Columbia, Biochemistry, 1986  
DDS, University of the Pacific, School of Dentistry, 1990

### George Shiao

*Instructor of Diagnostic Sciences*

BA, Washington University St. Louis, Biology/History, 1995  
DMD, Temple University School of Dentistry, 1999

### Dennis Song

*Associate Professor of Diagnostic Sciences*

Board Certified, American Board of Oral and Maxillofacial Surgery, Oral and Maxillofacial Surgery, 2014  
Board Certified, National Dental Board of Anesthesiology, 2013  
Certificate, University of California San Francisco, General Surgery, 2005  
Certificate, University of California San Francisco, Oral and Maxillofacial Surgery, 2007  
DDS, BS, University of California San Francisco, Dental Surgery and Dental Sciences, 2000  
Fellowship, International Congress of Oral Implantologists, 2010  
Fellowship, University of California San Francisco, Resident Teaching Fellowship, 2007  
MD, University of California Davis, School of Medicine, 2004  
University of San Francisco, Biology, 1996

### Paul Subar

*Associate Professor of Diagnostic Sciences*

BA, University of California, Santa Cruz, Biochemistry/ Molecular Biology, 1989  
DDS, University of California, Los Angeles School of Dentistry, 1993  
EdD, University of the Pacific Benerd School of Education, Educational Leadership and Administration, 2009  
Residency, UCLA Center for Health Sciences, Department of Hospital Dentistry (General Practice), 1994  
Residency, Veterans Administration Medical Center, Hospital Dental Service, 1995

## W

### Allen Wong

*Professor of Diagnostic Sciences*

BA, University of the Pacific, Biology, 1983  
Certificate, Branemark Nobel Biocare, Restorative Implant, 2000  
Certificate, University of the Pacific, School of Dentistry, Advanced Education General Dentistry, 2001  
Certificate, University of the Pacific, School of Dentistry, Advanced Clinical Dentistry, 1987  
DDS, University of the Pacific, School of Dentistry, 1986  
EdD, University of the Pacific, Gladys Benerd School of Education, Professional Education and Leadership, 2010

### Lynne M. Wong

*Assistant Professor of Diagnostic Sciences*

BS, San Francisco State University, Biochemistry/Asian American Studies, 1998

DDS, University of the Pacific, School of Dentistry, 2002

Residency, University of the Pacific, Advanced Education in General Dentistry, 2004

**Russell G. Woodson**

*Assistant Professor of Diagnostic Sciences*

BS, Arizona State University, Chemistry, 1976

DDS, University of the Pacific, 1979

MA, University of the Pacific, Educational Psychology-Counseling, 1994

## Y

**Andrew Young**

*Assistant Professor of Diagnostic Sciences*

BA, University of California, Berkeley, Molecular Biology/Cell Biology, 2001

Certificate, Department of Veterans Affairs (Northern California Health Care System), General Practice Dentistry, 2006

Certificate, University of California, San Francisco ( Pain Management Center), Post Graduate Pain Management, 2008

Certificate, University of Medicine and Dentistry, New Jersey, Orofacial Pain Fellowship, 2008

DDS, University of California, San Francisco, 2005

MSD, University of Medicine and Dentistry, New Jersey, Orofacial Pain Masters, 2009

## Z

**Meixun Sinky Zheng**

*Associate Professor of Diagnostic Sciences*

BA, East China Normal University, English Education, 2004

MA, East China Normal University, Educational Administration, 2007

PhD, North Carolina State University, Curriculum and Instruction, 2012

**Keivan Zoufan**

*Assistant Professor of Diagnostic Sciences*

Certificate, University of Connecticut, Endodontics, 2010

Certificate, University of Southern California, Advanced Education in General Dentistry, 2005

DDS, Tehran Azad University, 1999

DDS, University of Southern California, 2004

MDS, University of Connecticut, Endodontics, 2010

## Adjunct Faculty

### A

**Brian Adams**

*Adjunct Instructor of Diagnostic Sciences*

DDS, University of the Pacific, 2002

MBA Management Systems, California Polytechnic State University San Luis Obispo, 1998

**Kimberly Adams**

*Adjunct Instructor of Diagnostic Sciences*

BA Speech/Physchology, University of San Diego, 2007

BS Dental Hygiene, Foothill College, 2012

**Edward Agyekum**

*Adjunct Instructor of Diagnostic Sciences*

BA Zoology/Physiology, Rutgers University, 1981

DMD, Boston University Henry M. Goldman School of Dental Medicine, 1990

Residency, University of California San Francisco, Advanced Education in General Dentistry, 1991

**Karina Alcalá-Barbosa**

*Adjunct Instructor of Diagnostic Sciences*

BA Dental Surgeon, University of Guadalajara, 2001

DDS, University of the Pacific, 2017

**Nelofer Ansari**

*Adjunct Instructor of Diagnostic Sciences*

BDS, University of Bombay Government Dental College and Hospital, 1977

**Nancy Haley Appelblatt**

*Adjunct Assistant Professor of Diagnostic Sciences*

BS, University of Michigan, Human Biology, 1972

MD, University of Michigan Medical School, Medicine, 1977

**Amal Asiri**

*Adjunct Instructor of Diagnostic Sciences*

BDS, King Abdulaziz University, 2011

Internship, King Abdulaziz University, 2012

**Sahar Aurangzeb**

*Adjunct Instructor of Diagnostic Sciences*

BS Dental Surgery, De'Montmorency College of Dentistry, 2000

DDS, University of the Pacific, 2013

## B

**Franklin G. Ballard**

*Adjunct Assistant Professor of Diagnostic Sciences*

BA, Northwest Nazarene College, 1965

DDS, Loma Linda University, 1969

**Sepideh Banava**

*Adjunct Instructor of Diagnostic Sciences*

Certificate, University of San Francisco, Dental Public Health, 2019

DDS, Tehran University of Medical Sciences, Dentistry, 1993

MPH, University of San Francisco, Public Health, 2017

MSc, Tehran University of Medical Sciences, Restorative Dentistry and Dental Materials, 1997

**Daniel J. Bender**

*Adjunct Assistant Professor of Diagnostic Sciences*

BA German, Humboldt State University, 1982

EdD Learning Inst, University of San Francisco, 2005

George-August Universitat, German Language Literature, 1985

MA Foreign Lang Lit, University of North Dakota, 1986

**Stephen Beveridge**

*Adjunct Instructor of Diagnostic Sciences*

BA Biology/Econ and Bus, Westmont College, 1982

DDS, Northwestern University Dental School, 1988

**Andrea S. Braun**

*Adjunct Assistant Professor of Diagnostic Sciences*

BS Biology, Emory University, 1978

Certificate, ADDX, Periodontal Medicine, 2007

DDS, New York University College of Dentistry, 1982

Fellowship, World Clinical Laser Institute, 2007

Residency, University of California San Francisco, Dental Sleep Medicine, 2016

**Christian Brennan**

*Adjunct Instructor of Diagnostic Sciences*

BA, San Francisco State University, Communications, 2007

MS, CAL East Bay, Educational Leadership, 2018

Other, Foothill College, Dental Hygiene, 2014

**Jeff J. Brucia**

*Adjunct Assistant Professor of Diagnostic Sciences*  
BA Molecular Biology, UC Santa Cruz, 1985  
DDS, University of the Pacific, 1988

**C**

**Annaliese Carlsmith**

*Adjunct Instructor of Diagnostic Sciences*  
BS Dental Hygiene, University of California San Francisco, 2000  
DDS, University of the Pacific, 2009

**Steven Cavagnolo**

*Adjunct Instructor of Diagnostic Sciences*  
BA Environmental Health, San Jose State College, 1967  
DDS, University of California San Francisco, 1973  
Residency, St. Luke's Hospital - Malawi, Central Africa, 1974

**Crystal Chang**

*Adjunct Instructor of Diagnostic Sciences*  
BA, Harvard University, Molecular and Cellular Biology, 2010  
DDS, UCSF School of Dentistry, Dentistry, 2015  
Veterans Affairs Palo Alto, 2016

**Kara Chang**

*Adjunct Instructor of Diagnostic Sciences*  
BA, University of Texas at Austin, Human Ecology, 2006  
Baylor College of Dentistry, Pediatric Dentistry - Externship, 2009  
BSc, University of Texas at Austin, Human Development Family Science, 2006  
DDS, Baylor College of Dentistry, Dentistry, 2010  
Michael E. DeBakey VA Medical Center, General Practice Residency, 2011  
Our Children's House at Baylor, Pediatric Dentistry - Externship, 2009  
University of Texas Dental Branch at Houston, Pediatric Dentistry - Externship, 2010

**Joyce Y. Chen**

*Adjunct Instructor of Diagnostic Sciences*  
BA, University of California, Berkeley, Molecular Cell Biology, 1995  
DDS, University of California, San Francisco School of Dentistry, Dentistry, 2001

**Allison Chin**

*Adjunct Assistant Professor of Diagnostic Sciences*  
BS, UCLA, Biology, 2007  
DDS, University of The Pacific, Dentistry, 2011

**William Choi**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of California, Irvine, Biology, 2003  
Diplomat, International Congress of Oral Implantologists, Implantology, 2014  
DMD, Temple University School of Dentistry, Magna Cum Laude in Dentistry, 2009  
Fellowship, International Congress of Oral Implantologists, Implantology, 2011  
University of California, San Francisco, Hospital Dentistry, 2010

**Jean Creasey**

*Adjunct Instructor of Diagnostic Sciences*  
DDS, University of California, San Francisco, Doctorate of Dental Surgery, 2001

**Arthur W. Curley**

*Adjunct Assistant Professor of Diagnostic Sciences*  
BS, UC Berkeley, Business Admin, 1970  
JD, UC Hasting College of Law, Law, 1974

**D**

**Wayne Del Carlo**

*Adjunct Instructor of Diagnostic Sciences*  
BSD, University of San Francisco, Pre Dental, 1964  
DDS, University of the Pacific San Francisco, Dental, 1968

**Osleydis Diaz**

*Adjunct Instructor of Diagnostic Sciences*  
BA, IPVCE/Cuba, Sciences/Literature, 1995  
DDS, UCSF School of Dentistry, Dentistry, 2008  
DS, Advanced Institute of Medical Sciences of Santiago de Cuba, Doctor of Stomatology, 2000  
Faculty of Medicine, Granma, Cuba, Management and Health Care, 2001  
Kaplan Institute and Truman College, English as a Second Language (ESL), 2003

**Eunice Dizon**

*Adjunct Instructor of Diagnostic Sciences*  
DDS, New York University College of Dentistry, General Dentistry, 2006  
University of the Pacific Arthur A. Dugoni School of Dentistry, General Dentistry - AEGD, 2007

**Jennifer Domagalski**

*Adjunct Instructor of Diagnostic Sciences*  
BA, Dartmouth College, Anthropology, 2006  
DDS, Arizona School of Dentistry, Dentistry, 2010  
MPH, A.T. Still University School of Health Management, Public Health, 2010

**Arthur A. Dugoni**

*Adjunct Professor of Diagnostic Sciences*  
BS, Gonzaga University, 1944  
Bureau of Medicine and Surgery Internship, Dental, 1949  
DDS, College of Physicians Surgeons (UOP), Dental, 1948  
MSD, University of Washington, Orthodontics Certificate, 1963  
University Missouri, School of Dentistry, Dental, 1946  
University of San Francisco, 1943

**E**

**Christine Eng**

*Adjunct Instructor of Diagnostic Sciences*  
Certificate, University of the Pacific School of Dentistry, AEGD, 1991  
DDS, Faculte Dentaire Paris V Montrouge, Dental Surgery, 1985

**Joe Errante**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of Arizona, Nutritional Biochemistry, 1977  
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 1980

**F**

**Simiade Fabiyi**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of Florida Gainesville, Food Science, Human Nutrition and Dietetics, 2003  
DDS, University of California San Francisco, General Dentistry, 2015

**Harold F. Fisk**

*Adjunct Instructor of Diagnostic Sciences*  
BS, Marquette University, Physical Therapy, 1978

Pacific University, Clinical Doctorate Program  
PT, Marquette University, 1978

### **Roger Fung**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of Memphis, Microbiology, 1977  
DDS, University of The Pacific School of Dentistry, Dentistry, 1987

## **G**

### **Vanisha Gandhi**

*Adjunct Instructor of Diagnostic Sciences*  
BA, Stanford University, Human Biology, 2010  
DDS, University of the Pacific Dugoni School of Dentistry, Dentistry, 2014

### **Dyani Gaudilliere**

*Adjunct Assistant Professor of Diagnostic Sciences*  
BA, Stanford University, Human Biology, 2005  
DMD, Harvard School of Dental Medicine, 2009  
Other, University of California Berkeley, Public Health, 2012

### **Koroush Langroudi Ghafourpour**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of California, Davis, Physiology, 1994  
College of San Mateo, 1991  
DDS, University of the Pacific School of Dentistry, Dentistry, 1997  
Highland Trauma Center, Intern in Oral and Maxillofacial Surgery, 2003  
The Ohio State Medical Center Teaching Fellow in Oral and Maxillofacial Surgery, Maxillofacial trauma, Dental pathology, Anesthesia, Grafting Implantology, 2005

### **Vishavjeet Shah Girm**

*Adjunct Instructor of Diagnostic Sciences*  
BA, University of California, Berkeley, Integrative Biology, 2011  
Certificate, University of California, San Francisco, Pediatric Dentistry, 2018  
DMD, Tufts University School of Dental Medicine, Dentistry, 2015  
MS, University of California, San Francisco, Oral and Craniofacial Sciences, 2018

### **Lindsey Green**

*Adjunct Instructor of Diagnostic Sciences*  
BA, Oakland University, Psychology, 2003  
JD, DePaul College of Law, Law, 2007

### **Sandra Guereca**

*Adjunct Instructor of Diagnostic Sciences*  
DDS, Juarez University of Durango State Dental School, 1999

## **H**

### **Maureen Harrington**

*Adjunct Instructor of Diagnostic Sciences*  
BA, St. Mary's College of California, Integral Studies, 1992  
MPH, California State University, Long Beach, Community Health Education, 1996

### **Mariam Hashoush**

*Adjunct Instructor of Diagnostic Sciences*  
BBS, Cal State East Bay, Biology, 2000  
DDS, UCSF, Dentistry, 2006

### **Eddie K Hayashida**

*Adjunct Associate Professor of Diagnostic Sciences*  
AB, University of California, Berkeley, Physiology, 1971  
DDS, University of California, Los Angeles, 1976

MBA, University of the Pacific, 1999

### **Amruta Hendre**

*Adjunct Instructor of Diagnostic Sciences*  
BDS, University of Pune India, Dentistry, 1997  
DDS, California State, Dentistry, 2008

### **Kelly Hicklin**

*Adjunct Instructor of Diagnostic Sciences*  
BS, UCLA, Microbiology, Immunology and Molecular Genetics, 2006  
DDS, University of the Pacific School of Dentistry, Dentistry, 2009  
VA Greater Los Angeles Healthcare System, General Practice Residency, 2011

### **Andy Hoover**

*Adjunct Assistant Professor of Diagnostic Sciences*  
Archbishop Mitty High School, High School, 2000  
BA, University of Colorado at Boulder, Environmental, Population, and Organic Biology, 2005  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor of Dental Sciences, 2013

### **Kimberley Hubenette**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of Southern California, Los Angeles, CA, Biology, 1989  
DDS, University of Southern California, Los Angeles, CA, Doctor of Dental Surgery, 1993  
MA, The Pankey Institute, Continuum Level I, II, II-E, III, IV, 2007

## **I**

### **David Masao Ichimura**

*Adjunct Instructor of Diagnostic Sciences*  
BS, California State University Long Beach, Zoology, 1987  
DDS, USC School of Dentistry, General Dentistry, 1992

## **J**

### **Peter Linsey Jacobsen**

*Adjunct Professor of Diagnostic Sciences*  
BA, Florida State University, Biology w. Minor in Chemistry, 1967  
DDS, University of California, San Francisco, Dentistry, 1977  
Fellowship, University of California, Berkeley, Postdoctoral Fellowship in Toxicology, 1973  
PhD, University of California, San Francisco, Comparative Pharmacology and Toxicology, 1972  
University of California, San Francisco Dental School, Oral Medicine Clerkship (6 months), 1976

### **Maximillian Jensen**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of New Mexico, Nutrition/ Dietetics, 2016  
DDS, University California, San Francisco, Dentistry, 2015

### **Tripti Joshi**

*Adjunct Instructor of Diagnostic Sciences*  
BA, Haverford College, Biology, 2007  
Temple University, 2011

### **Bonnie Lynn Jue**

*Adjunct Assistant Professor of Diagnostic Sciences*  
DDS, University of the Pacific, dentistry, 1993  
University of the Pacific, pre-dental, 1990

## **K**

### **Dennis M Kalebjian**



*Adjunct Assistant Professor of Diagnostic Sciences*  
California State University, Fresno, 1974  
DDS, University of the Pacific, 1978  
University of California, Los Angeles, 1975  
Valley Medical Center, GPR, 1979

**John Kim**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of Puget Sound, Natural Biology, 2000  
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, General Dentistry, 2008

**L**

**Hoang N. Le**

*Adjunct Instructor of Diagnostic Sciences*  
BS, Baylor University, Chemistry, 1980  
Certificate, Jerry L. Pettis VA Hospital, Hospital Dentistry, 1986  
DDS, University of Texas, Dental Branch in Houston, Dentistry, 1984  
MA, University of Pacific, Dental Education, 2013

**Bonnie Lederman**

*Adjunct Instructor of Diagnostic Sciences*  
BSc, Baltimore College of Dental Surgery Dental School, Dental Hygiene, 1981  
DDS, Baltimore College of Dental Surgery Dental School, Dentistry, 1992  
University of California, San Francisco, Geriatric Dental Fellow, 2013

**Jennifer Lehnhardt**

*Adjunct Instructor of Diagnostic Sciences*  
BS, UC Riverside, Business Admin, 2008  
DDS, Loma Linda University, Dentistry, 2013

**Tiffany C. Leung**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of California, Davis, Biological Sciences, 1994  
DDS, University of the Pacific School of Dentistry, General Dentistry, 1999

**Lawrence W. Life**

*Adjunct Instructor of Diagnostic Sciences*  
BA, University of Denver, Biology, Magna Cum Laude, 1978  
DMD, Tufts University School of Dental Medicine, Dentistry Cum Laude, 1981

**Anthony Likes**

*Adjunct Instructor of Diagnostic Sciences*  
Certificate, Medical University of South Carolina, Advanced Education in General Dentistry, 1996  
DMD, Medical University of South Carolina, Dental Medicine, 1995

**Albert S. Lin**

*Adjunct Assistant Professor of Diagnostic Sciences*  
BS, University of Portland, Life Science, 1976  
DDS, University of Pacific, Dentistry, 1994

**Mai Ly**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of California, Davis, Biology, 2002  
DDS, UCSF School of Dentistry, Dentistry, 2007

**M**

**Monica MacVane-Pearson**

*Adjunct Instructor of Diagnostic Sciences*  
BS, Mount Allison University, Biology, 2001  
DMD, McGill University, 2005

Universidad de Zaragoza, Rotary Club International exchange student, 1997  
Universite de Moncton, One-month long summer French immersion camp, 1995  
University of the Pacific, Arthur A. Dugoni School of Dentistry, AEGD, 2006

**Andrew Malan**

*Adjunct Instructor of Diagnostic Sciences*  
Boise State University, Health Science Studies, 2005  
DMD, University of Pittsburg, Dental Medicine, 2009

**Linda B. Markle**

*Adjunct Instructor of Diagnostic Sciences*  
BA, Asbury University, Biology, 1979

**Howard May**

*Adjunct Instructor of Diagnostic Sciences*  
DDS, University of the Pacific School of Dentistry, Dentistry, 1976  
University of California Berkeley, Social Science, 1971

**Anthony Mock**

*Adjunct Instructor of Diagnostic Sciences*  
AB, U.C. Berkeley, Bacteriology, 1975  
DDS, Case Western Reserve University Dental School, Dentistry, 1980  
Highland General Hospital, GPR, 1981

**Audrey Mojica**

*Adjunct Assistant Professor of Diagnostic Sciences*  
BA, California Polytechnic State University, Nutritional Science, 2012  
DDS, Loma Linda University of Dentistry, General Dentistry, 2008

**Alicia Montell**

*Adjunct Instructor of Diagnostic Sciences*  
BS, Stanford University, Biological Sciences, 2000  
DDS, University of California, San Francisco, Dentistry, 2005

**Jasmin Moschref**

*Adjunct Instructor of Diagnostic Sciences*  
BA, University of California, Berkeley, Integrative Biology, 2004  
DDS, Indiana University School of Dentistry, Dentistry, 2008

**N**

**David Neal**

*Adjunct Instructor of Diagnostic Sciences*  
A.T. Still University, Workforce Education and Development, 2006  
DMD, A.T. Still University, Dentistry, 2010

**Chris Nelson**

*Adjunct Instructor of Diagnostic Sciences*  
BS, University of California, Davis, Biological Sciences (Neurobiology, Psychology, Behavior), 2006  
DDS, University of the Pacific, General Dentistry, 2009  
Shasta State High School, 2002

**Elizabeth Newell**

*Adjunct Instructor of Diagnostic Sciences*  
BA, University of Rochester, Rochester, NY, Bachelor of Arts in Philosophy and Classics, 1998  
Other, Foothill College, Los Altos Hills, CA, Associate of Science in Dental Hygiene, 2013  
Other, Stanford University, Stanford, CA, Master of Arts in Philosophy, 2000

**Nancy Nguyen**

*Adjunct Instructor of Diagnostic Sciences*  
BA, University of Colorado, Biology, 1997

DDS, Howard University, Dentistry, 2003  
N/A, Cal State University of Long Beach, Biology, 1991  
N/A, El Camino College, Biology, 1995

**David Bruce Nielsen**

*Adjunct Associate Professor of Diagnostic Sciences*

American Dental Association, 1980  
BA, Los Angeles State College, 1962  
DDS, University of the Pacific, 1967  
MA, University of the Pacific, 1994

## O

**Noha H. Oushy**

*Adjunct Instructor of Diagnostic Sciences*

DDS, Ain Shams University, Dental Medicine and Surgery, 2005  
MS, New Mexico State University, Public Health, 2010

## P

**Jacob Pai**

*Adjunct Instructor of Diagnostic Sciences*

BS, Pacific Union College, Physical Science, 1986  
DDS, UCSF, Dentistry, 1994  
Loma Linda University, Health Education: Community Health, 1990  
UCSF, Dental Public Health, 2003

**Aditya Pandya**

*Adjunct Instructor of Diagnostic Sciences*

BSc, Arizona State University, Biology, 2009  
DMD, A.T. Still University, Dental Public Health, 2014

**Kam Pareek**

*Adjunct Assistant Professor of Diagnostic Sciences*

BDS, SMS Medical College and Hospital, Geeral Dentistry, 1995  
MPH, AT Still University, Public Health Dentistry, 2019  
MS, University of Southern California, Orofacial Pain and Oral Medicine, 2020

**Sridevi Ponnala**

*Adjunct Instructor of Diagnostic Sciences*

DDS, M.R. Ambedkar Dental College, Dental Surgery, 1997  
DDS, University of California San Francisco, Dentistry, 2004

## R

**Emily Renk**

*Adjunct Instructor of Diagnostic Sciences*

BA, University of California, Los Angeles, Classical Civilizations, 2005  
DDS, Ostrow School of Dentistry, USC, Dentistry, 2011  
University of California, Los Angeles, General Practice Residency, Hospital Dentistry, 2012

**Gary K Roberts**

*Adjunct Assistant Professor of Diagnostic Sciences*

BA, University of the Pacific, Liberal Studies Biochemistry, 1984  
Certificate, United States Navy, Oral Surgery, 1992  
DDS, University of the Pacific San Francisco, Dentistry, 1988  
Other, United States Navy, Hospital Dentistry, 1989

**Boyd Edwin Robinson**

*Adjunct Associate Professor of Diagnostic Sciences*

BA, California State University, Chico, BA in Biology 1971  
Graduate Studies 1971-1973, 1973  
DDS, University of the Pacific, School of Dentistry, Doctor of Dental Surgery, 1976  
MD, Naval Dental School, Bethesda, MD, 1984

Other, George Washington University, Masters Degree, Higher Ed and Human Development, 1991  
Other, Naval Dental School, National Naval Dental Center, Comprehensive Dentistry Residency, 1984

**Rowena Romero**

*Adjunct Instructor of Diagnostic Sciences*

DDS, University of the Pacific, Dentistry, 2015

**Torrey Rothstein**

*Adjunct Instructor of Diagnostic Sciences*

BS, University of California, San Diego, Animal Physiology and Neuroscience, 2002  
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dental Surgery, 2005

**Biana Roykh**

*Adjunct Instructor of Diagnostic Sciences*

BS, University of California Los Angeles, Physiological Sciences, 2001  
DDS, University of California San Francisco, General Dentistry, 2006  
MPH, University of California Berkeley, Public Health, 2016

## S

**Rami Saah**

*Adjunct Instructor of Diagnostic Sciences*

BS, University of California, Irvine, Biological Sciences, 1996  
DDS, University of the Pacific School of Dentistry, Dentistry, 2000

**Faezeh Sadeghi**

*Adjunct Instructor of Diagnostic Sciences*

BA, University of California San Francisco, Biology, 1999  
BS, Isfahan University, Iran, Zoology, 1992  
College of San Mateo, Biology, 1997  
DDS, University of California San Francisco, Dentistry, 2005

**Mahdi Salek**

*Adjunct Instructor of Diagnostic Sciences*

BS, UCLA, Biological Sciences, 2005  
DDS, University of Illinois at Chicago, General Dentistry, 2011

**Ronald J Sani**

*Adjunct Associate Professor of Diagnostic Sciences*

BS, Santa Clara University, Biology, 1972  
DDS, University of the Pacific, 1975  
Valley Medical Center, 1976

**Jack Saroyan**

*Adjunct Assistant Professor of Diagnostic Sciences*

BA, University of California Berkeley, General Curriculum, 1958  
DDS, University of the Pacific, Dental School, Dentist, 1962

**Brian Sheppard**

*Adjunct Instructor of Diagnostic Sciences*

BS, San Jose State University, Mechanical Engineering, 2004  
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 2010  
University of the Pacific, Arthur A. Dugoni School of Dentistry, Advanced Education in General Dentistry, 2011

**Cristiane Silva**

*Adjunct Instructor of Diagnostic Sciences*

DDS, Universidad de la Salle Bajio, Leon, Guanajuato, Mexico, Doctor of Dental Science, 2014  
Universidade de Ribeirao Preto, Ribeirao Preto, Sao Paulo, Brazil, Cirurgia Dentista- Liscensed Dentist in Brazil, 1998

**Ann Marie Silvestri**

*Adjunct Assistant Professor of Diagnostic Sciences*  
 BS, University of San Francisco, General Biology, 1972  
 Certificate, University Hospital School, The University of Iowa, Dental  
 Course for patients with disabilities, 1979  
 DDS, University of the Pacific, Arthur A. Dugoni, School of Dentistry,  
 General Dentistry, 1975  
 MPA, Notre Dame de Namur University, Belmont, CA, Health Services  
 Administration, 1999  
 Other, Notre Dame des Victories High School, College Preparatory, 1968

**Mark J. Singer**

*Adjunct Instructor of Diagnostic Sciences*  
 BA, University of Michigan, 1966  
 MD, College of Physicians and Surgeons of Columbia University,  
 Medicine, 1970  
 Northwestern University McGraw Medical Center, Fellowship: Head and  
 Neck Surgery, 1976  
 Northwestern University McGraw Medical Center, Residency:  
 Otolaryngology, 1976  
 Northwestern University McGraw Medical Center, Residency: Pathology,  
 1972  
 Northwestern University McGraw Medical Center, Residency: Surgery,  
 1973  
 Rush-Presbyterian St. Luke's Medical Center, Internship-Surgery, 1971

**Norma Solarz**

*Adjunct Instructor of Diagnostic Sciences*  
 BA, University of California Berkeley, Botany, 1976  
 DDS, University of California San Francisco, Dentistry, 1980  
 University of California Berkeley, MPH Epidemiology, 1990

**Sara Soleimani**

*Adjunct Instructor of Diagnostic Sciences*  
 BA, University of Washington, Washington DC, Near Eastern Languages  
 Civilizations, 2003  
 DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor  
 of Dental Surgery, 2006

**Catherine Suh**

*Adjunct Instructor of Diagnostic Sciences*  
 BA, Wellesley College, Psychology, 2004  
 DMD, Tufts University School of Dental Medicine, Dentistry, 2010

**Stanley R. Surabian**

*Adjunct Associate Professor of Diagnostic Sciences*  
 California State University, Fresno, 1965  
 DDS, University of Southern California, 1969  
 JD, San Joaquin College of Law, 1992

**T****Alice Tai**

*Adjunct Instructor of Diagnostic Sciences*  
 BS, University of California Los Angeles, Sciences, 1986  
 Certificate, University of Washington School of Dentistry, Periodontics,  
 1992  
 DDS, University of California San Francisco, General Dentistry, 1990

**Ariane Terlet**

*Adjunct Instructor of Diagnostic Sciences*  
 BA, UC Berkeley, 1980  
 DDS, University of the Pacific, 1986

**Garrett Tien**

*Adjunct Instructor of Diagnostic Sciences*

BA, UC Berkeley, Biology, 2002  
 DDS, University of Pacific, School of Dentistry, Dentistry, 2010

**U****Lauren Umetani**

*Adjunct Instructor of Diagnostic Sciences*  
 BA, Cogswell College, Computer Video Imaging / Web Design, 2003

**V****Willam Albert vanDyk**

*Adjunct Assistant Professor of Diagnostic Sciences*  
 BA, University of California, Davis, Sociology, 1969  
 DDS, University of the Pacific School of Dentistry, General Dentistry, 1973  
 Madigan Army Medical Center, Tacoma, Washington, Dental Internship,  
 1974

**Robert Timothy Verceles**

*Adjunct Instructor of Diagnostic Sciences*  
 BS, UC Davis, Genetics, 1989  
 DDS, UCSF, Dentistry, 1993

**W****Colin Wong**

*Adjunct Professor of Diagnostic Sciences*  
 BA, University of California, Berkeley, Microbiology, 1961  
 DDS, University of the Pacific Arthur A. Dugoni School of Dentistry,  
 General Dentistry, 1965

**Y****Gilbert Yee**

*Adjunct Instructor of Diagnostic Sciences*  
 BA, UC Berkeley, Psychology, 1983  
 DDS, University of the Pacific- Dugoni School of Dentistry, Dentistry, 1988  
 San Francisco State University, Post Baccalaureate Study, 1985

**Chung-Kwan Yen**

*Adjunct Assistant Professor of Diagnostic Sciences*  
 BS, Stanford University, Chemical Engineering, 1978  
 Certificate, University of California, San Francisco, Oral and Maxillo-Facial  
 Surgery, 1987  
 DDS, Emory University, Dentistry, 1983  
 MS, University of Michigan, Chemical Engineering, 1979

**Z****Alaleh Zadmehr**

*Adjunct Instructor of Diagnostic Sciences*  
 BS, University of California Irvine, Biology, 2004  
 DDS, University of California, SF, Dentistry, 2008

**Course Descriptions****Predocloral Courses****DS 101. Integrated Clinical Sciences I: Orientation to the Clinical Practice of General Dentistry. 10 Units.**

This course is the didactic component of a multi-disciplinary, year-long course designed to prepare students to treat patients and engage in community oral health events and programs. Together DS 101 and DS 106 focus on diagnostic sciences, behavioral sciences, periodontology, and prevention and community health care services and systems. Case-based simulations are supported by clinical exercises and practical exams. In addition whole patient health, medical implications of dental disease, professionalism, and odontogenesis are discussed.

**DS 102. Integrated Clinical Sciences I Concepts: Orientation to the Clinical Practice of General Dentistry. 9 Units.**

This is a didactic course designed to prepare students to treat patients in Pacific's Main Dental Clinic and engage in community oral health events and programs. The course focuses on Diagnostic Sciences, Behavior Sciences, Periodontology, Prevention and Community Health Care Services and Systems. Case-based simulations are supported by clinical exercises and practical exams. (IDS Quarters 1-2).

**DS 103. Integrated Case Based Discussions. 4 Units.**

Multi-disciplinary faculty lead small group case-based discussions incorporating biomedical science content, clinical knowledge, and behavioral concepts.

**DS 106. Integrated Clinical Sciences I: Orientation to Clinical Practice Lab. 4.5 Units.**

This course is a clinically-focused, multi-disciplinary course designed to prepare students to treat patients in Pacific's Main Dental Clinic and in community-based settings. This lab course is comprised of supervised case-based simulations, workshops, clinical exercises and visits to community sites. The focus is on the development of a comprehensive medical and dental database risk assessment; disease prevention strategies; diagnostic tests; oral pathology; electronic chart management; ergonomics; infection control; basic periodontal instrumentation; professional deportment; cultural sensitivity and communication with patients in the clinic and in community settings. Activities include a module on community health/social determinants of health and small group, case based discussions.

**DS 107. Intergrated Clinical Sciences I Lab: Orientation to Clinical Practice in General Dentistry. 4 Units.**

The Orientation to the Clinical Practice of General Dentistry Practicum is a clinically-focused, multi-disciplinary, one-quarter course designed to prepare students to treat patients in Pacific's Main Dental Clinic and in community-based settings. This lab/clinic course is comprised of supervised case-based simulations, workshops, clinical exercises and community sites. The focus is on the development of a comprehensive medical and dental database risk assessment; disease prevention strategies; diagnostic tests; oral pathology; electronic chart management; ergonomics; infection control; basic periodontal instrumentation; professional deportment; cultural sensitivity and communication with patients in the clinic and in community settings. (IDS Quarter 1).

**DS 160. Dental Radiology. 1 or 2 Unit.**

The application of radiation physics and biology, the assessment of image quality, the practice of radiation safety and prescribing protocols, and the study of radiographic techniques, anatomic landmarks, and the principles of radiographic interpretations for both two- and three-dimensional imaging. (Quarters 2-3).

**DS 166. Dental Radiographic Technique. 1-2 Units.**

Instruction and practice using the extension cone paralleling radiographic technique including patient management, radiation safety, use of equipment, film placement, exposure, identification and mounting, and correction of technical error. (20 hours lab/clinic. Quarter 4.).

**DS 200. Practice Management I. 1 Unit.**

Introduces students to the study of fundamental concepts and terminology of the art and science of practice management as a basis for leadership and decisions in dental practice. Students will learn to track and evaluate key practice indicators, read financial reports, understand the importance of leading a team for efficient delivery of patient care, track and control overhead expenses, and set goals. (10 hours. Quarter 5.).

**DS 201. Integrated Clinical Sciences II: Application of Foundational Knowledge. 5 Units.**

This second year Integrated Clinical Sciences course, "Applications of Foundational Knowledge", provides students with enriched multidisciplinary diagnostic and technical content that builds on the fundamentals and active learning approach of first year studies. This course is directed from the Department of Diagnostic Sciences however, development and teaching are done in collaboration with many departments and disciplines. Topics include biomedical sciences, information literacy, evidence based dentistry, dental materials, professionalism, community oral health, clinical techniques and issues, and information specific to endodontics, oral surgery, sleep medicine and orofacial pain. Emphasis is placed on critical thinking and application of evidence to the clinical diagnosis, treatment and management of patients with diverse needs, in order to improve the novice practitioner's ability to adjust ideal principles and protocols to the successful management of non-ideal, real world cases. (Quarters 5-6.).

**DS 202. Integrated Clinical Sciences II: Application of Foundational Knowledge. 4 Units.**

This course builds on foundational clinical and biomedical material presented in first-year studies and in DS 201 through a multidisciplinary approach to basic science principles and clinical application. Topics will be presented in a lecture format as well as smaller seminar sessions, many of which are focused on case scenarios. There is also independent study time to prepare for these activities. Emphasis is placed on the integration of dental concepts, evidence, and critical thinking to deliver accurate diagnoses, prepare customized treatment plans and consider the need for inter-professional collaboration in the delivery of oral health care. Topics include advanced endodontic content, orofacial pain, ethics, patient management, community oral health and various clinical topics. (Quarter 7.).

**DS 203. Integrated Clinical Sciences II: Application of Foundational Knowledge. 4-5 Units.**

This course continues the multidisciplinary and active learning approach used in DS 201 and DS 202. Topics include advanced content in oral surgery and sedation, endodontics, regenerative dentistry, orofacial pain, ethics, and the management of complex cases. Students are also introduced to resume and professional electronic portfolio development as they ready themselves for professional careers. (Quarter 8).

**DS 217. Clinical Oral Diagnosis and Treatment Planning. 3-4 Units.**

The diagnosis and communication to the patient of the need for dental treatment; recognizing medical, oral, physical, emotional, and economic factors that modify or complicate dental treatment; and development of comprehensive dental treatment plans suitable for patients' needs in accordance with identified modifying and complicating factors. (Quarters 5-8).

**DS 230. General Pathology. 5 Units.**

This course aims to present the basic mechanisms of pathology and the diseases affecting the different organ systems of the body. It is also intended to provide an understanding of the more common diseases and where appropriate how they might impact patient management.

**DS 266. Clinical Dental Radiology. 2 Units.**

Study of preparation, evaluation, and interpretation of diagnostically acceptable intraoral radiographic and panoramic surveys for comprehensive care and emergency clinic patients. (Quarters 5-8.).

**DS 300. Practice Management II. 3 Units.**

Challenges students to apply knowledge of practice management concepts through utilization of a computerized business simulation. Includes preparation for career decisions in dentistry with a focus on practice transitions, associateships, dental benefit plan participation, marketing, debt management, retirement planning, patient billing and collections, scheduling for efficiency, basic accounting, tax planning, and development of business plans. (30 hours lecture. Quarter 11.).

**DS 301. Jurisprudence. 1 Unit.**

Prepares students for an understanding of the foundations of the law, its primary groupings and modes, and its application to the dentist and dental practice environment. Particular attention will be given to California dental law and risk management. (10 hours lecture. Quarter 12.).

**DS 302. Clinical Care of Complex Needs. 4 Units.**

Study of basic disease processes, epidemiology, demographics, treatment planning, principles of providing dental treatment for individuals with a wide variety of conditions including medical and developmental disabilities, problems associated with aging, psychological problems including dental phobia, hospital organization, joining a hospital staff, providing dental treatment and consultation in a hospital, and principles of general anesthesia. (20 hours lecture, 20 hours self-study and seminar. Quarters 9-11.).

**DS 303. Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars. 6 Units.**

Multidisciplinary case based presentations of integrated material related to the practice of clinical dentistry. This three-quarter course builds on the foundational and clinical knowledge base of each student to evaluate and plan more complex treatment needs. (60 hours lecture/seminar. (Quarters 9-11).

**DS 307. Extramural Patient Care. 4 Units.**

Through a combination of didactic and clinical experiences, this course seeks to prepare the student for practice in community clinical settings where diverse patient populations may be encountered. Upon completion of the course, students will have developed the skills to: perform dental procedures in community-based practice settings, work with diverse patient populations, describe the social context of disease processes, develop social awareness and skills for treating underserved groups, describe dental delivery in a community clinic environment, and develop treatment alternative in clinics with limited resources (90 hours clinical rotations and 4 hours lecture/seminar. Quarters 9-12).

**DS 320. Prep for State Licensure. 0 Units.**

This course, available to students on an as-needed basis, includes a review of requirements and protocol as well as practical exercises in preparation for the Western Regional Examining Board and other licensing examinations.

**DS 399. Enriched Clinical Experience. 16 Units.**

This course provides students with an additional opportunity to enhance or enrich their skills in some or all clinical disciplines subsequent to the scheduled graduation date. These experiences are directed by the student's Group Practice Leader, who also recommends certification for graduation.

**PA 231. Oral Pathology. 3 Units.**

Study of the etiology, pathogenesis, clinical and histopathogenic features, and the treatment and prognosis of oral diseases. Recognition of basic tissue reaction and lesions that occur in the mouth, jaws, and neck; formulation of tentative diagnoses; methods used to secure definitive diagnoses and provide appropriate therapy and management or obtaining consultation for the same. (24 hours lecture, programmed instruction equivalent to 30 hours lecture, and six hours clinical rotation. Quarter 7.).

**PA 232. Differential Diagnosis of Oral and Maxillofacial Lesions. 3 Units.**

Clinical evaluation, development of a differential diagnosis, and management protocols for oral and paraoral soft tissue and jaw lesions, based on knowledge of the appearance, behavior, and treatment of oral diseases. (Quarter 8.).

**Graduate Courses****DS 402. Statistical Methods I. 1 Unit.**

Residents learn the importance of data organization and evaluation, and statistical methods used in research. They apply this knowledge to their own research and enhance skills in the interpretation of quality research data. (Quarter 3.).

**DS 430. Advanced Oral Pathology I. 1 Unit.**

Organized into lectures and clinical-pathologic conferences, this course provides residents a firm foundation in endodontic pathology and clinical entities that may occur in patients but are unrelated to root canal treatment. (Quarter 1.).

**DS 460. Advanced Radiology I. 1 Unit.**

This course covers key elements of endodontics such as proper radiographic technique and three-dimensional data acquisition and interpretation. Residents obtain and read images from small FOV cone beam scans. (Quarter 1.).

**DS 530. Advanced Oral Pathology II. 1 Unit.**

Organized into lectures and clinical-pathologic conferences, this course provides residents a firm foundation in endodontic pathology and clinical entities that may occur in patients but are unrelated to root canal treatment. (Quarter 5.).

## Endodontics (EN)

### Department Chairperson

**Ove Andreas Peters**

*Professor of Endodontics*

### Vice Chair

**Alan H. Gluskin**

*Professor of Endodontics*

## Faculty

### A

**Andy Ashtiani**

*Assistant Professor of Endodontics*

15th Annual Endodontic Biology Review, 2016

18th Annual Loma Linda Anesthesia Symposium, 2016

Certificate, Loma Linda University Medical Center, Certificate in Dental Anesthesiology, 1998

Certificate, New York University, Certificate in Endodontics, 2001

DDS, Northwestern University Dental School, Chicago, IL, 1989

ITI Dental Implant Systems, 2016

Loma Linda University, Dental Anesthesiology, 1998

New York University, Endodontics, 2001

Oral surgery Internship Department of Oral/Maxillofacial surgery, 2016

Scripps Implant Dentistry

course featuring biological, surgical, and prosthetic treatments involving various implant modalities, 1991

Steri-oss Advances Surgical and Prosthetic Techniques, 2016

### B

**Orest Balytsky**

*Assistant Professor of Endodontics*

BS, Lviv Medical Institute, Dr of Stomatology Prenatal/Dentistry, 1981

Certificate, University of Pittsburgh School of Dentistry, Certificate in Endo, 1998  
DMD, University of Pittsburgh School of Dentistry, Dentistry, 1995

#### **Farinaz Bokhour**

*Assistant Professor of Endodontics*  
BS, University of California, Los Angeles, Psychobiology, 2004  
Certificate, New York University College of Dentistry, Endodontics, 2018  
DDS, University of California, Los Angeles, School of Dentistry, Dentistry, 2009

#### **David Clifford Brown**

*Associate Professor of Endodontics*  
BSD, Newcastle University Dental School, 1988  
MSD, Indiana University, Endodontics, 1994  
MSD, Newcastle University Dental School, Operative, 1993

## **D**

#### **Craig Dunlap**

*Assistant Professor of Endodontics*  
BS, UC Davis, Genetics, 1990  
Certificate, University of Illinois, Chicago, Endodontics, 1996  
DDS, UC San Francisco, Dentistry, 1994  
Other, Oregon Health Sciences University, Moderate Parenteral Sedation, 2010

## **E**

#### **Samer Magdi Ebeid**

*Assistant Professor of Endodontics*  
Boston University School of Dental Medicine, Endodontics, 1996  
BS, University of San Francisco, Biological Sciences, 1989  
DDS, University of the Pacific, Dentistry, 1992

## **F**

#### **Jennifer Melissa Fong**

*Assistant Professor of Endodontics*  
BS, UC Davis, Genetics, 2004  
DDS, University of the Pacific, School of Dentistry, Dentistry, 2007  
Other, Tufts Dental School, Endodontics, 2013  
VA Palo Alto, General Practice Residency, 2008

## **G**

#### **Johnah C Galicia**

*Assistant Professor of Endodontics*  
DMD, Manila Central University, Philippines, Dentistry, 1996  
MS, University of North Carolina, Endodontics, 2014  
Other, University of Rennes 1, France, Clinical Dentistry, 2000  
PhD, Niigata University, Japan, Oral Biology, 2006

#### **Alan H. Gluskin**

*Professor of Endodontics*  
BA, University of California, Los Angeles, Anthropology, 1968  
CERT, Temple University, Endodontics, 1976  
DDS, University of the Pacific School of Dentistry, Dentistry, 1972

## **K**

#### **Ravi S. Koka**

*Assistant Professor of Endodontics*  
BDS, London Hospital Medical College, England, 1990  
DDS, Loma Linda University, 1993  
MS, University of Nebraska, 1998

## **L**

#### **Yoon Lee**

*Assistant Professor of Endodontics*  
BS, University of the Pacific (UOP), Bachelor of Science (B.S.) in Biological Sciences, 2011  
DDS, UOP Arthur A. Dugoni School of Dentistry, Doctor of Dental Surgery (D.D.S.), 2014  
Nova Southeastern University College of Dental Medicine, Specialty certificate in Endodontics, 2016

#### **Lawrence M. LeVine**

*Assistant Professor of Endodontics*  
BS, University of Illinois, Urbana, Philosophy, 1958  
DDS, University of Illinois, Chicago, Dentistry, 1962

## **M**

#### **Nick A Morton**

*Assistant Professor of Endodontics*  
BS, University of California San Diego, Biochemistry and Cell Biology, 2004  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor of Dental Surgery, 2008  
MS, University of Florida, Masters of Science in Dental Science, 2010

## **P**

#### **Christine Inge Peters**

*Associate Professor of Endodontics*  
American School in Lahore, Pakistan, 1976  
DMD, Ruprecht-Carls - University, Heidelberg, Baden-Württemberg, Germany, Approbation as Dentist, 1992  
DMD, Ruprecht-Carls - University, Heidelberg, Baden-Württemberg, Germany, Dissertation: Dr. med. Dent, 1992  
Gymnasium Mockmuhl, Mockmuhl, Germany, 1986  
Heilbronn, Germany, Primary School, 1977  
University of Zurich, Switzerland, Postgraduate in Education Endodontology, 2001

#### **Ove Andreas Peters**

*Professor of Endodontics*  
Certificate, UCSF, Endodontics, 2006  
Certificate, University of Zurich Dental School Switzerland, Endodontics, 2001  
DDS, University of Kiel Dental School, Germany, Dentistry, 1990  
MS, UCSF, Oral Biology, 2003  
PhD, University of Kiel, Department of Physiology, Dr med dent., 1992  
PhD, University of Zurich Dental School Switzerland, Oper. Dentistry/Endodontics, 2001

## **Q**

#### **Phuong N. Quang**

*Assistant Professor of Endodontics*  
BA, University of California, Berkeley, Biochemistry and Molecular Biology Minor: Spanish, 2000  
DDS, University of California, San Francisco School of Dentistry, Doctor of Dental Surgery, 2005  
PhD, University of California, San Francisco, School of Dentistry, Oral Craniofacial Sciences, 2010  
University of Texas Health Sciences Center at San Antonio, Endodontics Certificate, 2012

## R

### **Yasaman Ravandoust**

*Assistant Professor of Endodontics*

DDS, Azad University, School of Dentistry, Dentistry, 1999

DDS, UCSF, Dentistry, 2010

MS, Isfahan University, Endodontics, 2001

MS, UCSF, Endodontics, 2013

### **Ali Allen Rezai**

*Assistant Professor of Endodontics*

BA, University of California, Davis, Economics, 1987

DDS, Columbia University School of Dental Oral Surgery, Dentistry, 1999

Manhattan VA Medical Center, 2000

Manhattan VA Medical Center/New York University, Endodontics, 2002

## S

### **Raymond S. Scott**

*Associate Professor of Endodontics*

BA, U.C. Santa Barbara, Biology, 1977

DDS, University of the Pacific, Dentistry, 1980

MS, University of Pittsburgh, Endodontics, 1992

### **Mark Stevenson**

*Instructor of Endodontics*

BA, University of Berkeley, BA, 1983

Certificate, American Board of Endodontics, Specialty Board Certification, 2002

DDS, Georgetown University School of Dentistry, Doctor of Dental Surgery, 1988

University of Southern CA Medical Center, General Practice Residency, 1989

University of Southern CA School of Dentistry, Endo Residency, 1997

## T

### **Kenneth W. Tittle**

*Assistant Professor of Endodontics*

BS, University of California, Santa Barbara, Biopsychology, 1985

DDS, University of the Pacific, Dentistry, 1989

MS, Loma Linda University, Endodontics, 1995

VA Medical Center at Long Beach, CA, 1990

## W

### **Ralan Dai Ming Wong**

*Associate Professor of Endodontics*

College of San Mateo, 1988

DDS, University of the Pacific, Dentistry, 1992

MS, University of Pennsylvania, 1997

Skyline College, 1988

University of Pennsylvania, Endodontics, 1997

University of the Pacific, 1989

University of the Pacific, AEGD, 1994

University of Vienna, Histology, 1996

## Adjunct Faculty

## B

### **Sean F Bardsley**

*Adjunct Assistant Professor of Endodontics*

BA, University of California, Santa Barbara, Biological Sciences, 1995

Certificate, University of Southern California, Endodontics, 2015

Certificate, University of the Pacific School of Dentistry, AEGD, General Dentistry, 2000

DDS, University of the Pacific School of Dentistry, Dentistry, 1999

### **Sean Bardsley**

*Adjunct Assistant Professor of Endodontics*

BA, University of California, Santa Barbara, Biological Sciences, 1995

Certificate, University of Southern California, Endodontics, 2015

Certificate, University of the Pacific School of Dentistry, AEGD, General Dentistry, 2000

DDS, University of the Pacific School of Dentistry, Dentistry, 1999

## D

### **Saman Deljoui**

*Adjunct Instructor of Endodontics*

BS, University of California, Los Angeles, Biology, 2004

Certificate, Rutgers University, Endodontics, 2015

DMD, University of Pennsylvania, Dentistry, 2008

## F

### **Nava Fathi**

*Adjunct Assistant Professor of Endodontics*

American Dental Association Institute For Diversity in Leadership, Chicago, IL, Certificate of Completion, 2000

BS, University of California, Irvine, Biological Science, 1992

Complutense University, Madrid, Spain, Certificate of completion of the UC Education Abro, 1991

DDS, University of the Pacific, Doctorate in Dental Surgery, 1995

EdD, University of the Pacific Gladys L. Benerd School of Education, Doctorate in Education, 2013

Northwestern University Kellogg School of Management - ADA/Kellogg Mini MBA Program, Certificate of Completion, 2001

University of Southern California School of Dentistry, Postgraduate Program in Endodontics, Los Angeles, CA, Certificate of Endodontic Specialty, 1998

University of Southern California, Postgraduate Endodontics, 1998

University of the Pacific Arthur A. Dugoni School of Dentistry, Advanced Ed in General Dentistry, Certificate, 1996

University of the Pacific, Advanced Endodontics, 1996

## H

### **Ken Hovden**

*Adjunct Assistant Professor of Endodontics*

BA, Stanford University, Social Science with a stress in Political Science, 1978

BS, Stanford University, Biology, 1978

DDS, UOP School of Dentistry, 1981

## L

### **Ella T. Lim**

*Adjunct Instructor of Endodontics*

BS, University of California, San Diego, Human Biology, 2006

DDS, New York University, Dentistry, 2011

## S

### **Mohammad Ali Saghiri**

*Adjunct Assistant Professor of Endodontics*

BS, Karaj University, Materials Sciences Engineering, 2002

MS, Azad University, Science and Research Branch, Biomedical Engineering, 2006

PhD, Azad University, Science and Research Brand, Biomedical Engineering (Nano-Dental Material and Devices), 2010

PhD, Tehran University, Medical Laboratories (Maxillofacial Biology), 2011

## T

### Mahmoud Torabinejad

*Adjunct Professor of Endodontics*

BS, University of Tehran Medical School, 1967

Certificate, University of Illinois, Oral Pathology, 1974

DMD, University of Tehran Dental School, Dentistry, 1971

MSD, University of Washington, Endodontics, 1976

PhD, University of London, 1995

## W

### Scott Wilkinson

*Adjunct Assistant Professor of Endodontics*

BA, West Virginia University, Biology, 1988

BA, West Virginia University, English, 1989

Certificate, Temple University, Endodontics Dept., Endodontics, 1999

DMD, Medical University of South Carolina School of Dentistry, Dental

Medicine, 1993

## Course Descriptions

### Predoctoral Courses

#### EN 154. Basic Endodontics. 1 Unit.

Development of the dental pulp, classification and nature of endodontic disease, clinical diagnosis, and fundamentals of root canal therapy and radiographic interpretation. (10 hours lecture. Quarter 3.).

#### EN 159. Preclinical Endodontics. 2-3 Units.

Study of pulp morphology, anatomy, cleaning and shaping of root canals; access openings; use of irrigating solutions; obturating the canal and judging the complete treatment with radiographs. (40 hours laboratory. Quarter 4.).

#### EN 254. Endodontics. 1 Unit.

Review of endodontic retreatment and surgical therapies; dental trauma and sequelae; complex problem solving; endodontic emergencies; endodontic mishaps; and alternate treatments. (10 hours lecture. Quarter 7.).

#### EN 259. Clinical Endodontics I. 4 Units.

Study of endodontic diagnosis, treatment planning, and therapy, including management of endodontic emergencies and surgical endodontics in a comprehensive clinical dental practice setting. (Quarters 5-8.).

#### EN 359. Clinical Endodontics II. 8 Units.

Study of endodontic diagnosis, treatment planning, and therapy, including management of endodontic emergencies and surgical endodontics in a comprehensive clinical dental practice setting. (Quarters 9-12.).

### Graduate Courses

#### EN 401. Endodontic Technology I. 1 Unit.

This course introduces residents to endodontic technology. (Quarter 1.).

#### EN 402. Endodontic Therapy Seminar I. 2 Units.

Residents discuss contemporary endodontic strategies and the application of current scientific evidence to endodontic treatment. (Quarters 1-2.).

#### EN 403. Endodontic Biology and Pathology I. 8 Units.

This course presents the biology and etiology of pulpal and periapical disease. (Quarters 1-4.).

#### EN 405. Advanced Endodontic Technique. 8 Units.

This preclinical course uses simulated root canal treatment on extracted teeth with a variety of instruments and devices to prepare residents for clinical care. (Quarter 1.).

#### EN 411. Case Seminar I. 12 Units.

Residents review their own cases prepared according to ABE board documentation rules. (Quarters 1-4.).

#### EN 412. Classic Literature I. 12 Units.

Residents review the body of classic literature pertinent to endodontics, including material relevant for board preparation. (Quarters 1-4.).

#### EN 413. Current Literature I. 4 Units.

In this course, residents review current endodontic literature using the EndoLit iPad app. (Quarters 1-4.).

#### EN 422. Clinical Transition: Evidence-based Endodontics. 4 Units.

This course introduces residents to the evidence-based modalities and local rules for treating patients endodontically in the school's clinic. (Quarter 2.).

#### EN 423. Anesthesia and Pain Management I. 1 Unit.

This course is an introduction to theoretical and practical anesthetic techniques and pain management. (Quarter 2.).

#### EN 424. Pain/Neuro Seminar I. 1 Unit.

Residents study the physiology and pathophysiology of pain. (Quarter 1.).

#### EN 430. Clinic Connections I. 1 Unit.

The collaboration between endodontists and other members of the dental team is essential for good clinical outcomes. A series of presentations by clinicians with different training and expertise reinforces an inclusive view of typical and atypical treatment modalities. (Quarter 4.).

#### EN 440. Special Topics in Endodontology I. 2 Units.

Residents attend seminars by invited speakers and faculty with expertise and training in contemporary endodontic therapies. (Quarters 1-2.).

#### EN 457. Endodontic Clinic: Assisting. 1 Unit.

In this clinical course, residents assist during endodontic treatment by endodontic faculty in the graduate endodontic clinic. (Quarter 1.).

#### EN 458. Clinical Endodontics I. 25 Units.

Residents practice non-surgical endodontics appropriate in scope and case difficulty for the first year. (Quarters 2-4.).

#### EN 459. Clinical Endodontics: Surgery I. 3 Units.

Residents practice surgical endodontics appropriate in scope and case difficulty for the first year. (Quarters 2-4.).

#### EN 466. Special Care Clinic Rotation. 1 Unit.

In this rotation, residents practice non-surgical endodontics under sedation and general anesthesia for patients with special needs. (Quarter 3.).

#### EN 503. Endodontic Biology and Pathology II. 8 Units.

This course presents the biology and etiology of pulpal and periapical disease. (Quarters 5-8.).

#### EN 511. Case Seminar II. 12 Units.

Residents review their own cases prepared according to ABE board documentation rules. (Quarters 5-8.).

#### EN 512. Classic Literature II. 12 Units.

Residents review the body of classic literature pertinent to endodontics, including material relevant for board preparation. (Quarters 5-8.).

#### EN 513. Current Literature II. 4 Units.

In this course, residents review current endodontic literature using the EndoLit iPad app. (Quarters 5-8.).

#### EN 530. Clinic Connections II. 1 Unit.

The collaboration between endodontists and other members of the dental team is essential for good clinical outcomes. A series of presentations by clinicians with different training and expertise reinforces an inclusive view of typical and atypical treatment modalities. (Quarter 8.).



**EN 558. Clinical Endodontics II. 42 Units.**

Residents practice non-surgical endodontics appropriate in scope and case difficulty for the first year. (Quarters 5-8.)

**EN 559. Clinical Endodontics: Surgery II. 4 Units.**

Residents practice surgical endodontics appropriate in scope and case difficulty for the second year. (Quarters 5-8.)

**EN 567. Endodontics at La Clinica II. 28 Units.**

Residents practice non-surgical endodontics appropriate in scope and case difficulty for the second year at an affiliated extramural site. (Quarters 5-8.)

**EN 571. Predoctoral Instruction. 4 Units.**

Residents instruct predoctoral dental students in non-surgical endodontics. (Quarters 6-8.)

**EN 611. Case Seminar III. 3 Units.**

Residents review their own cases prepared according to ABE board documentation rules. (Quarter 9.)

**EN 613. Current Literature III. 1 Unit.**

In this course, residents review current endodontic literature using the EndoLit iPad app. (Quarter 9.)

**EN 658. Clinical Endodontics III. 9 Units.**

Residents practice non-surgical endodontics appropriate in scope and case difficulty for the third year. (Quarter 9.)

**EN 659. Clinical Endodontics: Surgery III. 1 Unit.**

Residents practice surgical endodontics appropriate in scope and case difficulty for the third year. (Quarter 9.)

**EN 671. Residency Instruction. 2 Units.**

Senior residents instruct first-year residents in endodontic technique. (Quarter 9.)

**EN 684. ABE Seminar. 3 Units.**

Residents participate in mock board exams and assemble their portfolios. (Quarter 9.)

## Oral and Maxillofacial Surgery (OS)

### Department Chairpersons

**Anders Nattestad**

*Professor of Oral and Maxillofacial Surgery*

## Faculty

### A

**Michael Ajayi**

*Associate Professor of Oral and Maxillofacial Surgery*

BDS, University of Lagos College of Medicine and Dentistry, 1975

BSc, University of Toronto, Toronto, Canada, 1981

Henry Ford Hospital, Oral Maxillofacial Surgery, Detroit, Michigan, Chief Resident, 1983

University of Toronto, Oral and Maxillofacial Surgery, Resident, 1981

### B

**Edmond Bedrossian**

*Professor of Oral and Maxillofacial Surgery*

BS, University of San Francisco, Biology, 1981

DDS, Highland General Hospital, Certificate of Completion, 1990

DDS, University of the Pacific, 1986

**John A. Boghossian**

*Associate Professor of Oral and Maxillofacial Surgery*

BA, San Francisco State University, Biology, 1984

Certificate, Memorial Sloan-Kettering Cancer Center, New York, NY, Dental Oncology Fellowship Certificate, 1990

DDS, University of California San Francisco, Dentistry, 1988

Harbor-UCLA Medical Center, Torrance, CA, Oral Surgery, 1995

## F

**Vincent Wayne Farhood**

*Associate Professor of Oral and Maxillofacial Surgery*

Certificate, Wilford Hall USAF Medical Center, Oral Maxillofacial Surgery, 1978

DDS, University of Southern California, Dentistry, 1970

## J

**Bahram Javid**

*Associate Professor of Oral and Maxillofacial Surgery*

BDS (LDS), King's College Dental School, 1957

BDS, King College (Durham University) Sutherland Dental School, Newcastle-upon-Tyne, U.K., 1956

Diplomate, American Board of Oral and Maxillofacial Surgery, 1972

DMD, School of Dental Medicine, Tufts University, 1960

Eastman Dental Center, University of Rochester, Rochester, New York, USA, Clinical Fellow, 1958

Hilsea College (Basingstoke) U.K., School Certificate, Oxford University, U.K., 1951

Hospital of the University of Pennsylvania, Graduate School of Medicine, Pennsylvania, PA USA, Oral Surgery Residency Program, 1966

King's College Dental School (Durham University). Newcastle-upon-Tyne, U.K., Junior House Officer, 1957

## K

**Brandon Kang**

*Instructor of Oral and Maxillofacial Surgery*

BA, Rutgers University, New Brunswick NJ, 2000

New York University, College of Dentistry, Doctor of Dental Surgery, 2004

Woodhull Medical Center Brooklyn NY, Oral Maxillofacial surgery, 2009

**Sam F Khoury**

*Instructor of Oral and Maxillofacial Surgery*

BS, Santa Clara University, Biology, 1999

DMD, University of Pittsburgh, Dental Medicine, 2005

## L

**Luis Ramon G. Limchayseng**

*Assistant Professor of Oral and Maxillofacial Surgery*

BS, University of the East (Philippines), 1979

DMD, University of the Philippines College of Dentistry, 1983

## M

**Fatima Mashkooor**

*Assistant Professor of Oral and Maxillofacial Surgery*

BS, Fatima Jinnah Dental School, University of Karachi, Pakistan, Bachelors of Dental Surgery,, 2004

Certificate, Medical College of Virginia, Post Baccalaureate Graduate

Certificate in Anatomy and Neurobiology, 2008

Certificate, NYC Health + Hospitals/Woodhull, Brooklyn, NY, Oral

Maxillofacial Surgery, 2017

DDS, Virginia Commonwealth University, School of Dentistry, Richmond, VA, Doctorate of Dental Surgery,, 2012

The Brooklyn Hospital Center, Brooklyn, NY, Internship in Oral

Maxillofacial Surgery, 2013

**Joseph Clarence McMurray**

*Assistant Professor of Oral and Maxillofacial Surgery*  
BS, Pt. Loma College, Biology, 1985  
DMD, Washington University St. Louis, 1990  
MBA, Pepperdine University, Business Economics and Management, 2007  
University of Southern California, Oral Maxillofacial Surgery, 1994

## N

### **Anders Nattestad**

*Professor of Oral and Maxillofacial Surgery*  
American Dental Education Association (ADEA), ADEA Leadership Institution, 2007  
DDS, University of Copenhagen, Dentistry, 1986  
Dental School, University of Copenhagen, Oral and Maxillofacial Surgery, 1998  
Masters, Kobenhavns Universitet, Health Sciences, 1986  
PhD, Dental School, University of Copenhagen, Dentistry, 1991  
PhD, Royal Dental College, Dentistry, 1992

## P

### **Joshua Parfitt**

*Instructor of Oral and Maxillofacial Surgery*  
BS, Linfield College, Physiology, 2009  
DDS, A.T Still University, Dentistry, 2015  
University of the Pacific, Oral and Maxillofacial Surgery, 2019

## S

### **Olya P Smutko**

*Instructor of Oral and Maxillofacial Surgery*  
BS, Arizona State University, Microbiology, 2006  
DDS, University of the Pacific School of Dentistry, Dentistry, 2009  
University of the Pacific, School of Dentistry, SF, Invisalign Certificate, 2008

## T

### **Len Tolstunov**

*Associate Professor of Oral and Maxillofacial Surgery*  
DDS, University of the Pacific, Graduated with honors (TAU KAPPA OMEGA), 1992  
DMD, Moscow Dental University, Doctor of Stomatology (DMD), graduated Summa Cum Laude, 1985  
Moscow Trauma Hospital, Resident in the department of oral and maxillofacial surgery, 1989  
University of California, San Francisco, Chief Resident in Oral and Maxillofacial Surgery, 1997  
University of California, San Francisco, Oral and Maxillofacial Surgery Internship, 1993  
University of California, San Francisco, Oral and Maxillofacial Surgery Residency, 1997

## Adjunct Faculty

## B

### **Michael Lawrence Beckley**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*  
BS, Texas Christian University, Biology, 1992  
DDS, Baylor College of Dentistry Texas A and M University, 1997  
University of the Pacific School of Dentistry, Oral and Maxillofacial Surgery, 2002

## C

### **Michael E. Cadra**

*Adjunct Instructor of Oral and Maxillofacial Surgery*  
BS, University of California, Irvine, Biological Sciences, 1975  
Cottage Hospital, Santa Barbara, General Surgery, 1994  
DMD, Washington University School of Dental Medicine, Dentistry, 1982  
Los Angeles County/USC Medical Center, Oral and Maxillofacial Surgery, 1986  
MD, University of Alabama School of Medicine, Medicine, 1993  
Other, California State University, Fullerton, Graduate Research in Biochemistry, 1978

## F

### **Jesse M. Fa**

*Adjunct Instructor of Oral and Maxillofacial Surgery*  
BS, University of the Notre Dame, IN, Science, 2003  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2006  
PGY1 General Practice Residency VA/UCI Medical Center, Long Beach, Certificate, 2007  
PGY2 General Practice Residency VA/UCLA Medical Center, LA, Certificate, 2008  
University of Illinois at Chicago, Oral Surgery Internship, Certificate, 2010

## G

### **Ehssan Ghassemi**

*Adjunct Instructor of Oral and Maxillofacial Surgery*  
Western University of Health Sciences

### **Brian Goo**

*Adjunct Instructor of Oral and Maxillofacial Surgery*  
University of Southern California

## K

### **Touraj Khalilzadeh**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*  
BS, University of California, Irvine, Biological Sciences, 2002  
DMD, University of Pennsylvania, Doctor of Dental Medicine, 2006  
MD, University of Maryland School of Medicine, Doctor of Medicine, 2009  
Other, University of Maryland Medical Center, R. Adams Cowley Shock Trauma Center, Oral Maxillofacial Surgery, 2012

### **Joseph S Kim**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*  
BA, Oxford College at Emory University, Chemistry, 1985  
DMD, Tufts University School of Dental Medicine, 1991  
Montefiore Medical Center, Specialty Certificate, 1997

## L

### **Gregory Scott Lee**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*  
BA, University of the Pacific Stockton, Stockton California, 1984  
Certificate, University of the Pacific School of Dentistry, Highland General Hospital, 1997  
DDS, University of the Pacific School of Dentistry, 1987

### **Kristin Lee**

*Adjunct Instructor of Oral and Maxillofacial Surgery*  
BS, Santa Clara University, Public Health Science, 2014  
DDS, Creighton University School of Dentistry, Dentistry, 2018

### **Sean Lee**

*Adjunct Instructor of Oral and Maxillofacial Surgery*  
BA, Dartmouth College, Neuroscience, 2011

DDS, Stony Brook School of Dental Medicine, General Dentistry, 2018

**Wendy Peiwen Liao**

*Adjunct Instructor of Oral and Maxillofacial Surgery*

BA, University of California, Berkeley, Molecular Cell Biology Emphasis in Neurobiology, 1999

BA, University of California, Berkeley, Music, 1999

DDS, University of California, Los Angeles, Degree Expected, 2004

**Sheng (Charlie) Chuan Lin**

*Adjunct of Oral and Maxillofacial Surgery*

BSc, University of British Columbia, Integrated Sciences (Biomechanics and Physiology), 2011

DMD, Harvard School of Dental Medicine, Dental Medicine, 2015

## M

**Sirish Makan**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*

BS, University of California Riverside, 2007

Certificate, Howard University Hospital, Oral and Maxillofacial Surgery, 2016

DDS, University of the Pacific, Dental Surgery, 2011

Georgetown University Hospital, Residency Rotation, 2016

Posnick Center for Facial Plastic Surgery, Residency Rotation, 2016

**Nima Massoomi**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*

BS, St. Lawrence University, Cum Laude, Canton, New York, Bio/Chemistry, 1994

DMD, University of Pennsylvania School of Dental Medicine, Dental Medicine, 2001

Fellowship, T. Williams Evans Fellowship Columbus, Ohio, Facial Cosmetics Surgery, 2008

Internship, Vanderbilt University Medical Center, Nashville, TN, General Surgery, 2005

MD, Vanderbilt University School of Medicine, Nashville, TN, Medicine, 2007

Med, University of Pennsylvania Graduate School of Education, Masters of Education, 2001

Residency, Vanderbilt University, Nashville, TN, Oral Maxillofacial Surgery, 2007

## N

**Yuko Christine Nakamura**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*

BS, Duke University, Trinity College, Major: Cell Molecular Biology, Minor: Chemistry, 1999

DMD, Case Western Reserve University, School of Dental Medicine, Doctor of Medical Dentistry, 2004

MD, Columbia University - College of Physicians Surgeons, Doctor of Medicine, 2007

New York Presbyterian Hospital - Columbia Campus, General Surgery Internship, 2008

New York Presbyterian Hospital - Columbia Campus, Oral Maxillofacial Surgery Residency, 2010

## R

**Andrew Rich**

*Adjunct Instructor of Oral and Maxillofacial Surgery*

BS, UC Santa Barbara, Biology, 2010

DMD, Western University of Health Sciences, Dentistry, 2018

**Terry Rust**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*

BS, University of Oregon, 1962

County Hospital NY Intern, 1968

DDS, St. Louis University Dental School, Dentistry, 1967

North Welling Hospital, 1969

NYU Post Grad Oral Surgery, Oral Surgery, 1970

## S

**Roger W. Sachs**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*

Beth Israel Hospital, OMFS, 1971

BS, Parsons College, Biology, 1964

DMD, Temple University, Dentistry, 1970

Lincoln Hospital, Albert Einstein College of Medicine, Oral Maxillofacial Surgery, 1974

MS, Northeastern University, Physiology, 1966

**Alireza Michael Sodeifi**

*Adjunct Assistant Professor of Oral and Maxillofacial Surgery*

DMD, Harvard School of Dental Medicine, Dentistry, 1997

MD, Vanderbilt University School of Medicine, Dentistry, 2007

Vanderbilt University Medical Center, Chief Resident, Oral Surgery, 2003

Vanderbilt University Medical Center, Intern, Oral Surgery, 1998

Vanderbilt University Medical Center, Resident, General Surgery, 2001

Vanderbilt University Medical Center, Resident, Oral Surgery, 2002

**Brett Sterling**

*Adjunct Instructor of Oral and Maxillofacial Surgery*

New York University College of Dentistry

**Ho Hyun Sun**

*Adjunct Instructor of Oral and Maxillofacial Surgery*

BS, UCLA, Psychobiology, 2009

DMD, Western University, Dentistry, 2017

## Y

**Justin Michael Young**

*Adjunct Instructor of Oral and Maxillofacial Surgery*

BA, Miami University, Microbiology/Immunology, 1996

Certificate, IFCS, Facial Cosmetic Dentistry, 2008

Certificate, Thomas Jefferson University Hospital, Department of Oral and Maxillofacial Surgery, Oral and Maxillofacial Surgery, 2007

Certificate, Thomas Jefferson University Hospital, General Surgery, 2005

DDS, Ohio State University College of Dentistry, Dentistry, 2000

MD, Jefferson Medical College, OMFS/Medicine Summa cum laude, 2004

**Wenli Yu**

*Adjunct Instructor of Oral and Maxillofacial Surgery*

DDS, Peking University, Dentistry, 2001

DDS, University of Minnesota, Dentistry, 2017

Other, Peking University, OMFS, 2004

PhD, Baylor College of Dentistry, Biomedical Sciences, 2017

## Course Descriptions

### Predocloral Courses

#### OS 139. Preclinical Multidisciplinary Surgery. 1 Unit.

Study of the principles of mucoperiosteal flap design, biopsy techniques, suturing, use of flaps, bone removal, and tooth sectioning for exodontia; apicoectomy in endodontic surgery and osseous surgery. Soft tissue grafting in periodontics will also be demonstrated. (7.5 hours lecture, 4 hours laboratory. Quarter 4.).

**OS 239. Clinical Oral and Maxillofacial Surgery I. 1 Unit.**

Oral and maxillofacial surgical treatment planning and treatment including routine exodontia, incision and drainage, biopsy, mucoperiosteal flap design, sectioning of teeth, and bone removal; utilizing accepted procedures for asepsis; and patient preparation, positioning, and management including obtaining patients' informed consent and proper consideration for medically compromised patients. The student learns to assume responsibility for recognizing limitations of their competence and to refer patients who need more complex surgical treatment to a specialist. (Quarters 5-8.).

**OS 339. Clinical Oral and Maxillofacial Surgery II. 2 Units.**

Oral and maxillofacial surgical treatment planning and treatment including routine exodontia, incision and drainage, biopsy, mucoperiosteal flap design, sectioning of teeth, and bone removal; utilizing accepted procedures for asepsis; and patient preparation, positioning, and management including obtaining patients' informed consent and proper consideration for medically compromised patients. The student learns to assume responsibility for recognizing limitations of their competence and to refer patients who need more complex surgical treatment to a specialist. (Quarters 9-12.).

**Graduate Courses****OS 434. Implant Seminar I. 4 Units.**

In this implant treatment-planning seminar, endodontics residents discuss case presentations and treatment planning options. The focus will be on evidence-based treatment options. (Quarters 1-4.).

**OS 439. Advanced Oral Surgery and Implantology I. 6 Units.**

This hands-on course provides endodontics residents the foundational and practical knowledge of treatment planning and placement. (Quarters 3-4.).

**OS 534. Implant Seminar II. 4 Units.**

In this implant treatment-planning seminar, endodontics residents discuss case presentations and treatment planning options. The focus will be on evidence-based treatment options. (Quarters 5-8.).

**OS 634. Implant Seminar III. 1 Unit.**

In this Implant treatment-planning seminar, endodontics residents discuss case presentations and treatment planning options. The focus will be on evidence-based treatment options. (Quarter 9.).

## Orthodontics (OR)

**Department Chairperson****HeeSoo Oh***Professor of Orthodontics***Program Director****HeeSoo Oh***Professor of Orthodontics***Associate Director of the Craniofacial Research Instrumentation Laboratory (CRIL)****HeeSoo Oh***Professor of Orthodontics***Director of the Cleft Lip and Palate Prevention Program****Marie Milena Tolarova***Professor of Orthodontics*

## Faculty

### B

**Marta Parisek Baird***Assistant Professor of Orthodontics*

American Board of Orthodontics, Diplomate, 2012  
BS, University of the Pacific, Biological Sciences Summa Cum Laude, 2005

DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2008

McLaughlin, 2 year course, 2017

MSD, CERT, University of the Pacific Arthur A. Dugoni School of Dentistry, MS in Dentistry, Certification in Orthodontics, 2011

Western Regional Board Exam, successfully completed, 2008

**Roger P. Boero***Associate Professor of Orthodontics*

DDS, College of Physicians Surgeons (UOP), Dentistry, 1964

MSD, University of the Pacific, Orthodontics, 1995

Pomona College, 1960

University of the Pacific, Orthodontics, 1975

### C

**David William Chambers***Professor of Orthodontics*

AB, Harvard University, Experimental psychology, 1965

Cambridge University, Department of Philosophy, Visiting Scholar, 2008

Center for Philosophy of Natural and Social Sciences, London School of Economics, Visiting Scholar, 2012

EdM, Harvard University, School of Education, Educational evaluation, 1966

MBA, San Francisco State University, Management and operations research, 1979

PhD, Stanford University, School of Education, Educational psychology, 1969

University of California, Berkeley, Department of Philosophy, Visiting Scholar, 2010

**James Chen***Assistant Professor of Orthodontics*

Certificate, University of California - San Francisco, Advanced Training in Clinical Research, 2012

Certificate, University of California - San Francisco, Orthodontics, 2011

DDS, University of California - San Francisco, Dentistry, 2005

Other, University of California - Berkeley, MPH - Health Policy Concentration, 2011

PhD, University of California - San Francisco, Oral and Craniofacial Sciences, 2011

### K

**Katherine Kieu***Instructor of Orthodontics*

BS, University of California, Los Angeles, Biology, 2005

DDS, University of California, San Francisco, Dentistry, 2009

MSD, University of the Pacific, Orthodontics, 2012

### M

**Kimberly A Mahood***Assistant Professor of Orthodontics*

BS, University of Louisville, Biology, 2000

DMD, University of Kentucky College of Dentistry, Dentistry, 2004

MSD, University of the Pacific Arthur A. Dugoni School of Dentistry, Orthodontics, 2010

University of Kentucky College of Dentistry, Oral and Maxillofacial Surgery, 2005

University of the Pacific Arthur A. Dugoni School of Dentistry, Advanced General Dentistry, 2007

## O

### HeeSoo Oh

*Professor of Orthodontics*

Chonnam National University Hospital, Korea, Pediatric Dentistry, 1992  
DDS, Chonnam National University School of Dentistry, Korea, Dentistry, 1989

MS, Chonnam National University, School of Dentistry, Korea, Pediatric Dentistry, 1992

MSD, University of the Pacific, Arthur A. Dugoni, School of Dentistry, Orthodontics, 2005

PhD, Chonnam National University, School of Dentistry, Korea, Oral Biology, 1999

University of the Pacific, School of Dentistry, Graduate Residency Program - AEGD, 2001

## P

### Joorok Park

*Assistant Professor of Orthodontics*

BA, University of California, Berkeley, Molecular and Cell Biology, 2001

DMD, University of Pennsylvania, School of Dental Medicine, Dental Medicine, 2006

MSD, University of the Pacific, Arthur A. Dugoni School of Dentistry, Certificate, Orthodontics, 2008

## S

### Heeyeon Suh

*Assistant Professor of Orthodontics*

BS, Seoul National University, Chemical Engineering, 2004

DDS, Seoul National University, General Dentistry, 2009

PhD, Seoul National University, Dentistry, 2015

## T

### Miroslav Tolar

*Associate Professor of Orthodontics*

MD, Charles University School of Medicine, 1965

PhD, Czechoslovak Academy of Sciences Charles University School of Medicine, Postgraduate Program in Physiology, 1970

University of California in San Francisco, Postgraduate course in biostatistics biomodeling, 1993

### Marie Milena Tolarova

*Professor of Orthodontics*

Board Cert, Postgraduate Medical Institute, Prague, Czechoslovakia, Medical Genetics, Board Certificate, 1985

Board Cert, Postgraduate Medical Institute, Prague, Czechoslovakia, Pediatrics, Board Certificate, 1985

DSc, Czechoslovak Academy of Sciences, Prague, Czechoslovakia, Medical Genetics, 1986

Gymnasium, Tabor, Czechoslovakia, College education, 1959

MD, Charles University School of Medicine, Medicine, 1965

PhD, Czechoslovak Academy of Sciences Charles University School of Medicine, Prague, Czechoslovakia, Human Genetics, 1979

## Y

### Jennifer Yau

*Instructor of Orthodontics*

BS, University of the Pacific, Biology, 2009

DDS, University of California, Los Angeles, Doctor of Dental Surgery,, 2013

MSD, University of the Pacific, Arthur A. Dugoni School of Dentistry, Certificate in Orthodontics, 2015

### Olivia Yue

*Assistant Professor of Orthodontics*

DDS, University of California, Los Angeles: School of Dentistry, 2015

New York University School of Dentistry, Orthodontic Residency, 2018

NYU Langone, Orthodontic Craniofacial Fellowship, 2019

## Adjunct Faculty

## A

### Hesham Amer

*Adjunct Assistant Professor of Orthodontics*

BDS, Cairo University (Cairo, Egypt), General Dentistry, 1995

MS, University of the Pacific School of Dentistry, Orthodontics, 2001

### Christopher Anderson

*Adjunct Assistant Professor of Orthodontics*

BS, Santa Clara University, Biology, 2001

DDS, University of the Pacific, Dentistry, 2004

MSD, University of the Pacific, Orthodontics, 2006

### Maryse M. Aubert

*Adjunct Associate Professor of Orthodontics*

DDS, University Paris V, Dentistry, 1976

MA, University of the Pacific, Education, 1994

MA, University of the Pacific, Psychology and Counseling, 1994

University of California, San Francisco, Certificate of Participation - Temporomandibular, 1996

University of the Pacific, Orthodontics, 1980

University Paris VII, Embryology, 1976

## B

### Thomas Reed Bales

*Adjunct Assistant Professor of Orthodontics*

Certificate, UCLA, Orthodontics, 1976

DDS, University of the Pacific, School of Dentistry, Dental, 1974

University of California Davis, 1971

### Robert L. Boyd

*Adjunct Professor of Orthodontics*

CERT, University of Pennsylvania, Orthodontics, 1974

CERT, University of Pennsylvania, Periodontics, 1972

DDS, Temple University, Dentistry, 1970

Indiana University, Biology, 1966

Med, University of Florida, Dental Education, 1981

## C

### Ana Calles

*Adjunct Instructor of Orthodontics*

BA, Wake Forest University, Spanish Literature, 2011

DMD, Harvard University, Dentistry, 2017

MSD, University of the Pacific, Orthodontics, 2019

### Sean K. Carlson

*Adjunct Assistant Professor of Orthodontics*

BA, University of California, Santa Barbara, Biology, 1989

DMD, Harvard School of Dental Medicine, Dentistry, 1994

MS, University of California, San Francisco, Oral Biology, 1998

University of California, San Francisco, Orthodontics Certificate, 1998

### William A Cole

*Adjunct Associate Professor of Orthodontics*

BA, Washington and Jefferson College, Biology, 1981  
Cert, University of California, San Francisco, Orthodontics, 1986  
DMD, New Jersey Dental School, Dental, 1983

## D

### Bill Dischinger

*Adjunct Assistant Professor of Orthodontics*  
BS, Oregon State University, Pre Dental, 1994  
Certificate, Tufts University, Orthodontics, 1999  
DMD, Oregon Health Sciences University, Dentistry, 1997  
Lake Oswego High School, 1990

### Steven A. Dugoni

*Adjunct Professor of Orthodontics*  
DMD, Tufts University, 1979  
MSD, University of the Pacific, 1981

## F

### Stuart Lund Frost

*Adjunct Assistant Professor of Orthodontics*  
Arizona State University, 1989  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1992  
Eastman School of Dentistry, Certificate in TMJD, 1988  
Mesa Community College, 1989  
University of Rochester, Eastman Dental Center, Certificate in Orthodontics, 2000

## G

### John P. Gibbs

*Adjunct Associate Professor of Orthodontics*  
BS, University of Nebraska, Nebraska, 1954  
DDS, University of Nebraska Medical Center, Nebraska, Doctor of Dental Surgery, 1956  
Other, University of Nebraska, Nebraska, Orthodontics, 1960

## H

### David C. Hatcher

*Adjunct Associate Professor of Orthodontics*  
BA, Central Washington State College (1969), Biology  
Columbia Basin Comm. College, Pasco, Washington (1967), Biology  
DDS, University of Washington, Seattle (1973), Dentistry  
M.R.C.D., University of Toronto, Ontario Canada (1983), Oral Radiology  
M.Sc., University of Toronto, Ontario Canada (1983), Oral Radiology  
University of Vermont Medical Center (1976), General Practice Residency  
University of Washington, Seattle (1965), Biology  
University of Washington, Seattle (1968), Biology  
Western Washington State College (1969), Biology

### Hyeon-Shik Hwang

*Adjunct Associate Professor of Orthodontics*  
DDS, Yonsei University, Dentistry, 1983  
MSD, Yonsei University, Orthodontics, 1989  
Other, Yonsei University, Pre-Dentistry, 1979  
PhD, Yonsei University, Orthodontics, 1992

## J

### Adrienne Joy

*Adjunct Instructor of Orthodontics*  
AB, Princeton University, Chemistry, 2011  
Certificate, Princeton University, Materials Science and Engineering, 2011  
Certificate, University of the Pacific, Orthodontics, 2018

DMD, University of Pennsylvania, Dentistry, 2016  
MSD, University of the Pacific, Orthodontics, 2018

## K

### Paul M Kasrovi

*Adjunct Professor of Orthodontics*  
BS, University of Southern Cal (USC), Biomedical Engineering, 1984  
DDS, UCSF, Dental Sciences, 1992  
MS, UCSF, orthodontics, oral biology, 1995  
MS, University of Pennsylvania, Electrical Engineering, 1986

### Rebecca B Keller

*Adjunct Assistant Professor of Orthodontics*  
BA, University of the Pacific, Applied Sciences (awarded in 2000), 2000  
Certificate, Harvard - Wide General Practice Residency, Hospital Based General Practice Residency, 1999  
Certificate, University of the Pacific Arthur A. Dugoni School of Dentistry, orthodontics, 2003  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, dentistry, 1998  
Livermore High School, High School Diploma, 1993  
MSD, University of the Pacific Arthur A. Dugoni School of Dentistry, orthodontics, 2003  
University of Southern California, 1995

## L

### Jetson Scott Lee

*Adjunct Associate Professor of Orthodontics*  
AB, University of California, Berkeley, Biological Sciences, 1981  
Certificate, University of the Pacific, School of Dentistry, Orthodontics, 1986  
DDS, University of the Pacific School of Dentistry, Dentistry, 1984  
MSD, University of the Pacific, School of Dentistry, Orthodontics, 1986

### Victor S. Lee

*Adjunct Instructor of Orthodontics*  
Beijing University, completed two courses of Chinese (Mandarin) Language, 2002  
BS, University of California, Davis, Neurology, Physiology and Behavior: Exercise Biol, 2007  
DDS, University of California, Los Angeles School of Dentistry, Dentistry, 2011  
Kyoto Seika University, completed three courses of Japanese Language, 2007  
MSD, University of the Pacific, Orthodontics, 2013

## M

### Setareh Mozafari

*Adjunct Assistant Professor of Orthodontics*  
DDS, Azad University, School of Dentistry, Dental, 2001  
DDS, University of Southern California, School of Dentistry, Dental, 2005  
University of Rochester, Eastman Dental Center, Orthodontics and Dentofacial Orthopedics, 2007

## P

### Brian W Payne

*Adjunct Assistant Professor of Orthodontics*  
BA, University of California Berkeley, Biology, 1983  
Certificate, University of California San Francisco, Orthodontics, 1988  
DDS, University of the Pacific, Dentistry, 1986

## R

### **Shikha Rathi**

*Adjunct Assistant Professor of Orthodontics*

BDS, D.Y. Patil College of Dentistry, general dentistry, 2004  
Certificate, University of Texas Health Science Center San Antonio, Oral and maxillofacial Radiology, 2010  
D.Y. Patil Dental College and Hospital, General Dentistry Internship, 2005  
MS, University of Texas Health Science Center San Antonio, Oral and Maxillofacial Radiology, 2011  
Preceptors, University of Texas HSC San Antonio, Oral and Maxillofacial Radiology, 2007

### **W. Ron Redmond**

*Adjunct Associate Professor of Orthodontics*

BA, U C Riverside, Zoology, 1962  
DDS, University of the Pacific, Dentistry, 1966  
MS, University of Southern California, Orthodontics, 1970

### **Michael R. Ricupito**

*Adjunct Associate Professor of Orthodontics*

BA, San Jose State University, Biological Science, Psychology minor, 1980  
DDS, University of the Pacific School of Dentistry, Dentistry, 1983  
MS, University of California at Los Angeles School of Dentistry, Oral Biology, 1987  
University of California at Los Angeles School of Dentistry, Certificate in Orthodontics, 1987

### **Bert D. Rouleau**

*Adjunct Assistant Professor of Orthodontics*

BS, University of Vermont, Zoology, Botany, 1975  
DMD, Tufts University, Dentistry, 1978  
MS, Northwestern University, Pediatric Dentistry, 1980  
MSD, University of the Pacific, Orthodontics, 1982

## S

### **L. William Schmohl**

*Adjunct Assistant Professor of Orthodontics*

BS, University of California Berkeley, Business Administration, 1966  
DDS, University of California, San Francisco, Dentistry, 1970  
MS, Case Western Reserve University, Orthodontics, 1974  
U.S. Naval Hospital, Oakland, CA, Externship, 1969

### **Kenneth Shimizu**

*Adjunct Assistant Professor of Orthodontics*

BS, University of California, Berkeley, Biology, 1980  
DDS, University of the Pacific, Dentistry, 1985  
MSD, University of the Pacific, Orthodontics, 1987

### **Kevin Shimizu**

*Adjunct Instructor of Orthodontics*

BS, UC Davis, Biological Sciences Environmental Toxicology, 2013  
DDS, University of the Pacific Athur A. Dugoni School of Dentistry, dentistry, 2017  
MSD, University of the Pacific Athur A. Dugoni School of Dentistry, orthodontics, 2019

## T

### **Sandra Khong Tai**

*Adjunct Assistant Professor of Orthodontics*

BDS, University Malaya, Dentistry, 1986  
MS, University of Minnesota, Orthodontics, 1990

## W

### **Gregory V Wadden**

*Adjunct Assistant Professor of Orthodontics*

BS, University of Maryland, Zoology, 1968  
Certificate, DeWitt Army Hospital, Rotating Dental Internship, 1973  
Certificate, University of the Pacific, orthodontics, 1977  
DDS, Georgetown University, Dentistry, 1972

## Y

### **Audrey Yoon**

*Adjunct Assistant Professor of Orthodontics*

DDS, Seoul National University, College of Dentistry, South Korea, dentistry, 2000  
DDS, University of California, Los Angeles, dentistry, 2004  
MS, University of California, Los Angeles, Oral Biology, 2008  
Seoul National University, College of Natural Science, South Korea, preliminary course in dentistry, 1996  
University of California, Los Angeles, orthodontics, 2008  
University of California, Los Angeles, pediatrics, 2008

## Course Descriptions

### **Predoctoral Courses**

#### **OR 244. Orthodontics. 2 Units.**

An introduction to orthodontic diagnostic procedures, comprehensive treatment planning, and various treatment modalities as applied to a full range of malocclusions in a general dental practice. A strong emphasis is placed on the use of the Invisalign appliance and its application in general practice. Other orthodontic appliances covered will be the functional appliance as it relates to early orthodontic treatment and the edgewise appliance in full comprehensive cases. Orthognathic surgical cases and use of microimplants for anchorage will also be reviewed. (20 hours lecture. Quarters 4-5.)

#### **OR 249. Preclinical Orthodontics. 1 Unit.**

This preclinical course introduces students to various removable and fixed appliances with primary focus on their application for minor orthodontic movement. Laboratory instruction addresses such areas as fabrication of removable and fixed appliances, cementation of bands, bonding of brackets and placement of arch wires. Lateral head films are traced, measured, analyzed, and discussed with regard to norms and growth patterns. The course also introduces students to 3-D computer technology for the manufacturing of the Invisalign system appliance and the use of this appliance in general practice. Emphasis is placed on critical self-evaluation skills. (12 hours seminar. Quarter 8.)

#### **OR 348. Applied Orthodontics. 1 Unit.**

A study of standard orthodontic records and their application to diagnosis, treatment planning, and treatment evaluation in the mixed and permanent dentitions. Students will present cases incorporating digital records, cephalometric analysis, photographs, to explain diagnostic, treatment planning, and treatment procedures. (12 hours seminar, 6 hours graduate orthodontic clinic. Quarters 9-10.)

## Graduate Courses

### OR 400. Craniofacial Biology & Genetics. 1 Unit.

In about sixty percent of dental conditions and diseases, genetics plays an important – and sometimes the major – role in etiology. As orthodontics is focusing on treatment of malocclusions and dentofacial deformities, in etiology of which genetics is almost always in the background, it is important for an orthodontist to understand why or how a malocclusion occurs, how it reacts to a treatment plan, to what extent it may be expressed in the next generation, and - last but not least - if it can be prevented. The concepts of heredity and genetics in orthodontics are covered in this course starting with historical Orthodontia Era (1900-1930), through Hereditary vs Environment Era (1930-1970) and Heritability Era (1970-2000) to the present time Orthodontic Genomic Era. Nowadays, genetics is a backbone of personalized medicine and also of personalized orthodontics. Patient's treatment outcome may be affected by combinations of specific gene mutations not only in orofacial clefts, craniofacial anomalies and malocclusions, but also in external apical root resorption, mandibular morphology, tooth size, hypodontia, and other conditions. Understanding of basic genetic and translational research concepts is needed for precision orthodontics and for utilization of modern genomic information for improved treatment of malocclusions and dentofacial deformities.

### OR 401. Cephalometrics. 4 Units.

The purpose of the course is to introduce students to the use of cephalometric radiographs in clinical orthodontics. In addition to understanding basic principles and the historical significance of cephalometry, students will learn how to interpret various cephalometric analyses that are most commonly used in diagnosis and treatment planning. At the end of this course, students should also be able to perform various methods of superimposition in order to identify and understand changes that occurred during growth and treatment between different lateral cephalometric radiographs. (Quarters 1-2.).

### OR 402. Facial Growth. 4 Units.

The purpose of the course is to provide students with scientific literature that supports current knowledge and understanding of basic biological principles on craniofacial growth and development. This course focuses on the basic mechanisms of postnatal growth of the cranium, nasomaxillary complex and mandible, and the clinical application of facial growth principles. (Quarters 3-4.).

### OR 403. Critical Thinking - Research Design. 3 Units.

The purpose of the course is to provide students with foundational knowledge on scientific methods, while also honing an ability to critically evaluate the literature and to design a sound research project. (Quarters 2-4.).

### OR 404. Research Practicum and Thesis I. 2 Units.

This is an independent research course. Under the guidance of research mentors, students develop research questions, formulate hypotheses and write a formal research proposal that includes a full literature review, statement of material and methods, execution of the research, and appropriate analysis and interpretation of data. This course is designed to enable successful completion of the MS thesis. (Quarters 1-4.).

### OR 410. Biomechanics. 7 Units.

The purpose of the course is to introduce fundamental concepts for understanding the laws of mechanics and biological responses to force systems used in orthodontic appliances. This is a seminar-based course designed to teach first year residents the basic principles of biomechanics and theories related to planning and designing orthodontic force systems. Students will be expected to read and understand background material in assigned articles & textbooks for seminar discussions. (Quarters 1-4.).

### OR 411. Craniofacial Biology & Genetics - Genetics in Orthodontics. 2 Units.

In about sixty percent of dental conditions and diseases, genetics plays an important – and sometimes the major – role in etiology. As orthodontics is focusing on treatment of malocclusions and dentofacial deformities, in etiology of which genetics is almost always in the background, it is important for an orthodontist to understand why or how a malocclusion occurs, how it reacts to a treatment plan, to what extent it may be expressed in the next generation, and - last but not least - if it can be prevented. The concepts of heredity and genetics in orthodontics are covered in this course starting with historical Orthodontia Era (1900-1930), through Hereditary vs Environment Era (1930-1970) and Heritability Era (1970-2000) to the present time Orthodontic Genomic Era. Nowadays, genetics is a backbone of personalized medicine and also of personalized orthodontics. Patient's treatment outcome may be affected by combinations of specific gene mutations not only in orofacial clefts, craniofacial anomalies and malocclusions, but also in external apical root resorption, mandibular morphology, tooth size, hypodontia, and other conditions. Understanding of basic genetic and translational research concepts is needed for precision orthodontics and for utilization of modern genomic information for improved treatment of malocclusions and dentofacial deformities. (Quarters 2-3.).

### OR 412. Cleft Lip & Palate/Craniofacial Anomalies - Orofacial Clefts and Abnormal Craniofacial Development. 2 Units.

This course provides information needed for understanding of concepts related to disturbed and compromised craniofacial growth. It forms a necessary background that makes possible to distinguish and diagnose craniofacial abnormalities. Principles of developmental craniofacial biology and craniofacial embryology are reviewed and continuously updated with new findings and discoveries. Particular emphasis is given to molecular regulation of craniofacial morphogenesis, abnormal neural crest formation (leading to Treacher Collins syndrome, Pierre Robin sequence, DiGeorge sequence, and Hemifacial Microsomia), and molecular regulation of skeletal morphogenesis and disorders comprising the FGFR-related craniosynostosis spectrum (Apert, Crouzon, Pfeiffer, Muenke, Jackson-Weiss, and Beare-Stevenson syndromes). In order to build a solid foundation for the clinical dental treatment and, specifically, for orthodontic treatment of orofacial clefts (cleft lip, cleft and palate and cleft palate only) – complex etiology of these anomalies, that is influenced by a genetic background and environmental factors, is explained. Points of origin and importance of precise diagnosis of nonsyndromic and syndromic cases are emphasized. (Quarter 4.).

### OR 414. Introduction to Contemporary Orthodontics. 4 Units.

The purpose of the course is to introduce basic artistic skills in contemporary orthodontics. This is a seminar-based course designed for first year residents to review the basic concepts of photography, direct bonding of fixed appliances, 3D imaging, 3D cephalometric analysis, and digital imaging software (2D and 3D). Students will be expected to read and understand background material in assigned articles for seminar discussions. They are also expected to complete assignments. This course will consist of 17 seminar sessions throughout the first year of residency. (Quarters 1-3.).

### OR 420. Bone Biology. 3 Units.

The purpose of this course is for students to gain an understanding of the general biological activities of bone. This is a seminar-based course designed for first year residents to review basic concepts and theories of bone biology, orthodontic tooth movement, and osseointegration of orthodontic microimplants. Students will be expected to read and understand background material in assigned articles & textbooks for seminar discussions. (Quarter 4.).



**OR 421. Current Literature Seminar I. 4 Units.**

A review of articles appearing in orthodontic and related journals is presented using a seminar format. (Quarters 1-4.)

**OR 422. Anatomy. 1 Unit.**

This course provides a detailed review of anatomic structures of the craniofacial region. Lecture topics include osteology of the skull, innervation and blood supply of the face, muscles of facial expression and mastication, and anatomy of the oral cavity. (Quarter 1.)

**OR 423. Comprehensive Case Analysis Seminar I. 4 Units.**

The seminar highlights the clinical application of various diagnostic procedures and treatment philosophies and the presentation of practical procedures in the management of unusual problems that can arise during the course of treatment. Basic and applied principles of photography and advances in computer technology are integral to this course. During each session, a Comprehensive Case Analysis is presented by the second year residents. All students then participate in discussion about the case. (Quarters 1-4.)

**OR 424. Treatment Planning Seminar I. 2 Units.**

A case presentation is prepared by the first-year residents to share initial diagnostic records in order to diagnose and treatment plan orthodontic cases. All students then participate in free-format discussion. (Quarters 1-4.)

**OR 426. Principles of Orthodontic Technique. 5 Units.**

This course is designed to provide basic principles on orthodontic tooth movement and fixed appliances by working on typodonts. (Quarters 1-2.)

**OR 430. Surgical-Orthodontic Treatment. 4 Units.**

The purpose of this course is to provide the student with fundamental knowledge in orthognathic surgery and its role in the orthodontic treatment of skeletal malocclusions. This seminar-based course covers basic concepts involved in surgical orthodontics, which include: diagnosis and treatment planning, pre-surgical orthodontics, surgical procedures utilized by oral surgeons, and post-surgical orthodontics. In addition, topics such as TMJ disorders, Distraction Osteogenesis, and Obstructive Sleep Apnea are discussed. The goal is for the student to understand these surgical concepts and implement them in the clinical treatment of orthognathic surgery patients. (Quarters 1-3.)

**OR 431. Orthognathic Surgery Seminar I. 4 Units.**

This course is a joint seminar for the orthodontic and oral surgery residents that is held once a month during the first and second years of the residency program. The Orthognathic Surgery Seminar consists of case presentations by the Orthodontic and Oral and Maxillofacial Surgery faculty and residents. Emphasis is placed on diagnosis, treatment planning, management of pre- & post surgical orthodontic treatment, and understanding of treatment outcome and stability. (Quarters 1-4.)

**OR 432. Multidisciplinary Seminar I. 4 Units.**

The treatment of patients with complex dental and skeletal orthodontic, periodontal, and restorative problems that requires input from a variety of dental specialties is considered. The teaching format includes case presentations by the residents and open discussions of interdisciplinary topics. (Quarters 1-4.)

**OR 433. Retention Seminar I. 1 Unit.**

Long-term post-active treatment records provide invaluable material for studying stability of orthodontic treatment outcome. Each of the second year residents is required to present the long-term post retention patient whose active orthodontic treatment was completed at least ten years prior to the resident's year of graduation from the program. Faculty and the first year residents are participated in the discussion after the presentation. (Quarter 4.)

**OR 434. Introduction to Invisalign. 1 Unit.**

The purpose of this course is to introduce basic knowledge on clinical applications of Invisalign treatment, while also incorporating the latest treatment protocols. (Quarter 1.)

**OR 440. Imaging in Orthodontics, TMJ & Airway Consideration. 4 Units.**

Orthodontists have a fundamental interest in facial form, facial growth patterns, occlusion and any pathologic conditions that may alter them. Current three dimensional (3D) imaging techniques available for routine imaging provide the opportunity to utilize a "systems approach" in order to visualize and evaluate the functional and developmental relationships between proximal craniofacial regions. This course will discuss the use of 3D imaging to evaluate the developmental and functional inter-relationships between TMJ, occlusions, airway, and facial growth. (Quarters 2-3.)

**OR 441. Orthodontic Treatment of Craniofacial Anomalies. 2 Units.**

Understand and relate embryology, abnormal growth and development and sequelae of surgical repair of craniofacial anomalies to the orthodontic treatment of craniofacial anomalies. (Quarters 2-4.)

**OR 456. Clinical Orthodontics I. 30 Units.**

Clinical orthodontics includes various appliance systems: edgewise appliance (.018 & .022" slot), TAD, self-ligating brackets, fixed-functional appliance (Herbst, Forsus), and Invisalign for adolescent and adult patients. Clinical experience in treating orthodontic patients with a variety of problems is provided. In addition, various orthopedic appliances, including the headgear, face mask, rapid maxillary expander and other fixed auxiliary appliances (LLA, TPA, Wilson distalizer) may be incorporated into specific treatment protocols. Patients are treated in the Graduate Orthodontic Clinic every afternoon Monday-Friday, as well as Thursday nights. (Quarters 1-4.)

**OR 457. Mixed Dentition Orthodontics I. 8 Units.**

In addition to a didactic portion that focuses on the review of mixed dentition articles and comprehensive case analyses, this course also includes clinical sessions that provide residents with basic knowledge and experience in treating various malocclusions in the mixed dentition stage. This course provides an understanding of facial growth and occlusal development in the mixed dentition, an ability to diagnosis and treatment plan mixed dentition cases, and an ability to evaluate growth changes and treatment outcomes. (Quarters 1-4.)

**OR 458. Surgical Orthodontics I. 2 Units.**

This course provides clinical experience in analyzing diagnostic records and formulating surgical orthodontic treatment plans for patients with major skeletal and dental disharmonies that require integration of surgical and orthodontic treatment, communication with surgeons, pre- and post- surgical orthodontic treatment, and evaluation of treatment outcomes. (Quarters 1-4.)

**OR 459. Clinical Orthodontics in Craniofacial Anomalies I. 2 Units.**

This course combines the orthodontic treatment of patients with craniofacial anomalies in the graduate clinic and attending panels provided by comprehensive Oakland Children's Hospital Craniofacial Anomalies Teams. (Quarters 1-4.)

**OR 501. Principles of Orthodontics. 8 Units.**

Principles of Orthodontics is a literature-based seminar. Each resident will participate in discussion with emphasis on the critical analysis and evaluation of the scientific methodology in the literature reviewed. Topics include Principles of Orthodontics Introduction, Biomechanics, Facial growth, Retention & Relapse, Functional appliances, Intraoral forces, Mandibular motion & Tooth contact, Maxillo-Mandibular references, and Occlusal treatment objectives. Each seminar will focus on the clinical application of the material. (Quarters 5-8.)

**OR 502. Microimplant I. 2 Units.**

The objective of the course is to comprehensively review the factors related to safety and stability of orthodontic microimplants and their clinical application in orthodontic treatment. Students will be expected to read and understand background material in assigned articles for seminar discussions. They will also present their own clinical cases that utilized microimplants. (Quarters 5-6.)

**OR 503. Research Design I. 4 Units.**

An advanced course for orthodontic graduate students in which the nature of hypothesis testing, the process of clinical decision making, and the statistical methodology to be employed in each student's thesis project is discussed. (Quarters 5-8.)

**OR 504. Research Practicum and Thesis II. 5 Units.**

This is an independent research course. Under the guidance of research mentors, students develop research questions, formulate hypotheses and write a formal research proposal that includes a full literature review, statement of material and methods, execution of the research, and appropriate analysis and interpretation of data. This course is designed to enable successful completion of the MS thesis. (Quarters 5-8.)

**OR 510. Periodontic-Orthodontic Relations. 6 Units.**

This course includes the Orthodontic-Restorative-Periodontal Interface: Esthetic & Functional Considerations, Periodontal and Other Benefits of Two Phase vs. Single Phase Orthodontic Treatment, Clinical Considerations of Orthodontic Root Resorption, Periodontal Considerations in the Orthodontic Treatment of Impacted Teeth, Invisalign treatment. Part II Invisalign Treatment: What are the Latest Innovations from Invisalign and Do They make Possible Now the Successful Treatment of Complex Class, I, II, and III Malocclusions? (Quarters 5-6.)

**OR 511. Practice Management I. 4 Units.**

The goal of the Practice Management Course is to introduce and familiarize the orthodontic residents with a multitude of basic concepts that include human resource management, management systems, marketing, legal aspects of orthodontics, associateships/practice ownership, and customer service. The course includes: 1) guest lectures by orthodontists, orthodontic consultants, and other professionals connected to the specialty of orthodontics, and 2) private practice office visits both in the San Francisco Bay area and out-of-state. (Quarters 7-8.)

**OR 512. Preparation for Specialty Examination. 2 Units.**

This course will prepare the 2nd year residents for the American Board of Orthodontics Written Exam. This provides a comprehensive review of basic sciences and clinical concepts in orthodontics. This course will consist of 10 seminar sessions during the Winter and Spring quarters of the 2nd year of residency. (Quarter 7.)

**OR 514. Temporomandibular Joint Disorders. 1 Unit.**

This course provides an overview of clinical anatomy and mechanics of the TMJ, pathogenesis of degenerative TMD disorders, and various approaches on the management of TMD. (Quarter 7.)

**OR 521. Current Literature Seminar II. 4 Units.**

A review of articles appearing in orthodontic and related journals is presented using a seminar format. (Quarters 5-8.)

**OR 523. Comprehensive Case Analysis Seminar II. 4 Units.**

The seminar highlights the clinical application of various diagnostic procedures and treatment philosophies and the presentation of practical procedures in the management of unusual problems that can arise during the course of treatment. Basic and applied principles of photography and advances in computer technology are integral to this course. During each session, a Comprehensive Case Analysis is presented by the second year residents. All students then participate in discussion about the case. (Quarters 5-8.)

**OR 524. Treatment Planning Seminar II. 2 Units.**

A case presentation is prepared by the first-year residents to share initial diagnostic records in order to diagnose and treatment plan orthodontic cases. All students then participate in free-format discussion. (Quarters 5-8.)

**OR 531. Orthognathic Surgery Seminar II. 4 Units.**

This course is a joint seminar for the orthodontic and oral surgery residents that is held once a month during the first and second years of the residency program. The Orthognathic Surgery Seminar consists of case presentations by the Orthodontic and Oral and Maxillofacial Surgery faculty and residents. Emphasis is placed on diagnosis, treatment planning, management of pre- & post surgical orthodontic treatment, and understanding of treatment outcome and stability. (Quarters 5-8.)

**OR 532. Multidisciplinary Seminar II. 4 Units.**

The treatment of patients with complex dental and skeletal orthodontic, periodontal, and restorative problems that requires input from a variety of dental specialties is considered. The teaching format includes case presentations by the residents and open discussions of interdisciplinary topics. (Quarters 5-8.)

**OR 533. Retention Seminar II. 1 Unit.**

Long-term post-active treatment records provide invaluable material for studying stability of orthodontic treatment outcome. Each of the second year residents is required to present the long-term post retention patient whose active orthodontic treatment was completed at least ten years prior to the resident's year of graduation from the program. Faculty and the first year residents are participated in the discussion after the presentation. (Quarter 8.)

**OR 556. Clinical Orthodontics II. 38 Units.**

Clinical orthodontics includes various appliance systems: edgewise appliance (.018 & .022" slot), TAD, self-ligating brackets, fixed-functional appliance (Herbst, Forsus), and Invisalign for adolescent and adult patients. Clinical experience in treating orthodontic patients with a variety of problems is provided. In addition, various orthopedic appliances, including the headgear, face mask, rapid maxillary expander and other fixed auxillary appliances (LLA, TPA, Wilson distalizer) may be incorporated into specific treatment protocols. Patients are treated in the Graduate Orthodontic Clinic every afternoon Monday-Friday, as well as Thursday nights. (Quarters 5-8.)

**OR 557. Mixed Dentition Orthodontics II. 8 Units.**

In addition to a didactic portion that focuses on the review of mixed dentition articles and comprehensive case analyses, this course also includes clinical sessions that provide residents with basic knowledge and experience in treating various malocclusions in the mixed dentition stage. This course provides an understanding of facial growth and occlusal development in the mixed dentition, an ability to diagnosis and treatment plan mixed dentition cases, and an ability to evaluate growth changes and treatment outcomes. (Quarters 5-8.)

**OR 558. Surgical Orthodontics II. 3 Units.**

This course provides clinical experience in analyzing diagnostic records and formulating surgical orthodontic treatment plans for patients with major skeletal and dental disharmonies that require integration of surgical and orthodontic treatment, communication with surgeons, pre- and post- surgical orthodontic treatment, and evaluation of treatment outcomes. (Quarters 5-8.)

**OR 559. Clinical Orthodontics in Craniofacial Anomalies II. 3 Units.**

This course combines the orthodontic treatment of patients with craniofacial anomalies in the graduate clinic and attending panels provided by comprehensive KAISER and Oakland Children's Hospital Craniofacial Anomalies Teams. (Quarters 5-8.)

**OR 602. Microimplant II. 1 Unit.**

The objective of the course is to comprehensively review the factors related to safety and stability of orthodontic microimplants and their clinical application in orthodontic treatment. Students will be expected to read and understand background material in assigned articles for seminar discussions. They will also present their own clinical cases that utilized microimplants. This course will consist of 16 seminar sessions throughout the second and third year of residency. (Quarter 9).

**OR 603. Research Design II. 1 Unit.**

An advanced course for orthodontic graduate students in which the nature of hypothesis testing, the process of clinical decision making, and the statistical methodology to be employed in each student's thesis project is discussed. (Quarter 9).

**OR 604. Research Practicum and Thesis III. 6 Units.**

This is an independent research course. Under the guidance of research mentors, students develop research questions, formulate hypotheses and write a formal research proposal that includes a full literature review, statement of material and methods, execution of the research, and appropriate analysis and interpretation of data. This course is designed to enable successful completion of the MS thesis. (Quarter 9).

**OR 611. Practice Management II. 2 Units.**

The goal of the Practice Management Course is to introduce and familiarize the orthodontic residents with a multitude of basic concepts that include human resource management, management systems, marketing, legal aspects of orthodontics, associateships/practice ownership, and customer service. The course includes: 1) guest lectures by orthodontists, orthodontic consultants, and other professionals connected to the specialty of orthodontics, and 2) private practice office visits both in the San Francisco Bay area and out-of-state. (Quarter 9).

**OR 612. Ethics. 1 Unit.**

This is an intermediate-advanced course that builds on undergraduate ethics instruction and focuses on issues unique to orthodontic practice. Typical or expectable ethical problems in orthodontics are studied. Reflection and student participation is emphasized in discussions of real-life cases. (Quarter 9).

**OR 613. Orthodontics Speaker Series. 2 Units.**

This course includes various topics in orthodontics. (Quarter 9).

**OR 621. Current Literature Seminar III. 1 Unit.**

A review of articles appearing in orthodontic and related journals is presented using a seminar format. (Quarter 9).

**OR 623. Comprehensive Case Analysis Seminar III. 1 Unit.**

The seminar highlights the clinical application of various diagnostic procedures and treatment philosophies and the presentation of practical procedures in the management of unusual problems that can arise during the course of treatment. Basic and applied principles of photography and advances in computer technology are integral to this course. During each session, a Comprehensive Case Analysis is presented by the second year residents. All students then participate in discussion about the case. (Quarter 9).

**OR 624. Treatment Planning Seminar III. 1 Unit.**

A case presentation is prepared by the first-year residents to share initial diagnostic records in order to diagnose and treatment plan orthodontic cases. All students then participate in free-format discussion. (Quarter 9).

**OR 631. Orthognathic Surgery Seminar III. 1 Unit.**

This course is a joint seminar for the orthodontic and oral surgery residents that is held once a month during the first and second years of the residency program. The Orthognathic Surgery Seminar consists of case presentations by the Orthodontic and Oral and Maxillofacial Surgery faculty and residents. Emphasis is placed on diagnosis, treatment planning, management of pre- & post surgical orthodontic treatment, and understanding of treatment outcome and stability. (Quarter 9).

**OR 632. Multidisciplinary Seminar III. 1 Unit.**

The treatment of patients with complex dental and skeletal orthodontic, periodontal, and restorative problems that requires input from a variety of dental specialties is considered. The teaching format includes case presentations by the residents and open discussions of interdisciplinary topics. (Quarter 9).

**OR 656. Clinical Orthodontics III. 9 Units.**

Clinical orthodontics includes various appliance systems: edgewise appliance (.018 & .022" slot), TAD, self-ligating brackets, fixed-functional appliance (Herbst, Forsus), and Invisalign for adolescent and adult patients. Clinical experience in treating orthodontic patients with a variety of problems is provided. In addition, various orthopedic appliances, including the headgear, face mask, rapid maxillary expander and other fixed auxiliary appliances (LLA, TPA, Wilson distalizer) may be incorporated into specific treatment protocols. Patients are treated in the Graduate Orthodontic Clinic every afternoon Monday-Friday, as well as Thursday nights. (Quarter 9).

**OR 657. Mixed Dentition Orthodontics III. 2 Units.**

In addition to a didactic portion that focuses on the review of mixed dentition articles and comprehensive case analyses, this course also includes clinical sessions that provide residents with basic knowledge and experience in treating various malocclusions in the mixed dentition stage. This course provides an understanding of facial growth and occlusal development in the mixed dentition, an ability to diagnosis and treatment plan mixed dentition cases, and an ability to evaluate growth changes and treatment outcomes. (Quarter 9).

**OR 658. Surgical Orthodontics III. 1 Unit.**

This course provides clinical experience in analyzing diagnostic records and formulating surgical orthodontic treatment plans for patients with major skeletal and dental disharmonies that require integration of surgical and orthodontic treatment, communication with surgeons, pre- and post- surgical orthodontic treatment, and evaluation of treatment outcomes. (Quarter 9).

**OR 659. Clinical Orthodontics in Craniofacial Anomalies III. 1 Unit.**

This course combines the orthodontic treatment of patients with craniofacial anomalies in the graduate clinic and attending panels provided by comprehensive KAISER and Oakland Children's Hospital Craniofacial Anomalies Teams. (Quarter 9).

## Pediatric Dentistry (PD)

### Department Chairperson

**Alfred Jeffrey Wood**

*Professor of Pediatric Dentistry*

## Faculty

### B

**Nicolas Bronzini**

*Assistant Professor of Pediatric Dentistry*

BS, University of California, Davis, Biological Sciences, 2002

DDS, University of the Pacific - School of Dentistry, Dentistry, 2005

University of Southern California, Pediatric Dentistry, 2007

## C

### Alice Chan

*Assistant Professor of Pediatric Dentistry*

BS, University of the Pacific, Biological Science, 2009

DDS, University of the Pacific, Dentistry, 2012

Other, Lutheran Medical Center SF, AEGD, 2013

Other, Tufts University, Pediatric Dentistry, 2016

### Virginia S. Conner

*Assistant Professor of Pediatric Dentistry*

BS, Duke University, Biology, 1994

DDS, University of the Pacific, Dental Surgery, 1999

MS, University of Michigan, Pediatric Dentistry, 2002

UCSF, AEGD, 2000

## G

### Geraldine Geroges Gaid

*Assistant Professor of Pediatric Dentistry*

DMD, Université de Montréal, Dental Medicine, 2008

MA, Horce H. Rackham, School of Graduate Studies, Master's Degree in Pediatric Dentistry, 2013

Other, College Jean-de-Brebeuf, Health Sciences, 2003

Other, College Sainte-Marcelline, Science, 2001

Other, McGill University-Montreal Children's Hospital, Multi-disciplinary training program in dentistry, 2009

Other, University of Michigan-School of Dentistry, Certificate in Pediatric Dentistry, 2013

## H

### Charles W Halterman

*Assistant Professor of Pediatric Dentistry*

BS, Chico State College, 1976

DDS, University of California, San Francisco, Dentistry, 1980

Eastman Dental, Pedo Certificate, 1973

MA, University of the Pacific, School of Dentistry, 1993

### Frank Robert Hodges

*Assistant Professor of Pediatric Dentistry*

DDS, University of the Pacific, Dentistry, 1971

MSD, Seattle Children's Orthopedic Hospital, Dentistry, 1975

MSD, University of Washington School of Dentistry, Dentistry, 1975

University of California, Santa Barbara, 1966

## L

### David W. Lee

*Assistant Professor of Pediatric Dentistry*

A.B., University of California at Berkeley, Integrative Biology, 1991

D.D.S., University of the Pacific School of Dentistry, Dentistry, 1988

## M

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DDS, Escuela Nacional de Estudios Profesionales, Dental Degree, 1981

Universidad Latinoamericana, School of Dentistry, Mexico City,

Orthodontics, 1992

Universidad Latinoamericana, School of Dentistry, Mexico City, Pediatric Dentistry, 1990

### Stephanie D. Moniz

*Assistant Professor of Pediatric Dentistry*

BS, University of Santa Barbara, Pharmacology, 2006

Children's Hospital of Wisconsin, Pediatric Dentistry, 2011

DDS, University of the Pacific, Dentistry, 2009

## P

### Robert C. K. Peng

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BA, Duke University, 1986

DDS, University of California, Los Angeles, School of Dentistry, 1995

Santo Domingo Dominican Republic, 1983

University of California, Los Angeles, School of Dentistry, Pediatric Dental

Residency, 1998

### Nikki Pung-Yamato

*Assistant Professor of Pediatric Dentistry*

DDS, University of the Pacific, Dentistry, 2009

Interfaith Medical Center, Pediatric Dentistry / Board Certified, 2011

## W

### Alfred Jeffrey Wood

*Professor of Pediatric Dentistry*

BS, Virginia Commonwealth University, Biology, 1980

DDS, Medical College of Virginia, Dentistry, 1984

Medical College of Virginia, Pediatric Dentistry, 1987

## Adjunct Faculty

## A

### Shilpa Avula

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DDS, University of the Pacific School of Dentistry, General Practice Dentistry, 2001

Montefiore Medical Center at Albert Einstein College of Medicine, New York, NY, General Practice Dentistry, 2002

St. Barnabas Hospital, New York, NY, Certificate in Pediatric Dentistry, 2004

University of the Pacific, 2+3 Honors Program, 1998

## F

### Niki Fallah

*Adjunct Assistant Professor of Pediatric Dentistry*

BA, UC Berkeley, American Studies, 2003

DDS, USC, Dentistry, 2010

MS, UCSF, Oral and Craniofacial Sciences, 2014

Other, UCSF, Pediatric Certificate, 2014

## G

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AB, California State University, Sacramento, General Science, 1997

BS, University of California Berkeley, Science, Resource Economics and Policy, 1996

DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, General Dentistry, 2008

MS, University of California, San Francisco, Pediatric Dentistry, 2011

## H

### May Hayder

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Certificate, University of Southern California, Advanced Education in General Dentistry, 2007  
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#### **Graham Hearn**

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Certificate, University of Virginia Medical Center, Certificate, General Practice Residency, 2014  
DDS, University of the Pacific, Doctor of Dental Surgery, 2012  
MSD, University of Washington - Seattle, WA, Master of Science in Dentistry and Certificate, Pediatric Dentistry, 2016  
University of California, San Diego, Bachelor of Science, Animal Physiology and Neuroscience, 2008

## **K**

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BS, University of Pacific, Biology, 2006  
DDS, Arthur A. Dugoni School of Dentistry, DDS, 2009  
Other, St. Barnabas Hospital, GPR, 2010  
Other, St. Barnabas Hospital, Pediatric Dentistry, 2012

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Certificate, Maimonides Medical Center, Pediatric Dentistry, 2009  
DMD, University of Pennsylvania, Dentistry, 2007

#### **Karen Kishiyama**

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BS, California Institute of Technology, Chemical Engineering, 2002  
DDS, UCSF, Dentistry, 2010  
MS, California Institute of Technology, Materials Science, 2004  
Other, UCSF, Pediatric Dentistry, 2013

## **L**

#### **Catherine M. Le**

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BS, Michigan State University, Human Biology, 2006  
Certificate, University of Vermont, Certificate of G, 2012  
DDS, New York University, Dentistry, 2011

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Kings County Hospital Center, General Dentistry, 2011  
Maimonides Medical Center, Pediatric Dentistry, 2013  
New York University

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Boston University School of Graduate Dentistry, Pediatric Dentistry, 1992  
DMD, University of the Philippines, 1986  
University of the Philippines, Pre-Doctoral, 1982

## **M**

#### **Malay Mathur**

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BDS, University of Rajasthan, Udaipur, India, Dental Surgery, 2007  
DDS, University of California, San Francisco, Dental Surgery, 2013  
MS, New York University, Biology, 2011  
Other, New York University, Advanced Certificate in Pediatric Dentistry, 2015

#### **Eric Charles McMahon**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, UC Davis, Genetics, 2001  
DDS, Harvard Dental, Specialty Certificate, 2007  
DDS, University of the Pacific, Dentistry, 2005

#### **Simon P. Morris**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, Harvey Mudd College, 1993  
DDS, University of the Pacific, 1996  
University of Southern California, Certificate of Specialization, 1998

## **N**

#### **John A Neves**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, University of California, Major: Biology Minors: German Music, 1998  
DMD, Nova Southeastern University, Doctor of Dental Medicine, 2004  
Georg-August Universitaet, Education Abroad Program, 1997  
Nova Southeastern University/Miami Children's Hospital, Certificate in Pediatric Dentistry, 2006

#### **Scott Ngai**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, University of California, Berkeley, Molecular Cell Biology/Public Health, 2007  
DDS, UoP School of Dentistry, Dentistry, 2010  
Other, University of California, Los Angeles, Pediatric Specialty, 2012

## **O**

#### **Priyal Ohri**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BA, USC, Psychology, 2008  
DDS, University of the Pacific, Dental, 2011  
UCLA GPR, 2012  
USC, Pediatric Certificate, 2016

## **R**

#### **Benjamin Robinson**

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BA, University of California, Davis, Exercise Biology, 2011  
Certificate, New York University Langone, Hawaii, Advanced Education in Pediatric Dentistry, 2018  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2016

## **S**

#### **Jamie J Sahouria**

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BS, University of the Pacific, Biological Sciences, 2001  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2004  
MS, University of Texas Health Sciences Center - Houston, Pediatric Dentistry, 2007  
University of the Pacific, Advanced Education - General Dentistry, 2005

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BS, University of California, Irvine, Biological Sciences, 1999  
Children's National Medical Center, 2009  
DDS, Columbia University College of Dental Medicine, 2005  
MPH, Columbia University Mailman School of Public Health, Health Policy and Management, 2005

MS, University of Hawaii at Manoa, Cell and Molecular Biology, 2000  
UCLA, General Practice Residency Program, 2006  
University of Hawaii at Manoa, Certificate of Public Health, 2000

**Donald C. Schmitt**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BA, University of California, Berkeley, Human Biodynamics, 1993  
DDS, University of the Pacific, 1999  
Miller Children's Hospital, Long Beach, 2001  
University of Southern California, Pediatric Dentistry, 2001

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*Adjunct Instructor of Pediatric Dentistry*  
BA, Columbia College Chicago, Business Management, 2002  
DDS, University of the Pacific School of Dentistry, Dentistry, 2014  
Loyola University Chicago, Post-Baccalaureate Pre-Health Program, 2011

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*Adjunct Associate Professor of Pediatric Dentistry*  
BA, Queens College, New York City, 1963  
DDS, State University of New York at Buffalo, School of Dentistry, Dentistry, 1967  
Harvard University, Pediatric Dentistry, 1979  
U.S. Public Health Service COSTEP Externship, Federal Medical Center, 1966

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BS, University of the Pacific, Biology, 1998  
Certificate, University of Texas, Health Science Center at Houston, Department of Pediatric Dentistry, Pediatric Dentistry, 2003  
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 2001  
MS, University of Texas, Health Science Center at Houston, Depts. of Oral Bio-Materials Pediatric Dentistry, Master of Science, 2003

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BS, UC Berkeley, Chemistry, 2007  
DDS, university of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2012  
Other, Children's Hospital Wisconsin, Pediatric Dentistry, 2014

## T

**Yogita B Thakur**

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BDS, VYWS College Hospital, General Dentistry, 1996  
MS, UCSF, Certificate Pediatric Dentistry, 2010  
MSA, University of Iowa, Dental Public Health, 2002

**Vikram Tiku**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BA, Dartmouth College, Biology, 2005  
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 2011  
Other, UNLV, Pediatric Dentistry, 2014  
Other, USC, GPR, 2014

**Brigid W Trent**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BA/BS, Marquette University, Physiology, Spanish, 2002  
BS, University of Illinois at Chicago School of Dentistry, Science in Dentistry, 2004  
Certificate, McGaw Medical Center of Northwestern University, , Lurie Children's Hospital of Chicago, Pediatric Dentistry, 2011

Children's Memorial Medical Center, Northwestern University, Pediatric Dentistry, 2011  
DDS, University of Illinois at Chicago School of Dentistry, Dentistry, 2006  
DDS, VA Medical Center, SF, General Practice Residency, 2009  
UCSF, General Practice Residency Externship, 2005  
Veterans Affairs Medical Center, General Practice Residency, 2007

**Amanda Tsoi**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, UOP, BS Biology, 2011  
Cincinnati Childrens Hospital Medical Center, Pediatric Dentistry, 2016  
DDS, UOP, Dentistry, 2014  
Other, Ohlone College, Spanish, 2007  
Other, The Umlora Institute, Italian, 2011

## V

**Vivienne L. Valdez**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, Ohio State University, Biological Sciences, Biology, 2003  
DDS, New York University College of Dentistry, Dentistry, 2007  
Part-time, Columbus State Community College, Psychology and History, 1999  
St Barnabas Hospital, Bronx, General Dental Practice, 2008  
St. Barnabas Hospital, Bronx, Pediatric Dental Residency, 2010  
Yr1-Sem1, University of Sydney, Medical Science, 1999

**Vincent Van**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, University of California, Irvine, Biological Science, 2006  
DDS, University of California, Los Angeles, School of Dentistry, 2011  
Other, New York University College of Dentistry, Advanced Education in Pediatric Dentistry, 2013

## W

**Michael Wahl**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, University of California Los Angeles, Engineering, 2006  
DDS, New York University College of Dentistry, DDS, 2010  
New York University College of Dentistry, Pediatric Dentistry, 2012

## Y

**Christian Yee**

*Adjunct Assistant Professor of Pediatric Dentistry*  
BS, University of the Pacific, Biology, 2006  
Certi., University of Southern California, Pediatric Dentistry, 2012  
DDS, UCSF Dental School, Dentistry, 2010  
Shasta Community Health Center, 2009  
USC/Children's Hospital Orange County, Pediatrics, 2012

## Course Descriptions

### Predoctoral Courses

**PD 146. Preclinical Pediatric Dentistry. 1 Unit.**

This simulation lab-based course introduces first-year IDS students to the technical aspects of preparing and restoring primary teeth and preparation of a space maintenance appliance. (2 hours lecture, approximately 6 hours lab/clinic. IDS Quarter 3.)

**PD 240. Pediatric Dentistry. 2 Units.**

The study of the physical and psychological development of the child; understanding and prevention of dental disease in children; differential diagnosis and treatment of dental and periodontal diseases and abnormalities in children; and modern concepts of behavioral guidance in children. (20 hours lecture. Quarters 5-6.)

**PD 346. Dental Auxiliary Utilization. 1-2 Units.**

Rationale and system of procedures for sit-down, four-handed dental practice, including ergonomically correct practice and work-related injury prevention. (84 hours clinic in conjunction with Clinical Pediatric Dentistry. Quarters 7-10.).

**PD 347. Clinical Pediatric Dentistry. 1 or 4 Unit.**

Study of the diagnosis, treatment planning, and comprehensive preventive and restorative dental treatment for children. (84 hours clinic in conjunction with Dental Auxiliary Utilization. Quarters 7-10.).

## Periodontics (PR)

### Department Chairperson

**William P. Lundergan**

*Professor of Periodontics*

## Faculty

### A

**Tamer Alpagot**

*Professor of Periodontics*

DDS, Ege University, Izmir, Turkey, Dentistry, 1983

Hacettepe University, Ankara, Turkey, Dentistry, 1981

PhD, Hacettepe University, Ankara, Turkey, Periodontics, 1986

PhD, University of Minnesota, Oral Biology, 1995

### B

**Gretchen J. Bruce**

*Associate Professor of Periodontics*

BA, Northwestern University, Biology, 1976

BS, University of Illinois, Bachelor of Science Dentistry 12/81, 1983

Cert, Boston University, Certificate, Periodontics 6/87, 1987

DDS, University of Illinois, Doctor of Dental Surgery 6/83, 1983

MBA, University of the Pacific, Master of Business Administration, 1999

University of Minnesota, 1973

### C

**Huei-Ling Chang**

*Assistant Professor of Periodontics*

DDS, University of California, San Francisco, Dentistry, 2005

MS, The Ohio State University, Periodontology, 2008

**Lauren K Chin**

*Instructor of Periodontics*

BA, San Francisco State University, Industrial Arts, 2007

BA, San Francisco State University, Journalism, 2007

BS, University of Pacific, Dental Hygiene, 2014

### E

**Roan Flores Espino**

*Instructor of Periodontics/Dental Hygiene*

BS, University of the Pacific, Dental Hygiene, 2010

### G

**Gary Grill**

*Assistant Professor of Periodontics*

Boston University, Certificate in Periodontics, 1980

BS, University of Maryland, BS Zoology, 1974

DDS, University of Southern California, Dentistry, 1978

## H

**Lisa A. Harpenau**

*Professor of Periodontics*

Baylor College of Dentistry, Periodontics, 1992

BS, Loyola Marymount University, Biology, 1986

BS, University of California San Francisco, Dental Sciences, 1990

DDS, University of California San Francisco, 1990

MA, University of the Pacific, Educational Administration, 2009

MBA, University of the Pacific, 1999

MS, Baylor University Graduate School, Oral Biology, 1992

**Josef A Huang**

*Assistant Professor of Periodontics*

BS, University of San Diego, Biology, 1993

DDS, Columbia University Dental, Dental, 1998

New York University, Periodontics, 2001

## K

**Candice Kieffer**

*Instructor of Periodontics/Dental Hygiene*

BS, University of the Pacific, RDH, 2009

MS, University of California San Francisco, 2017

San Joaquin Delta College, Stockton CA, 2007

## L

**Michael S. LaFlamme**

*Instructor of Periodontics/Dental Hygiene*

AS, Carrington College, Dental Hygiene, 2009

BA, San Francisco State University, Broadcasting Electronic

Communications, 1996

**Dan R. Lauber**

*Assistant Professor of Periodontics*

BA, San Fernando Valley State College, Biology, 1970

Boston University, Periodontics Certificate, 1979

DDS, University of Southern California, 1975

**Lory Laughter**

*Assistant Professor of Periodontics/Dental Hygiene*

BS, Idaho State University, Dental Hygiene, 1994

MS, University of the California, San Francisco, Dental Hygiene, 2015

**William P. Lundergan**

*Professor of Periodontics*

BS, University of California, Irvine, Biology, 1973

Certificate, University of Connecticut, Certificate of Proficiency in Periodontics, 1983

DDS, University of the Pacific, Dentistry, 1981

MA, University of the Pacific, Education, 1994

University of California, San Francisco, Pharmacy, 1978

## N

**Richard Alan Nathan**

*Associate Professor of Periodontics*

BS, Tufts College, Biology / Psychology, 1971

Certificate, UCSF Dental School, Periodontology, 1978

Denver Hospital, Denver, CO, General Practice, 1976

DMD, Tufts Dental School, Dentistry, 1975

MS, UCSF Dental School, Oral Biology, 1979

**Christopher Edmond Nucho**

*Assistant Professor of Periodontics/Dental Hygiene*

AS, West Los Angeles College, 2009

BS, University Of California, 2004  
MS, University of California, 2016

## P

### **Sohyun Park**

*Assistant Professor of Periodontics*

BS, Virginia Commonwealth University, Biology, 2006  
Certificate, Lutheran Medical Center, Upstate New York, AEGD Residency, 2011  
Certificate, School of Dental Medicine, University of Pittsburgh, Periodontology, 2017  
DDS, School of Dental Medicine, SUNY at Buffalo, Dentistry, 2010  
MDS, School of Dental Medicine, University of Pittsburgh, Department of Periodontics and Preventive Dentistry, Periodontology, 2017

### **Kavitha Parthasarathy**

*Associate Professor of Periodontics*

BDS, Bangalore University, Dental Science, 1999  
MS, SUNY at Buffalo, Periodontics, 2007

## R

### **Mustafa Radif**

*Assistant Professor of Periodontics/Dental Hygiene*

BDS, Baghdad University, Dental Surgery, 2001  
BSD, University of the Pacific, Dental Hygiene, 2012  
Cert., Diablo Valley College, Dental Laboratory Technology, 2010

## T

### **Norina Tang**

*Instructor of Periodontics/Dental Hygiene*

Hong Kong Polytechnic University, Occupational Therapy, 1988  
MA, University of the Pacific, Business Administration, 2002  
Rocky Mountain University of Health Professions, Occupational Therapy, 2011

## Adjunct Faculty

## A

### **Yasin Assadi**

*Adjunct Instructor of Periodontics*

BA, University of California, Berkeley, Integrative Biology, 2009  
BS, University of the Pacific, CA, Dental Hygiene, 2017  
MS, University of California, San Francisco, Dental Hygiene Education, 2018  
San Francisco State University, Certificate, 2012

## B

### **Eric M Blasingame**

*Adjunct Assistant Professor of Periodontics*

BS, University of the Pacific, Biochemistry, 2007  
DDS, University of the Pacific Dugoni School of Dentistry, Dentistry, 2012  
MS, University of the Pacific, Biology, 2009  
University of Alabama at Baltimore, Periodontics, 2015

## F

### **Ardavan Fateh**

*Adjunct Assistant Professor of Periodontics*

DDS, Tehran University of Medical Sciences, Tehran, Iran, Doctor of Dental Surgery, 2001

DDS, University of California, San Francisco, School of Dentistry, San Francisco, CA, Doctor of Dental Surgery (International Dentist Program), 2010

DDS, Yeditepe University, School of Dentistry, Istanbul, Turkey, Periodontology, 2005

MMSc, Harvard University, Boston, MA, Master of Medical Science in Periodontology, 2013

Other, Harvard University, Boston, MA, Postdoctoral Residency in Periodontology, 2013

University of California, Los Angeles, School of Dentistry, Los Angeles, CA, Preceptorship in Periodontology, 2008

## J

### **Bao K Jabbar**

*Adjunct Assistant Professor of Periodontics*

BS, Santa Clara University, Cell and Molecular Biology, 2006  
DMD, MPH, Arizona School of Dentistry, Dentistry, 2019  
MSD, University of Texas School of Dentistry at Houston, Periodontology, 2016

## K

### **Richard Tsu-hsun Kao**

*Adjunct Professor of Periodontics*

AB, University of California, Berkeley, Bacteriology, 1976  
Certificate, University of California, San Francisco, Periodontics, 1991  
DDS, University of California, San Francisco, Dentistry, 1982  
Fellowship, University of California, San Francisco, Post-doctoral fellow in Bone Biochemistry, 1986  
Fellowship, University of California, San Francisco, Post-doctoral fellow in Pathology, 1986  
MA, San Francisco State University, Cell Biology, 1980  
PhD, University of California, San Francisco, Experimental, 1984

## M

### **Arielle Miller**

*Adjunct Instructor of Periodontics*

BS, Santa Clara University, Biology, 2012  
BS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dental Hygiene, 2015  
Gavilan College, 2009

## R

### **Mauricio Ronderos**

*Adjunct Assistant Professor of Periodontics*

DDS, Pontificia Universidad Javeriana, Dentistry, 1992  
MPH, University of Minnesota, Epidemiology, 1999  
MS, University of Minnesota, Periodontics-Dentistry, 1999  
University of Minnesota, Periodontics, 1999

## T

### **William J. Tognotti**

*Adjunct Assistant Professor of Periodontics*

DDS, College of Physicians Surgeons (UOP), 1959  
University of San Francisco, 1955

### **Urmi Tripathi**

*Adjunct Instructor of Periodontics*

BDS, Bharti Vidyapeeth Dental College And Hospital, 2008  
MSD, Sumandeep University, Periodontics, 2013



## Z

### Joseph A. Zingale

*Adjunct Professor of Periodontics*

Adelbert College of Case Western Reserve University, 1953

BS, Case Western Reserve University, 1955

DDS, Case Western Reserve University, 1957

Letterman Army Medical Center, Periodontics, 1970

MPS, Western Kentucky University, 1974

St. Luke's Hospital Cleveland, Ohio, Rotating Internship, 1958

Walter Reed Institute of Research, Advanced Theory and Science of Dental Practice, 1968

## Course Descriptions

### Predocctoral Courses

#### PR 150. Periodontal Diseases. 1 Unit.

Introduction to periodontology, clinical and histopathological features, epidemiology, classification of periodontal diseases, pathogenesis, etiologies of periodontal disease, genetics, and risk assessment. (10 hours lecture. Quarter 4.).

#### PR 156. Preclinical Periodontics. 1 Unit.

Study of techniques for instrument sharpening, root planing, and use of ultrasonic devices. Introduction to temporary splinting, microbiologic sampling, and dental implants. (5 hours lecture, 5 hours lab. Quarter 4.).

#### PR 250. Periodontics. 3 Units.

Introduction to the methodology of collecting data, utilizing data to make a diagnosis, preparing a treatment plan, and providing initial therapy including microbial sampling and chemotherapeutics; rationale for initial therapy including elimination of local factors, occlusal correction, provisional splinting, and initial therapy evaluation; basic rationale for periodontal surgery; techniques employed in surgical periodontics including the scientific basis for surgical technique, specific indications/contraindications, and sequence in healing following gingival surgery, osseous resection, gingival augmentation, regenerative therapy, and dental implants. (30 hours lecture. Quarters 5-7.).

#### PR 251. Periodontics. 2 Units.

Introduction to basic rationale for periodontal surgery; techniques employed in surgical periodontics including scientific basis for surgical technique, specific indications/contraindications, and sequence in healing following gingival surgery, osseous resection, gingival augmentation, regenerative therapy, and dental implants. (20 hours lecture. IDS Quarters 2-3.).

#### PR 256. Clinical Periodontics I. 5 or 6 Units.

Study of periodontal examination, diagnosis, treatment planning, nonsurgical therapy, use of evidence based dentistry and self-assessment principles, periodontal re-evaluation, periodontal surgery, and supportive periodontal therapy in comprehensive clinical dental practice. (Quarters 5-8.).

#### PR 356. Clinical Periodontics II. 4 Units.

Study of periodontal examination, diagnosis, treatment planning, nonsurgical therapy, periodontal re-evaluation, periodontal surgery, and supportive periodontal therapy in comprehensive clinical dental practice. (Quarters 9-12.).

## Preventive and Restorative Dentistry (PRD)

### Department Chairperson

#### Homayon (Homer) Asadi

*Associate Professor of Biomedical Sciences*

## Faculty

### A

#### Bernadette A Alvear Fa

*Associate Professor of Preventive and Restorative Dentistry*

BS, University of the Pacific, Biology, 2003

DDS, University of the Pacific, Dentistry, 2006

National Academy of Sports Medicine, Exercise Physiology, Certified Personal Trainer, 2012

Women's Fitness Specialist (WFS), National Academy of Sports Medicine, Exercise Physiology for Women, 2014

#### Shuba Anantha

*Instructor of Preventive and Restorative Dentistry*

Certificate, University of Illinois at Chicago, College of Dentistry,

International Dentist Program, 2004

DDS, University Of Illinois at Chicago, Dentistry, 2009

#### Kalid Aziz

*Assistant Professor of Preventive and Restorative Dentistry*

Certificate, University of Iowa, College of Dentistry, Operative Dentistry, 2002

DDS, University of Los Andes, Venezuela, Dentistry, 1993

MS, University of Iowa, Operative Dentistry, 2002

### B

#### Curtis Barmby

*Assistant Professor of Preventive and Restorative Dentistry*

American Board of Prosthodontics, Diplomate, 1987

American River College, AA Pre-Dental, 1967

DDS, UCSF School of Dentistry, Dentistry, 1971

Wadsworth VA Medical Center, Certificate in Fixed Prosthodontics, 1981

#### George E. Bunnell

*Associate Professor of Preventive and Restorative Dentistry*

BS, University of San Francisco, Biology, 1962

DDS, College of Physician and Surgeons, University of the Pacific, Dentistry, 1967

### C

#### Susan Caliri

*Instructor of Preventive and Restorative Dentistry*

BS, University of San Francisco, Science, 1977

DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 1985

V.A. Medical Center, San Francisco, General Practice Residency, 1986

#### Daniel M. Castagna

*Associate Professor of Preventive and Restorative Dentistry*

BA, University of the Pacific Stockton, CA, Biology, 1978

DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1981

#### Warren Hoohang Chee

*Instructor of Preventive and Restorative Dentistry*

BS, University of California at Berkeley, Business Administration, 1978

DDS, University of Southern California School of Dentistry, Dentistry, 1982

#### Eric H. Chen

*Instructor of Preventive and Restorative Dentistry*

BS, University of the Pacific, Biochemistry, 2002

DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dental Surgery, 2009

MS, University of the Pacific, Pharmacy and Chemistry, 2007

Other, University of the Pacific, Arthur A. Dugoni School of Dentistry, Certificate: Adv Education in General Dentistry, 2011

### **Kevin Chen**

*Instructor of Preventive and Restorative Dentistry*  
BS, University California of San Diego, General Biology, 2011  
DDS, University of the Pacific, Dentistry, 2016

### **Robert H. Christoffersen**

*Professor of Preventive and Restorative Dentistry*  
BA, San Francisco State University, 1963  
DDS, University of the Pacific, Dentistry, 1967  
MA, University of the Pacific, Educational Assessment, 1980

### **Ryan Courtin**

*Instructor of Preventive and Restorative Dentistry*  
BS, UCLA, BS Biology, 2010  
DDS, UOP Dental, DDS, 2016

### **Steven Reed Curtis**

*Associate Professor of Preventive and Restorative Dentistry*  
Certificate, Bethesda National Naval Dental Center, Prosthodontic Specialty Certificate, 1992  
Chanute Air Force Base, Air Force General Practice Residency, 1983  
DDS, University of California, Los Angeles, Doctor of Dental Science, 1982  
Peterson Area Dental Laboratory, Prosthodontic Fellow Dental Laboratory, 1996  
Santa Rosa Junior College, 1977  
University of California, Davis, 1978

## **D**

### **Scott Riley Dexter**

*Instructor of Preventive and Restorative Dentistry*  
Certificate, Cedars-Sinai Medical Center, General Practice Residency, 2007  
DDS, Loma Linda University School of Dentistry, Dentistry, 2006

### **Stafford Justin Duhn**

*Assistant Professor of Preventive and Restorative Dentistry*  
BA, University of California, Berkeley, 1981  
DDS, University of the Pacific, 1984

## **E**

### **Charles M. Eliason**

*Associate Professor of Preventive and Restorative Dentistry*  
BS, University of California , Berkeley, Nutrition, 1967  
DDS, University of California, San Francisco, 1971  
MA, University of the Pacific, Education, 1979

### **Thomas C Ellerhorst**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of San Francisco, Biology, 1972  
DDS, University of the Pacific, Dentistry, 1977

### **Steven Bruce Elman**

*Instructor of Preventive and Restorative Dentistry*  
BS, City University of New York, Pre-Dentistry, 1968  
DMD, Tufts University School of Dental Medicine, Dental Medicine, cum laude, 1972

## **F**

### **Gail E. Frick**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, Scripps College, Biology, 1973  
DMD, TUFTS University - School of Dental Medicine, Dentistry, 1977

Georgetown, Graduate Biology, 1974  
UCLA, Prosthodontics Certificate, 1981

## **G**

### **Richard John Garcia**

*Associate Professor of Preventive and Restorative Dentistry*  
BS, University of San Francisco, 1971  
DDS, University of California, Los Angeles, 1975  
Veterans Administration Hospital, San Francisco, 1976

### **Ernest G. Giachetti**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of Santa Clara, 1963  
DDS, University of the Pacific , 1967

### **Tiffany Giang**

*Instructor of Preventive and Restorative Dentistry*  
BS, University of the Pacific, Biology, 2012  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2015

### **Carlos Eduardo Gonzalez Espinoza**

*Assistant Professor of Preventive and Restorative Dentistry*  
DDS, Universidad Evangelica, Dental Surgery, 1995  
New York University, Prosthodontics Certificate of Completion, 1998  
Pikos Implant Institute, Advanced Bone Grafting Procedures I II, 2009  
Private Zahn Klinik Schloss Schellestein with Prof. Fouad Khoury, Olsberg, Germany, Bone augmentation Procedures soft tissue management, 2008

## **H**

### **Foroud F. Hakim**

*Associate Professor of Preventive and Restorative Dentistry*  
ADEA Leadership Institute, 2008  
BS, San Jose State University, 1987  
DDS, University of the Pacific, 1991  
Louisiana State University, 1985  
MBA, University of the Pacific, 1999

### **Heidi K. Hausauer**

*Assistant Professor of Preventive and Restorative Dentistry*  
BA, University of the Pacific, 1982  
DDS, University of the Pacific, 1985  
VA Palo Alto, 1986

### **Rex W Hoover**

*Assistant Professor of Preventive and Restorative Dentistry*  
BA, UOP, Biology, 1970  
DDS, UCLA, 1974

### **Judy A. Hwang**

*Instructor of Preventive and Restorative Dentistry*  
BS, University of California at Los Angeles, Anthropology, 1998  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2001

### **Chelsea C. Hyun**

*Instructor of Preventive and Restorative Dentistry*  
BS, Emory University, Biology, 2010  
DMD, Tufts School of Dental Medicine, Dental Medicine, 2014

## **K**

### **Narhide Kanayama**

*Assistant Professor of Preventive and Restorative Dentistry*

BS, Tufts University, Biology, 1988  
Certificate, University of Pittsburgh, School of Dental Medicine,  
Prosthodontics, 1996  
DMD, University of Pennsylvania, School of Dental Medicine, Dental  
Medicine, 1992

**Aouse Khalil**

*Instructor of Preventive and Restorative Dentistry*  
BDS, University of Mosul, College of Dentistry, Dental Surgery, 2003  
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, 2011

**Courtney Killough**

*Instructor of Preventive and Restorative Dentistry*  
BA, University of Virginia, Biology Spanish, 2013  
DDS, Virginia Commonwealth University School of Dentistry, 2017

**Nicholas K. Kitajima**

*Instructor of Preventive and Restorative Dentistry*  
BS, University of California, Davis, Physiology, 2001  
DDS, University of the Pacific, School of Dentistry, General Dentistry, 2004  
University of the Pacific, School of Dentistry, AEGD Dentistry, 2005

**Linda Kuo**

*Instructor of Preventive and Restorative Dentistry*  
BS, UC Berkeley, Molecular Cell Biology, 2007  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry,  
Dentistry, 2013

**L**

**Eugene Edward LaBarre**

*Associate Professor of Preventive and Restorative Dentistry*  
BA, Harvard University, 1973  
DMD, Tufts University, 1977  
MS, University of North Carolina, 1981

**Marcia A Loo**

*Assistant Professor of Preventive and Restorative Dentistry*  
DDS, University of the Pacific, Dentistry, 1996

**Kenneth Gregory Louie**

*Associate Professor of Preventive and Restorative Dentistry*  
BA, University of California, Berkeley, Microbiology, 1985  
DDS, University of the Pacific, Dentistry, 1988  
MA, University of the Pacific, Education, 1994

**Jennifer Marie Low**

*Instructor of Preventive and Restorative Dentistry*  
BS, Santa Clara University, Biology, 2008  
DDS, University of the Pacific Arthur A Dugoni School of Dentistry, 2012

**M**

**Joy Magtanong-Madrid**

*Instructor of Preventive and Restorative Dentistry*  
BS, University of California, Irvine, CA, Classical Civilization, 2004  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor  
of Dental Surgery, 2011  
University of California, San Francisco, Post-Baccalaureate Certificate,  
2007

**James Edward Milani**

*Associate Professor of Preventive and Restorative Dentistry*  
BA, University of the Pacific, Biology, 1979  
DDS, University of the Pacific, 1982

**Jeffrey P. Miles**

*Associate Professor of Preventive and Restorative Dentistry*  
BA, University of California, Santa Barbara, CA, Biochemistry, 1976  
BDS, University of California, San Francisco, Dental Services, 1980  
DDS, University of California, San Francisco, CA, 1980  
University of North Carolina, Institute for Teaching and Learning, 2007  
University of Washington, Summer Institute in Clinical Dental Research  
Metho, 2006

**Anubhuti Misra**

*Instructor of Preventive and Restorative Dentistry*  
BDS, HNBG University, Dental Surgery, 2011  
DDS, University Of Southern California School of Dentistry, Dentistry, 2016  
MA, University Of California, Davis, Public Health, 2013

**Donald Missirlian**

*Assistant Professor of Preventive and Restorative Dentistry*  
DDS, Northwestern University Dental School, Dentistry, 1965  
SF State, 1978  
UCLA, 1961  
University of Iowa, School of Dentistry (Iowa City), Certificate of Specialty  
in Fixed Prosthodontics, 1981

**Matthew Mizono**

*Instructor of Preventive and Restorative Dentistry*  
BS, University of California, Los Angeles, Psychology, 2011  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, 2018

**Kathy Mueller**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of KY, 1974  
DMD, University of KY, 1980  
MS, Pursue University, 1976  
VA UCSF, Prosthodontic Certificate, 1983

**Arthur Muncheryan**

*Instructor of Preventive and Restorative Dentistry*  
BSc, U.C. Irvine, Electrical Engineering, 1972  
DDS, UCSF School of Dentistry, Dentistry, 1977

**N**

**Nilou Nadershahi**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of California Berkeley, Architecture, 1988  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry,  
Dentistry, 1991

**Warden H. Noble**

*Professor of Preventive and Restorative Dentistry*  
DDS, University of California, San Francisco, Dentistry, 1965  
MS, University of Michigan, Ann Arbor, Restorative Dentistry, 1970  
MS, University of Southern California, Education, 1968  
University of California, Berkeley, Biology, 1961

**P**

**Frances Pham**

*Instructor of Preventive and Restorative Dentistry*  
BS, University of the Pacific, Biological Sciences, 2012  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry,  
Dentistry, 2017  
Post-bac, University of the Pacific, Biological Sciences, 2013

**Allan Pineda**

*Instructor of Preventive and Restorative Dentistry*  
DDS, University of Pacific, School of Dentistry, 2002

DMD, Centro Escolar University, 1985

## R

### **Gitta Radjaeipour**

*Associate Professor of Preventive and Restorative Dentistry*  
DDS, University of the Pacific, School of Dentistry, Doctoral of Dental Surgery, 1992  
EdD, University of the Pacific, Gladys L Benerd School of Education, Education administration and leadership EDD, 2009  
San Jose State University, Pre-Dental, 1989

### **Aneet Randhawa**

*Assistant Professor of Preventive and Restorative Dentistry*  
BDS, Punjab Government Dental College and Hospital, 1988  
MDS, Punjab Government Dental College and Hospital, 1992

### **Laura K. Reid**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of California, Davis, Psychology, 1991  
DDS, University of the Pacific, Doctorate of Dental Surgery, 2000  
Vanderbilt University, Doctor of Medicine, 1996

### **Patrick L. Roetzer**

*Associate Professor of Preventive and Restorative Dentistry*  
BS, University of Wisconsin, Experimental Psychology and Biology, 1970  
DDS, Marquette University, Dentistry, 1974  
Veterans Administration Medical Center, General Practice Resident, 1975

## S

### **Steven Judd Sadowsky**

*Professor of Preventive and Restorative Dentistry*  
BA, University of California, Los Angeles, Psychology, 1967  
DDS, University of California, Los Angeles, DDS, 1971  
University of Southern California School of Dentistry, Los Angeles, Certificate, Advanced Prosthodontic Education, 1983

### **Ladan Sahabi**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of California Los Angeles, Biochemistry, 2009  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor of Dental Surgery, 2012

### **Sima Salimi**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, Fairleigh Dickinson University, Bachelors of Science in Biology, 1991  
DDS, University of the Pacific, 1994., Doctor of Dental Surgery, 1994

### **Eugene T. Santucci**

*Associate Professor of Preventive and Restorative Dentistry*  
BS, Kings College, 1964  
DDS, Temple University School of Dentistry, 1968  
Foundation for Advanced Continuing Education, Certificate of Completion, 1977  
MA, University of the Pacific, 1994  
U.S. Navy Dental Internship, Certificate of Completion, 1969

### **Noelle M Santucci**

*Associate Professor of Preventive and Restorative Dentistry*  
BS/RDH, Marquette University, Dental Hygiene/Biology, 1985  
Certificate, University of the Pacific, School of Dentistry, Advanced Education in General Dentistry Cert., 1992  
DDS, University of the Pacific, School of Dentistry, Dentistry, 1991  
MA, University of the Pacific, Benerd School of Education, Educational Psychology and Counseling, 1994

### **Robert Savage**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of California Irvine, Biological Sciences, 1993  
DDS, Northwestern University, Dentistry, 1997  
Other, University of California San Francisco, Prosthodontics, 2006

### **Karen A. Schulze**

*Associate Professor of Preventive and Restorative Dentistry*  
DDS, University of Leipzig, Germany, Dentistry, 1992  
PhD, University of Leipzig, Germany, Oral Surgery, 1998  
Post-doc, UC San Francisco, Post-Doc in Dental Materials, 2002

### **Roxanna R. Shafiee**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of San Francisco, Biology, 1993  
DDS, University of the Pacific, Dentistry, 1997  
MSD, University of the Pacific, Dentistry, Orthodontics, 2009

### **Dennis Daizo Shinbori**

*Associate Professor of Preventive and Restorative Dentistry*  
BA, University of the Pacific, 1972  
DDS, University of the Pacific, Dentistry, 1975  
Other, Lowell High School, 1968

### **Bina Surti**

*Associate Professor of Preventive and Restorative Dentistry*  
AEGD, Case Western Reserve University, AEGD, 1996  
BS, Wayne State University, Biology, 1991  
Case Western Reserve University, Fellowship, 1997  
DDS, University of Detroit Mercy, Dentistry, 1995

## T

### **Walter Tickner**

*Assistant Professor of Preventive and Restorative Dentistry*  
BA, University of California, Berkeley, Paleontology, 1968  
DDS, University of California, Los Angeles, Dentistry, 1973  
Diablo Valley College, General Education for transfer to UC, 1966

### **Michael T. Tiller**

*Instructor of Preventive and Restorative Dentistry*  
BS, University of Oregon, 1995  
DDS, University of the Pacific, Dentistry, 1999

### **Konni Kawata Tittle**

*Instructor of Preventive and Restorative Dentistry*  
CSUF, Biology, 1984  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1989  
Indiana University, Biology - Undergraduate, 1985  
Indiana University, School of Dentistry, 1987

### **Chi Dinh Tran**

*Associate Professor of Preventive and Restorative Dentistry*  
DDS, Medical College of Virginia, 1979  
University of California, San Francisco, Certificate in Prosthodontics, 1984  
University of Richmond, 1973

### **Steven Truman**

*Instructor of Preventive and Restorative Dentistry*  
Cañada College, Associate of Science in Interdisciplinary Studies with Emphasis in Natural Science Mathematics, 2013  
DDS, University of the Pacific Arthur A. Dugoni, 2016

## W

### **Erich Werner**

*Assistant Professor of Preventive and Restorative Dentistry*  
BS, San Jose State University, Biology, 1984  
DDS, UOP School of Dentistry, 1988

## Adjunct Faculty

### B

#### **Eric Barrientos**

*Adjunct Instructor of Preventive and Restorative Dentistry*  
BS, San Jose State University, Accounting, 1988  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry,  
Dentistry, 1996  
Foothill College, Sciences, 1993

#### **Druthil Belur**

*Adjunct Instructor of Preventive and Restorative Dentistry*  
BDS, R. V. Dental College, Dentistry, 2003  
DMD, Boston University Goldman School of Dental Medicine, Dentistry,  
2007  
MS, Texas AM College of Dentistry, Prosthodontics, 2018

#### **Charles Bocks**

*Adjunct Instructor of Preventive and Restorative Dentistry*  
BS, Linfield College, Biology, 1967  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, 1972

#### **Philip M. Buchanan**

*Adjunct Associate Professor of Preventive and Restorative Dentistry*  
DDS, University of Southern California, School of Dentistry, Dentistry, 1968  
EdD, University of the Pacific, Benerd School of Education, Dental  
Education, 2016

### G

#### **Marc J. Geissberger**

*Adjunct Professor of Preventive and Restorative Dentistry*  
BS, St. Mary's College of California, Bachelors of Science in Biology, 1988  
CPT, National Academy of Sports Medicine, Exercise Physiology, 2009  
DDS, Doctor of Dental Surgery, University of the Pacific, Dentistry, 1991  
MA, University of the Pacific, Master of Arts in Educational Psychology,  
1994

#### **Juan Gomez**

*Adjunct Instructor of Preventive and Restorative Dentistry*  
DDS, University Of The Pacific, Dugoni School Of Dentistry, 1985  
University Of Southern California, Los Angeles, Chemistry, 1982

### H

#### **W. Peter Hansen**

*Adjunct Associate Professor of Preventive and Restorative Dentistry*  
BS, UOP Bachelor of Science Biology, 1966  
Certificate, University of Southern California School of Dentistry  
Advanced Prosthodontics, 1979  
DDS, University of the Pacific School of Dentistry, 1971  
Mercy Hospital School of Medicine Technology, 1967

### I

#### **Todd Iverson**

*Adjunct Instructor of Preventive and Restorative Dentistry*  
BS, University of Utah, Biology, 1992  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, 2002

### K

#### **Parag R. Kachalia**

*Adjunct Associate Professor of Preventive and Restorative Dentistry*  
BS, University of California, Davis, Physiology, 1998  
DDS, University of the Pacific, Dentistry, 2001  
Minor, University of California at Davis, Managerial Economics, 1998

### N

#### **Molly P. Newlon**

*Adjunct Associate Professor of Preventive and Restorative Dentistry*  
BA, UCLA, Fine Arts/Dance, 1975  
DDS, University of the Pacific, Dentistry, 1982  
GPR Cert., Veterans Administration Hospital, general practice residency,  
1983  
MA, UCLA, Dance Therapy, 1977  
UCSB, General Education, 1973

### P

#### **Marina Pampalone**

*Adjunct Instructor of Preventive and Restorative Dentistry*  
BA, California State University, Northridge, Biological Sciences, 1985  
DDS, UOP School of Dentistry, Dentistry, 1988

### T

#### **Sharareh Tajbakhsh**

*Adjunct Assistant Professor of Preventive and Restorative Dentistry*  
BS, University of California, San Diego, Biochemistry cell Biology, 1996  
DDS, University of the Pacific, Dental School, Dentistry, 2001

#### **Steven M. Toschi**

*Adjunct Instructor of Preventive and Restorative Dentistry*  
DDS, Georgetown University, Dentistry, 1985  
UC Davis, Biology, 1981

### U

#### **Jacqueline O Uy**

*Adjunct Instructor of Preventive and Restorative Dentistry*  
BA, Ateneo de Manila University, Psychology, 2007  
DDS, University of the Pacific, Dentistry, 2016

### W

#### **Richard H. White**

*Adjunct Associate Professor of Preventive and Restorative Dentistry*  
BA, Albion College, Biology, 1971  
CalTeach I and CalTeach II, 2013  
DDS, University of Michigan School of Dentistry, Dentistry, 1975  
University of Washington, Summer Institute in Clinical Dental Research  
Metho, 2010  
US Public Health Service, General Practice Dental Residency, 1976

## Course Descriptions

### Predocctoral Courses

#### **PRD 131. IPS I: Fundamentals in Restorative Dentistry. 15 Units.**

Students will learn basic concepts of dental anatomy, tooth morphology, dental materials, bonding, occlusion, and cariology; caries risk assessment and the ADA classification of dental caries; diagnosis and treatment planning for restorative dentistry; treatment planning of restorations; rationale and criteria for restorations; introduction to implant and removable dentistry; fabrication of articulated diagnostic casts from preliminary alginate impressions; CAD/CAM and digital dentistry; arbitrary and the ois dento-facial analyzer mounting techniques; color and shade selections, restoration of damaged teeth with fillers and/or post placement in endodontically treated teeth; preparation design and execution of full veneer, monolithic, zirconia, lithium disilicate, porcelain-fused-to-metal and porcelain-fused-to-zirconia crowns; anterior and posterior fixed prostheses (bridges); fabrication of provisional restorations utilizing direct and indirect techniques for single crowns and provisional fixed prostheses (bridges) based on knowledge of principles of treatment planning, path of insertion, resistance and retention forms, and fabrication of provisional restorations.

#### **PRD 134. Professionalism & Dentistry. 1.5 Unit.**

This course provides the student with an understanding of dentistry as a profession, including multi-disciplinary skills and all relevant ethical concepts and decision-making models to deal effectively with typical situations in patient care. It presents information from historical and contemporary perspectives with an emphasis on the responsibility of the student dentist as a member of the profession. Humanism, ethics, communication skills, ergonomics, self-care, and stress management are also discussed.

#### **PRD 137. Local Anesthesia. 1 Unit.**

Students review basic anesthesia delivery techniques and apply them to a clinical situation. Students will learn new injection technique and how to overcome difficulties in mandibular anesthesia. In the self-study component, students will conduct independent research and summarize their findings in writing. (Quarter 4).

#### **PRD 138. Advanced Restorative Technique. 0.5-2 Units.**

This hands-on course, referred to as "A.R.T" block, utilizes extracted human teeth to simulate a multitude of clinical procedures. Students will perform advanced techniques focused on adhesive dentistry and digital dentistry. (Quarter 4.).

#### **PRD 139. Clinical Transitions. 0.5-1 Units.**

A hands-on course focused on caries detection evaluation and removal techniques in extracted human teeth. Students will also participate in seminars that highlight Dugoni's clinical process and procedures relating to reconstructive dentistry. (Quarter 4.).

#### **PRD 144. Professionalism & Dentistry II. 2 Units.**

This course provides the student with a deeper understanding of dentistry as a profession, including multi-disciplinary skills and all relevant ethical concepts and decision-making models to deal effectively with typical situations in patient care. It is based on foundational concepts presented in PRD 134, and introduces normative principles and case-based discussions to simulate application to patient care.

#### **PRD 146. Integrated Preclinical Technique I: Direct Restorative. 9 Units.**

This course teaches students to prepare teeth for Class I, II, III, IV and V cavity preparations for filling with amalgam and composite restorative materials. Students are taught a range of techniques depending on the extent of caries, from minimally invasive to traditional amalgam preparations. Other subjects covered include the use of liners, matricing systems, and buildup materials. Students work in the simulation clinic on plastic typodont teeth in a mannequin and are evaluated with technique practical examinations.

#### **PRD 147. Integrated Preclinical Technique I: Indirect Restorative. 10 Units.**

Students learn laboratory skills to simulate reconstructive dentistry procedures as they relate to a "family" of patient cases. Starting with dental anatomy wax ups and all-ceramic preparations and progressing through PFM and gold and partial coverage restorations, an emphasis is on conservation of tooth structure and maintaining or enhancing esthetics. Students learn single and multiple tooth rehabilitation as projects increase in complexity throughout the year and culminate in treatment planning in preparation for digital dentistry (CAD/CAM). Ample time is spent on the adhesive protocols for cementation. Related topics addressed are post and core replacement, laboratory skills, and general dental procedures such as impression taking and model work.

#### **PRD 151. Integrated Preclinical Concepts I: Capstone. 2 Units.**

As a component of the Integrated Preclinical Preventive and Restorative Dentistry curriculum, students learn how to treat an integrated Posterior Restorative case and an Anterior Restorative case. Students are introduced to the concepts of a Smile Design, Esthetic wax-up, Core build-up, Lithium Disilicate crown prep, provisional and a final impression of each case. All-ceramic restorations are emphasized in later weeks with an emphasis on conservation of tooth structure and maintaining or enhancing esthetics is woven through all projects. Cases increase in complexity throughout the quarter and treatment planning accompanies all projects. Ample time is spent on the adhesive protocols for Restoration Cementation. Related topics included in this component are Post and Core placement, laboratory skills, general dental procedures such as Impression-taking and model work and shade selection in Restorative Dentistry. Lithium-Disilicate veneer preps and provisional restorations are also taught during this course. Finally, an integrated OSCE-type multiple-choice exam is given to help evaluate student competency in the concepts of Preventive and Restorative Dentistry. (Quarter 4).

#### **PRD 155. Integrated Preclinical Technique I: Capstone. 2-3 Units.**

As a component of the Integrated Preclinical Preventive and Restorative Dentistry curriculum, students will be evaluated on their mastery of laboratory skills and simulation of Restorative Procedures presented in this course. Cases increase in complexity throughout the quarter and treatment planning accompanies all projects. Students simulate the treatment of an integrated Posterior and Anterior case utilizing the principles and techniques taught in the Dental Anatomy, Direct and Indirect Restorative Dentistry courses in Quarter One through Three. Students perform a Smile Design on their simulated patient, prepare teeth #6-11 for Lithium Disilicate Porcelain Veneers and create Provisional (temporary) Restorations. An All-ceramic Onlay preparation and Provisional are also fabricated. A Restoration shade exercise is completed. During the last week of this course, the students remove the dental material Gutta-Percha, from an endodontically-treated tooth, create a post space and cement a Fiber Post utilizing the Prelude Bonding System and Rock-core build-up material. (Quarter 4).

**PRD 172. Fundamentals and Application of Local Anesthesia. 2 Units.**

In this course students will learn and apply basic techniques and fundamentals of local anesthesia, and discuss mandibular and maxillary difficulties in anesthesia and pain management. Knowledge gained in this course will help students appropriately apply current anesthesia concepts to general dentistry.

**PRD 173. Integrated Preclinical Concepts I: Direct and Indirect Restorative. 7 Units.**

This course introduces students to operative dentistry, dental anatomy, occlusion, and fixed prosthodontics in a comprehensive, integrated format with an emphasis on clinical applications. Foundational knowledge of direct and indirect restorative materials is presented. Indications and principles of preparations for restoring teeth with amalgam and composite resins, including techniques for placement of these direct restorations are introduced. Additionally, correct ergonomics for a dental practitioner, hand piece techniques, rubber dam application and tooth morphology are covered. Sequencing treatment is incorporated through the use of simulated clinical patient cases. Clinical photography with a hands-on training session is taught. The rationale and criteria for full cast gold and ceramic crowns, including the preparation designs for individual teeth and fixed partial dentures is introduced. Traditional and digital impression techniques and provisional fabrications are also taught. Emphasis is placed on the development of hand skills and self-evaluation of the student's own work. Development of critical thinking skills is achieved through a literature review project. (IDS Quarters 1 & 2.).

**PRD 174. Integrated Preclinical Concepts I: Advanced Direct and Indirect Restorative. 2 Units.**

The second course of the series continues with the integration of the disciplines of operative dentistry, fixed prosthodontics, and removable prosthodontics. Advanced restorative procedures, direct and indirect esthetic posterior restorations, and anterior esthetic reconstruction by creating a smile design and fabricating indirect porcelain veneers are covered. Advanced concepts in occlusion are introduced using wax up projects. Complex multi-disciplinary simulated cases are introduced where treatment planning and sequencing is reinforced. Digital dentistry advanced concepts such as CAD/CAM and Lasers are introduced to the students, which includes hands-on training sessions. Placement of fiber posts on an endodontically treated tooth is covered. Emphasis is placed on the student's ability to apply principles taught in the first two quarters to simulated clinical situations. (IDS Quarter 3.).

**PRD 175. Integrated Preclinical Technique I: Direct and Indirect Restorative. 8 Units.**

This course introduces students to operative dentistry, dental anatomy, occlusion, and fixed prosthodontics in a comprehensive, integrated format with an emphasis on clinical applications. Foundational knowledge of direct and indirect restorative materials is presented. Indications and principles of preparations for restoring teeth with amalgam and composite resins, including techniques for placement of these direct restorations are introduced. Additionally, correct ergonomics for a dental practitioner, hand piece techniques, rubber dam application and tooth morphology are covered. Sequencing treatment is incorporated through the use of simulated clinical patient cases. Clinical photography with a hands-on training session is taught. The rationale and criteria for full cast gold and ceramic crowns, including the preparation designs for individual teeth and fixed partial dentures is introduced. Traditional and digital impression techniques and provisional fabrications are also taught. Emphasis is placed on the development of hand skills and self-evaluation of the student's own work. (IDS Quarters 1 & 2.).

**PRD 176. Integrated Preclinical Technique I: Advanced Direct and Indirect Restorative. 6 Units.**

The second course of the series continues with the integration of the disciplines of operative dentistry, fixed prosthodontics, and removable prosthodontics. Advanced restorative procedures, direct and indirect esthetic posterior restorations, and anterior esthetic reconstruction by creating a smile design and fabricating indirect porcelain veneers are covered. Advanced concepts in occlusion are introduced using wax up projects. Complex multi-disciplinary simulated cases are introduced where treatment planning and sequencing is reinforced. Digital dentistry advanced concepts such as CAD/CAM and Lasers are introduced to the students, which includes hands-on training sessions. Placement of fiber posts on an endodontically treated tooth is covered. Emphasis is placed on the student's ability to apply principles taught in the first two quarters to simulated clinical situations. (IDS Quarter 3.).

**PRD 230. Integrated Preclinical Concepts II: Removable Prosthodontics. 3 Units.**

This didactic course provides students with the foundational knowledge in removable prosthodontics needed to build a strong foundation for critical assessment, evidence-based practice, and lifelong learning in the dental profession. Formative and summative assessment will be used frequently to appraise students' grasp of principles related to the partially edentulous and fully edentulous patient. Course material includes the full scope of removable prosthodontic treatment for partially and completely edentulous patients, including patho-physiology of tooth loss; diagnosis and treatment planning for transitional and definitive removable dentures; fabrication of partial and complete dentures; follow-up, recall, and problem-solving for patients with removable dentures. (Quarters 5 & 6, IDS Quarters 1 & 2).

**PRD 231. Integrated Preclinical Concepts II: Occlusion. 1-2 Units.**

This course is part of the Integrated Preclinical Transition for second year DDS students and provides a broad overview of occlusion combined with an occlusion philosophy for the students to utilize as "safe beginners" in the student clinic and upon graduation. The curriculum is designed to develop the students' occlusal awareness and for students to know when to refer more complex occlusal problems. The concept of "optimal occlusion" is taught as a model to utilize when designing new restorations and larger restorative cases. Topics include temporomandibular joint and muscle anatomy, anterior guidance, occlusal exam and TMJ analysis, inter-occlusal records, centric relation and taking a centric relation record, VPS final impression, marking media, mandibular movements, red flags, parafunction and levers, splint types, esthetic and functional wax-up, posterior wax-up, the smile design process, custom incisal guide table and occlusal equilibration. (Quarter 5).

**PRD 232. Integrated Preclinical Concepts II: Implant Dentistry. 1 Unit.**

The concepts part of the pre-clinical Implant Dentistry course will focus on introducing implant dentistry in a streamlined fashion to the pre-doctoral students. Lecture topics will include Introduction to Implants, Diagnostic Regimen, Biomechanics of Loading, Virtual Imaging, Soft Tissue and Hard tissue grafting for esthetics, Restorative Armamentaria, Implant Delivery and Maintenance, Implant Complications and Implants for Edentulous patients. The OSCE will facilitate critical thinking and integrate content from Occlusion. (Quarter 6, IDS Quarter 2).

**PRD 233. Integrated Preclinical Concepts II: Comprehensive Principles in Dentistry. 3 Units.**

The Concepts part of this pre-clinical course is a blend of established routine dental procedures concerned with Adhesive Dentistry, Veneer Preparation and Cementation, Ceramic Design for Inlay/Onlay Preparation, Erosion Etiology and Treatment. This is combined with an understanding of Basic Sleep principles, etiology and treatment. Block rotations are presented covering Dental Lasers, Laboratory Questions/ Answers and Restorability of Teeth. Finally, the students are introduced to CAD CAM Dental Technology, CAD CAM case selection, materials, workflow of CAD CAM Restorations, including design, mill, stain/ glaze and cementation of a full ceramic restoration. The students will participate in Evidence Based Research in a seminar format and present to their peers. (Quarter 7).

**PRD 235. Integrated Preclinical Technique II: Removable Prosthodontics. 5 Units.**

In this course, students develop laboratory and clinical skills as related to removable prosthodontics. In the partially edentulous patient, students will gain technical experience with tooth replacement with a removable prosthesis. Students will apply biomechanical principles and fundamentals of survey and prosthesis design, including base, clasp, rest, minor connector, and major connector designs. For edentulous patients and those patients with hopeless dentition, students will learn the basic clinical and laboratory phases of complete denture fabrication including diagnosis, pre-prosthetic surgery, tissue conditioning, impression, cast fabrication, record base/rim, occlusal records, chair-side esthetic arrangement, articulator mounting, anterior artificial tooth arrangement, trial denture try-in, denture processing and finishing, denture insertion, prosthetic home care patient education, and prosthetic follow-up and recall, including relin/repair and laboratory communication. Students will prescribe optimal clinical materials to be used in prosthesis fabrication and diagnose biomechanical problems from simulated case scenarios. (Quarters 5 & 6, IDS Quarters 1 & 2).

**PRD 236. Integrated Preclinical Technique II: Occlusion. 1 Unit.**

This course is part of the Integrated Preclinical Transition for second year DDS students and provides the laboratory and clinic technique knowledge, supporting the concepts learned in PRD 231. This course focuses on treatment of the dentate patient. Students gain clinical experience working on a partner in occlusal exam and TMJ analysis, centric relation record, PVS final impression and the Kois Dento-Facial Analyzer record. The students will gain knowledge in centric relation vs maximum intercuspation theories. Other learned techniques include the rehearsal of a smile design, a custom incisive guide table, and an occlusal adjustment from CR to MI. (Quarter 5).

**PRD 237. Integrated Preclinical Technique II: Implant Dentistry. 1 Unit.**

The technique part of the course will focus on lab exercises that will train the students to be competent in treating implant patients on the clinic floor. They will learn to surgically place an anterior and a posterior implant on a plastic model, learn the significance of a surgical stent and fabricate a surgical stent, learn to take closed and open tray impressions for implants, learn to fabricate a screw retained implant temporary crown and learn to convert a lower complete denture into an Overdenture. The students will learn the format for the Implant Seminar for single and multiple teeth. The quizzes are embedded in clinical videos to improve students' understanding of application of implant concepts in patient care. (Quarter 6, IDS Quarter 2).

**PRD 238. Integrated Preclinical Technique II: Comprehensive Principles in Dentistry. 3 Units.**

The Technique part of this course will focus on the following laboratory experiences: Understanding the basic laser concepts and safety protocol in using the instrument to cut various materials. Hands-on experience of a CAD CAM system to scan, design and mill a full ceramic restoration. Experience firing and customizing with principles of esthetics of custom staining and glazing a full ceramic restoration. Cementation/Bonding of a final full ceramic restoration Design and prepare a partial ceramic restoration. Hands on Veneer Preparations and methods of Cementation. Experience the sectioning of Crown Removal and Porcelain Repairs. Students will diagnose and restore patient's models following an approved treatment plan exhibiting an ideal mode of form and function. (Quarter 7).

**PRD 239. Integrated Preclinical Technique II: Clinical Occlusion. 2 Units.**

This course is about the occlusion of the natural teeth. The course will also include comparisons between the Occlusion of the natural teeth with the occlusion of implant-supported teeth and the occlusion of removable dental prosthodontics. Lectures in concepts will cover principles of occlusion and describe clinical and laboratory technique. In the technique component, students will be evaluated on their mastery of clinical and laboratory skills. Technique will include two parts. The first is the occlusal aspects of treating a typodont patient needing anterior esthetic restorations. The second involves the records, fabrication and delivery of an occlusal stabilization splint to a class-mate "patient". The course provides a broad overview of occlusion combined with an occlusion philosophy for students to utilize as "safe beginners". The curriculum is designed to develop the students' occlusal awareness and for students to know when to refer more complex occlusal problems. The concept of "optimal occlusion" is taught as a model to utilize when designing new restorations and larger restorative cases. (IDS Quarter 3).

**PRD 245. Integrated Preclinical Technique II: Applied Occlusion. 1 Unit.**

This Course is about the Occlusion of the natural teeth and is the continuation of PRD236. The course will also include comparisons between the Occlusion of the natural teeth with the Occlusion of implant-supported teeth and the Occlusion of Removable Dental Prosthodontics. In this technique course, students will be evaluated on their mastery of clinical and laboratory skills. The course focuses on treatment of the dentate patient. In the previous quarter, the students gained clinical experience in occlusal principals working and record collection on student partners. During this course, each student will participate in the clinical delivery of an occlusal stabilization splint. The splint project began in the previous quarter PRD236 and will now be completed due to the time needed by the lab to process the splints. (Quarter 6).

**PRD 277. Local Anesthesia. 1 Unit.**

Students review basic anesthesia delivery techniques and apply them to a clinical situation. Students will learn new injection technique and how to overcome difficulties in mandibular anesthesia. In the self-study component, students will conduct independent research and summarize their findings in writing. (2 hours lecture, 6 hours clinical rotation, 10 hours self-study. Quarters 5-7.).



**PRD 279. Clinical Restorative Dentistry I. 4-6 Units.**

Study of diagnosis, treatment planning, and intracoronal dental therapy, including preparation for and restoration of teeth with cast gold and porcelain inlays and onlays, composite resins, laminates, and amalgam in comprehensive clinical dental practice. Requirements include practice of operative dentistry procedures under simulated state board examination conditions. These courses also cover the diagnosis, treatment planning, and delivery of fixed prosthodontic treatment that addresses the patient's esthetic dental needs; stabilizes, improves, and protects the patients' gnathostomatic system in a comprehensive clinical dental practice. Students participate in quality assessment at clinical impression stage and at prosthesis delivery. Lab Services coordinates student dental laboratory prescriptions with private outsource laboratories. Test cases determine student competency by evaluating their ability to independently prepare a single tooth crown preparation in a specified time period. (Quarters 5-8.).

**PRD 281. Dental Implants. 1 Unit.**

The study of modern implant dentistry with emphasis on history, the physiology of osseous integration, treatment planning, implant surgery, fabrication of single and multiple tooth fixed implant restorations and implant-supported removable overdentures, laboratory steps, maintenance and implant problems. Hard and soft tissue augmentation procedures will be studied along with esthetic concerns. (10 hours lecture and laboratory. Quarter 8.).

**PRD 378. Clinical Restorative Dentistry II. 11 Units.**

Study of diagnosis, treatment planning, and intracoronal dental therapy, including preparation for and restoration of teeth with cast gold and porcelain inlays and onlays, composite resins, laminates, and amalgam in comprehensive clinical dental practice. Requirements include practice of operative dentistry procedures under simulated state board examination conditions. These courses also cover the diagnosis, treatment planning, and delivery of fixed prosthodontic treatment that addresses the patient's esthetic dental needs; stabilizes, improves, and protects the patients' gnathostomatic system in a comprehensive clinical dental practice. Students participate in quality assessment at clinical impression stage and at prosthesis delivery. Lab Services coordinates student dental laboratory prescriptions with private outsource laboratories. Test cases determine student competency by evaluating their ability to independently prepare a single tooth crown preparation in a specified time period. (Quarters 9-10.).

**PRD 379. Clinical Restorative Dentistry III. 12 Units.**

Study of diagnosis, treatment planning, and intracoronal dental therapy, including preparation for and restoration of teeth with cast gold and porcelain inlays and onlays, composite resins, laminates, and amalgam in comprehensive clinical dental practice. Requirements include practice of operative dentistry procedures under simulated state board examination conditions. These courses also cover the diagnosis, treatment planning, and delivery of fixed prosthodontic treatment that addresses the patient's esthetic dental needs; stabilizes, improves, and protects the patients' gnathostomatic system in a comprehensive clinical dental practice. Students participate in quality assessment at clinical impression stage and at prosthesis delivery. Lab Services coordinates student dental laboratory prescriptions with private outsource laboratories. Test cases determine student competency by evaluating their ability to independently prepare a single tooth crown preparation in a specified time period. (Quarters 11-12.).

**PRD 396. Clinical Removable Prosthodontics. 12 Units.**

The study of diagnosis, treatment planning, and removable prosthodontic treatment that restores masticatory function and phonetics, preserves underlying structures, results in patient comfort, and is esthetically pleasing. Course includes practice for state board removable prosthodontic procedures and simulated examination conditions. (Quarters 9-12.).

**Graduate Courses****PRD 484. Biomaterials I. 1 Unit.**

This class focuses on restorative materials such as bonding systems, buildup composites and materials for crown and bridge fabrication. It also introduces new developments in biomaterial sciences. Basic material testing principles are discussed and the material properties for NiTi alloy used in endodontics are included. (Quarter 2.).

## Conservatory of Music

<http://www.pacific.edu/conservatory/>

Phone: (209) 946-2415

Location: Stockton Campus Faye Spanos Concert Hall  
Peter Witte, Dean

## Programs Offered

**Master of Arts in Music Therapy**

The Conservatory of Music offers graduate degrees in music education and music therapy: Master of Music and Master of Arts in Music Therapy. Additionally, the Master of Education (with an emphasis in music education) is available through the Benerd College. The Conservatory of Music graduate programs give students individual faculty attention and opportunities to work with experts in their field.

Graduate students in the Conservatory of Music take a range of coursework designed to enhance their musicianship and research skills. They develop advanced skills in music therapy, conducting, pedagogy, or other areas of music specialization depending on individual career goals.

Music education degrees are designed for those with a previous degree/credential in music; in general, the Master of Music includes more coursework in music, while the Master of Education includes more education courses. Applicants who have not attained a music education degree/teaching credential previously are expected to complete the credential program as part of earning their graduate degree. Building on previous music and teaching experiences, the education programs are individualized and lead to a creative, productive career in teaching music, pre-K through college.

The Master of Arts in Music Therapy offers a choice of two tracks of study (research and clinical) that support (1) preparation for eventual entry into teaching and research careers or (2) development of advanced clinical, administrative, and program development skills.

## Comprehensive Examination

At the conclusion of the Master's programs, all students are expected to pass a comprehensive written and/or oral examination/thesis defense on all work covered during their graduate study at University of the Pacific.

## Admission Requirements

Admission to any graduate program in music at University of the Pacific is based upon both academic qualifications and musicianship, including overt musical behavior as demonstrated in performance and listening.

Academic considerations for the entering Master's student, regardless of major, are discussed in earlier pages of this catalog under Admission.

## Music Therapy Majors

1. Music Audition (live or DVD recording):
  - Candidates should prepare two contrasting pieces on their principal instrument/voice.
  - Sing two pieces from a traditional or contemporary musical repertoire with self-accompaniment on piano and guitar (proficiency on both piano and guitar is an important consideration for potential candidates). For these pieces, candidates may use sheet music or a lead sheet.
  - Sing one American folk song from memory a capella.
2. A Bachelor's degree in music or related fields.
3. Undergraduate GPA of 3.0 or better.
4. Online application form through the Graduate School.
5. 3 letters of recommendation.
6. General GRE scores (GRE is not required for applicants with GPA of 3.5 or higher.)
7. Official Transcripts
8. Statement of intent
9. Resume

## Music Therapy

The Master of Arts in Music Therapy program at University of the Pacific prepares students for a career using music-based interventions in a focused and concentrated manner to address health-related, psychological, educational, and other rehabilitative needs. The program offers students greater depth and breadth in knowledge and skills for advanced clinical competency. Through advanced learning and skill development, students will have a vital competitive advantage in the current healthcare market to provide quality patient care.

### Two paths to obtaining an MA in Music Therapy

- **Two-Year Master of Arts in Music Therapy:** This 32-unit program is designed for students who hold an undergraduate degree in music therapy (or its equivalent) and are looking for advanced-level clinical skills or research practice to secure a competitive position in today's rapidly growing health care system.
- **Three-Year Plus Internship Master of Arts in Music Therapy:** This 55-unit\* program is designed for those with a bachelor's degree in music or related fields (e.g. psychology, special education, etc.) who seek both entry-and advanced-level training in music therapy. This popular and flexible learning option starts with strong basic musicianship and adds specific knowledge and skills to meet the requirements of the Certification Board for Music Therapists (CBMT) and the American Music Therapy Association.

\* Additional units may be required depending on prior degree, coursework and experience

### Plan of Study

Students focus on their specific personal career goals by selecting a thesis or non-thesis track supporting: a) development of advanced clinical, administrative, and program development skills, or b) preparation for eventual entry into teaching and research careers.

Both tracks in the Master of Arts in music therapy program allow for flexibility in the design of individualized study plans. Master of Arts students should consult with their adviser during the first term in

residency to determine their overall plan of study and to detail their schedule of classes for each semester.

## Program Policies

1. Students must (a) maintain a minimum term and cumulative grade point average of 3.0, (b) earn a B- or better in all music therapy courses, and (c) demonstrate interpersonal and professional skills appropriate to the clinical profession as evaluated by the Music Therapy Program faculty, in order to remain in the program.
2. Students must pass the Board Certification Examination or provide evidence of current re-certification (MT-BC) status prior to completion of the Master of Arts degree in music therapy.
3. Students must demonstrate advanced clinical competencies as defined by the American Music Therapy Association (AMTA). Particular emphasis is placed upon the acquisition of advanced competencies relevant to the student's area of specialization.

### Clinical Musicianship

- Design a broad range of improvisational experiences and utilize a variety of clinical improvisation techniques for therapeutic purposes.
- Apply advanced musical skills in the clinical use of at least two of the following: keyboard, voice, guitar and/or percussion.
- Design and employ a broad range of re-creative music experiences for therapeutic purposes

### Music Therapy Theory

- Apply comprehensive, in-depth knowledge of the foundations and principles of music therapy practice.
- Articulate and defend a personal philosophy, approach and/or theory to music therapy.

### Clinical Supervision

- Design and implement methods of observing and evaluating supervisees that have positive effects on music therapy students and professionals at various levels of advancement and at different stages in the supervisory process.
- Evaluate the effects of one's own personality, supervisory style, and limitations on the supervisee and the supervisory process and seek consultation as indicated.

### Advanced Clinical Skills

- Apply comprehensive knowledge of current methods of music therapy assessment, treatment, and evaluation.
- Utilize advanced music therapy methods within one or more theoretical frameworks to assess and evaluate clients' strengths, needs and progress.

### Research

- Perform and evaluate the results of a comprehensive literature review to identify gaps in knowledge.
- Conduct research according to ethical principles for protection of human participants, including informed consent, assessment of risk and benefit, and participant selection.

## Master of Arts in Music Therapy

Students must complete a minimum of 32 units with a Pacific cumulative and major/program grade point average of 3.0 or higher in order to earn the Master of Arts degree in music therapy.

### Music Therapy Foundational Courses:

MTHR 231	Individual Music Therapy: Advanced Theory and Techniques	3
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MTHR 232	Group Music Therapy: Advanced Theory and Techniques	3
MTHR 251	Music Therapy Supervision I: Introduction to Theory and Applications	1
MTHR 252	Music Therapy Supervision II: Applied Experience	1
MTHR 260	Advanced Clinical Practice in Music Therapy *	2
MUSC 203	Contemporary Issues in Music Education and Music Therapy	3

- \* 1. Two semesters, one unit each semester.  
2. Students may fulfill one unit of this requirement by completing a Special Topics course in a clinical practice area.

Choose one of the following Options:

### Option A, Thesis Plan

EDUC 201	Techniques of Research	3
or MTHR 239 & MTHR 265	Research in Music and Human Research in Music Therapy: Supervised Experience	
MUSC 202	Introduction in Music Research	3
MTHR 299	Thesis	4

Select three of the following Specialized Electives: 9

EDUC 216	Nature and Conditions of Learning	
EDUC 330	Advanced Human Development I	
EDUC 331	Advanced Human Development II	
EDUC 335	Psychotherapeutic Interventions	
EDUC 337	Crisis Intervention	
EDUC 338	Consultation Methods	
EDUC 341	History and Systems in Psychology	
EDUC 343	Psychopathology and Wellness Promotion	
EDUC 348	Neuropsychology	
MTHR 240 & MTHR 291	Psychology of Music and Graduate Independent Study	

### Option B, Non- Thesis Plan

EDUC 201	Techniques of Research	3
or MTHR 239 & MTHR 265	Research in Music and Human Research in Music Therapy: Supervised Experience	
MTHR 245	Clinical Clerkship in Music Therapy	1
MUSC 202	Introduction in Music Research	3

Select four of the following Specialized Electives: 12

EDUC 216	Nature and Conditions of Learning	
EDUC 330	Advanced Human Development I	
EDUC 331	Advanced Human Development II	
EDUC 335	Psychotherapeutic Interventions	
EDUC 337	Crisis Intervention	
EDUC 338	Consultation Methods	
EDUC 341	History and Systems in Psychology	
EDUC 343	Psychopathology and Wellness Promotion	
EDUC 348	Neuropsychology	
MTHR 240 & MTHR 291	Psychology of Music and Graduate Independent Study	

## Master of Arts in Music Therapy - 3 Year Internship Option

Students must complete a minimum of 32 units with a Pacific cumulative and major/program grade point average of 3.0 or higher in order to earn the Master of Arts degree in music therapy.

### Pre-Board-Certification Courses:

MTHR 011	Music as Therapy: A Survey of Clinical Applications	3
MTHR 018	Basic Skills for Music Therapists and Allied Professionals	3
MTHR 020	Observation and Assessment in Music Therapy	2
MTHR 135	Music with Children in Inclusive Settings: Therapeutic and Educational Applications	3
MTHR 141	Music Therapy in Mental Health and Social Services	3
MTHR 142	Music Therapy in Medicine and Health Care	3
MTHR 150	Fieldwork in Music Therapy *	1-2
MTHR 187	Internship in Music Therapy **	1

\* Must take a total of 4 units.

\*\* Must take a total of 2 units.

### Music Therapy Foundational Courses:

MTHR 231	Individual Music Therapy: Advanced Theory and Techniques	3
MTHR 232	Group Music Therapy: Advanced Theory and Techniques	3
MTHR 251	Music Therapy Supervision I: Introduction to Theory and Applications	1
MTHR 252	Music Therapy Supervision II: Applied Experience	1
MTHR 260	Advanced Clinical Practice in Music Therapy *	2
MUSC 203	Contemporary Issues in Music Education and Music Therapy	3

\* Two semesters, one unit each semester.

Choose one of the following Options:

### Option A, Thesis Plan

EDUC 201	Techniques of Research	3
or MTHR 239 & MTHR 265	Research in Music and Human Research in Music Therapy: Supervised Experience	
MTHR 299	Thesis	4
MUSC 202	Introduction in Music Research	3

Select three of the following Specialized Electives: 6

EDUC 216	Nature and Conditions of Learning	
EDUC 330	Advanced Human Development I	
EDUC 331	Advanced Human Development II	
EDUC 335	Psychotherapeutic Interventions	
EDUC 337	Crisis Intervention	
EDUC 338	Consultation Methods	
EDUC 341	History and Systems in Psychology	
EDUC 343	Psychopathology and Wellness Promotion	
EDUC 348	Neuropsychology	

MTHR 240 & MTHR 291	Psychology of Music and Graduate Independent Study	
<b>Option B, Non-Thesis Plan</b>		
EDUC 201 or MTHR 239 & MTHR 265	Techniques of Research Research in Music and Human Research in Music Therapy: Supervised Experience	3
MTHR 245	Clinical Clerkship in Music Therapy	1
MUSC 202	Introduction in Music Research	3
Select four of the following Specialized Electives:		12
EDUC 216	Nature and Conditions of Learning	
EDUC 330	Advanced Human Development I	
EDUC 331	Advanced Human Development II	
EDUC 335	Psychotherapeutic Interventions	
EDUC 337	Crisis Intervention	
EDUC 338	Consultation Methods	
EDUC 341	History and Systems in Psychology	
EDUC 343	Psychopathology and Wellness Promotion	
MTHR 240 & MTHR 291	Psychology of Music and Graduate Independent Study	

## Course Descriptions

### Predoctoral Courses

#### **MTHR 018. Basic Skills for Music Therapists and Allied Professionals. 3 Units.**

MTHR 018 focuses on the development of applied/basic music skills necessary for implementing therapeutic music interventions with children and adults. Students increase performance competencies in the areas of singing and accompanying, and explore improvising/ composing/ arranging with instruments such as autoharp, Orff and other rhythmic/ ethnic instruments. The course includes development of song repertoire commonly used across various therapeutic settings. This course is open to non-Major. Prerequisite: MCOM 002.

#### **MTHR 011. Music as Therapy: A Survey of Clinical Applications. 3 Units.**

This course introduces the uses of music as a creative arts therapy, and it includes an overview of the history, theory, and clinical practice of music therapy across a broad range of settings. Classroom experiences, reading, films, and field observations introduce the student to various uses of music in the treatment of children and adults that are a foundation for the sequence of music therapy courses which together support development of required AMTA competencies for the professional music therapist. This course also offers an introduction to music therapy for interested persons in other health and pre-professional programs. This course is open to non-majors.

#### **MTHR 020. Observation and Assessment in Music Therapy. 2 Units.**

This course focuses on developing observation skills and assessment competencies. Students will practice implementation of standardized and therapist-constructed assessments (through simulation) to appropriately measure and monitor progress and evaluate effectiveness of music therapy interventions for children and adults. For graduate students only who need to fulfill coursework for board-eligibility through the Certification Board for Music Therapists.

#### **MTHR 135. Music with Children in Inclusive Settings: Therapeutic and Educational Applications. 3 Units.**

This course presents specific music therapy techniques and skills for development of programs for children's successful integration within home/school/community environments. Students will identify and create therapeutic music strategies to effect changes in children's academic, social, motor, and leisure skills development. This course also acquaints students with relevant music therapy/education research and current legislation regarding children within inclusive settings. Open to non-majors. Prerequisites: SPED 123 and either MTHR 018 or MCOM 002; or with instructor permission.

#### **MTHR 139. Research in Music. 2 Units.**

The application of scientific methods to investigate music therapy and related disciplines (e.g., music education and music psychology) are reviewed, including: qualitative and quantitative methods and related designs, review and evaluation of research literature, and writing a research proposal. Statistical analyses and evidence-based practice are introduced. Prerequisite: MCOM 002 or Instructor Permission.

#### **MTHR 140. Psychology of Music. 2 Units.**

This course introduces the psychological foundations of music, including the study of acoustics, perception of sound, music and neuroscience, and physical and psychosocial responses to music. Prerequisite: MTHR 139 or MTHR 239 or permission of the instructor.

#### **MTHR 141. Music Therapy in Mental Health and Social Services. 3 Units.**

This course examines theory, research, and clinical skills related to music therapy for adults, children, and adolescents in various mental health and social service treatment settings. It also includes an introduction to current DSM criteria for mental disorders commonly encountered by music therapists, and an overview of major theories of psychotherapy as they relate to music therapy. The course introduces music therapy techniques for group treatment which includes music improvisation, songwriting, and basic relaxation methods. This course is for music therapy majors only and it must be taken concurrently with Fieldwork in Music Therapy. Prerequisites: MTHR 011, MTHR 018, MTHR 135, and MTHR 140, PSYC 017 and completion of Voice, Guitar, and Piano competencies.

#### **MTHR 142. Music Therapy in Medicine and Health Care. 3 Units.**

This course provides an overview of music therapy with children, adults, and older adults in medical settings. Students survey theories, methods, and empirically supported treatments in settings such as acute care, physical rehabilitation, gerontology, palliative care, preventative medicine, and health maintenance. It also includes the study of physical and psychosocial processes natural to aging and end of life, and assists students in developing skills in improvised music for relaxation and palliative care. The course is for music therapy majors only. Prerequisites: MTHR 141, BIOL 011 and completion of Voice, Guitar, and Piano competencies.

#### **MTHR 143. Supervisory Techniques. 1 or 2 Unit.**

This course offers techniques in the supervision of music therapy fieldwork. The course is only open to music therapy majors by permission of the instructor. Prerequisites: MTHR 020, MTHR 140 and MTHR 150.

#### **MTHR 150. Fieldwork in Music Therapy. 1-2 Units.**

Fieldwork provides students with structured clinical experiences in music therapy under the supervision of a music therapist in varying community settings. This course repeated for credit and taken concurrently each semester students are enrolled in MTHR 135, MTHR 140, MTHR 141 and MTHR 142. Prerequisites: MTHR 011 and MTHR 018. This course is open only to music therapy majors, and a minimum of 4 units of Fieldwork (MTHR 150) is required for completion of the music therapy degree program.

**MTHR 187. Internship in Music Therapy. 1 Unit.**

This course consists of clinical training experience at an internship site approved by the AMTA. Successful completion of required hours and competencies allows students to sit for the Music Therapy Board Certification Examination. Prerequisites: Successful completion of all coursework and functional music skills, competency evaluation and individualized internship training plan. Students are required to enroll in MTHR 150 within the period of one year prior to the start of internship.

**MTHR 191. Independent Study. 1-2 Units.****MTHR 197D. Undergraduate Research. 1-4 Units.****MTHR 230. Bonny Method of Guided Imagery and Music Level I Training. 3 Units.**

Intensive 5-day residential seminar introduces theory and clinical applications of the Bonny Method of Guided Imagery and Music (BMGIM) and other music and imagery techniques. Participants gain intensive personal experience with BMGIM. Hands-on experiential exercises, demonstrations, and clinical examples introduce simple imagery techniques to add to participants' existing repertoire of therapeutic interventions. This residential phase of the course meets the Association of Music and Imagery (AMI) requirements for introductory training in the Bonny Method. The on-line learning component extends and deepens the student's understanding through exposure to literature in the Bonny Method, sharing of discoveries from readings and music listening, as well as personal reflection and integration of experiential learning. Due to the experiential nature of this course, participants must be willing to participate in all learning activities and in the group sharing process, and attend all seminar sessions as listed in the residential seminar course schedule. All students and instructors are expected to maintain confidentiality of personal material shared by group members. Prerequisites: Evidence of clinical experience and permission of instructor.

**MTHR 231. Individual Music Therapy: Advanced Theory and Techniques. 3 Units.**

This course explores current theories and techniques of music-centered psychotherapy for supportive, re-educative/rehabilitative, and re-constructive levels of clinical practice with a variety of populations. The course includes development of therapeutic relationship through music improvisation, and focused music-evoked imagery to address supportive and re-educative goals for individual clients. Experiential learning includes classroom simulations and supervised clinical practice. Prerequisites: MTHR 187 (or an AMTA-approved clinical internship) and MTHR 230 (or Level I training in the Bonny Method of Guided Imagery and Music) or permission of instructor.

**MTHR 232. Group Music Therapy: Advanced Theory and Techniques. 3 Units.**

This course examines theories and models for group music therapy with applications for a variety of clinical populations. The course includes approaches for quick group assessment and brief treatment environments. The focus is on therapist and member roles and tasks within group development processes. Students refine group facilitation skills that use music-centered techniques of improvisation and music-evoked imagery through in-class simulations and supervised clinical practice. Prerequisite: MTHR 231 with a "B" or better or permission of instructor.

**MTHR 239. Research in Music. 2 Units.**

The application of scientific methods to investigate music therapy and related disciplines (e.g., music education and music psychology) are reviewed, including: qualitative and quantitative methods and related designs, review and evaluation of research literature, and writing a research proposal. Statistical analyses and evidence-based practice are introduced. Prerequisite: MCOM 002 or Instructor Permission.

**MTHR 240. Psychology of Music. 2 Units.**

This course introduces the psychological foundations of music, including the study of acoustics, perception of sound, music and neuroscience, and physical and psychosocial responses to music. Prerequisite: MTHR 139 or MTHR 239 or permission of the instructor.

**MTHR 245. Clinical Clerkship in Music Therapy. 1-4 Units.**

As an alternate requirement for Thesis, Clinical Clerkship is designed for students who may want to focus on clinical skills and knowledge. Students complete a major project related to an applied therapeutic or educational setting.

**MTHR 251. Music Therapy Supervision I: Introduction to Theory and Applications. 1 Unit.**

This course provides a foundation for effective music therapy clinical supervision. It introduces multicultural, ethical, and legal considerations and explores factors unique to music therapy supervision. Readings, workbook assignments, field observations and in-class discussion of theories and techniques prepare students for MTHR 252, and practical experience supervising undergraduate students in clinical training settings. Prerequisite: MTHR 187 or an AMTA approved clinical internship.

**MTHR 252. Music Therapy Supervision II: Applied Experience. 1 Unit.**

This course provides mentored practice in clinical supervision and it supports individualized skill development of competencies for professional participation in clinical management and student, volunteer, or peer supervision situations. Learning experiences include direct on-site supervision of undergraduate music therapy students in fieldwork placements, maintaining the on-site learning environment, monitoring student progress, conducting formal evaluations, conducting group student supervision and regular participation in supervisors group consultation meetings with faculty. Prerequisite: MTHR 251 with a "B" or better.

**MTHR 260. Advanced Clinical Practice in Music Therapy. 1 Unit.**

This course provides individualized experiences for development of advanced clinical skills in music therapy. Students may focus on a new area of specialization, or may work within a familiar clinical environment that develops skills at a more advanced level. Experiences may include supervised practice in advanced music therapy techniques, interdisciplinary collaboration, new program development, or expansion of an existing clinical program. Prerequisites: two semesters of MTHR 187 or clinical internship.

**MTHR 265. Human Research in Music Therapy: Supervised Experience. 1 Unit.**

This course offers individualized experiences for development of advanced research skills in music therapy. It provides faculty oversight and supervision of human research in clinical or laboratory settings. Students may focus on their own independent research project or may work within a collaborative or faculty-directed research environment. It is required for students who conduct summer research activities with human subjects and includes projects that contribute to completion of the master's thesis or clinical clerkship. This course may be repeated. Prerequisites: Completion of University Human Subjects (IRB) training for student investigators, and permission of instructor.

**MTHR 275. College Teaching in Music Therapy: Curriculum, Competencies and Classroom. 3 Units.**

Students review the AMTA requirements for music therapy undergraduate program curriculum and for competency-based education and clinical training. The course provides mentored practice in teaching foundational level music therapy college courses, and it supports individualized skill development for professional participation in academic music therapy programs as an instructor. Permission of instructor.

**MTHR 291. Graduate Independent Study. 1-4 Units.**

**MTHR 297. Graduate Independent Research. 1-4 Units.**

**MTHR 299. Thesis. 1-4 Units.**

Students create an original monograph that embodies original research.

## School of Engineering and Computer Science

<http://www.pacific.edu/eng>

Phone: (209) 946-2151

Location: Stockton Campus John T. Chambers Technology Center  
Steven Howell, Dean

### Program Offered

**Master of Science in Data Science**

**Master of Science in Engineering Science**

### MS Engineering Science Concentrations

**Civil Engineering (Environmental, Structural)**

**Computer Engineering / Electrical Engineering / Computer Science**

**Engineering Management**

**Mechanical Engineering**

### Mission

The mission of the School of Engineering and Computer Science is to provide a superior, student-centered learning environment that emphasizes close faculty-student interaction, experiential education, and distinctive research opportunities. Graduates will be prepared to excel as professionals, pursue advanced degrees, and possess the technical knowledge, critical thinking skills, creativity, and ethical values needed to lead the development and application of technology for bettering society and sustaining the world environment.

### Admission Criteria for Master of Science in Engineering Science

All applicants for the Master of Science in Engineering Science program must submit the following materials to the Research and Graduate Studies Office at the University of the Pacific. A completed application includes:

1. The Graduate School application form
2. Letters of recommendation
3. Transcripts from the institution where the BS in engineering, computer science, or relevant degree was granted
4. A personal statement on professional goals and objectives
5. A 3.0/4.0 GPA on the last 60 units of undergraduate study
6. For students whose first language is not English, Test of English as a Foreign Language (TOEFL) is required. The minimum score for admission is 550 (paper) or 213 (computer) and the minimum score for a teaching assistantship award is 575 (paper) or 231 (computer)

### Academic Policies for Master of Science in Engineering Science

#### Engineering and Computer Science Prerequisite Requirement

All course prerequisites in the MS in Engineering Science program must be passed with a grade of C or higher.

### Courses Taken Pass/No Credit

All courses that count toward the MS in Engineering Science must be taken for a letter grade (except for thesis units).

### Graduate Independent Studies

Students who have an interest in a subject not offered as a regular course and who, by their overall performance at Pacific, have proven their ability to do independent work, may consider enrolling in a graduate independent study. The qualified student should initiate discussions with his/her advisor and with a professor who is knowledgeable in the subject. If both parties are in agreement, the student must complete the Individualized Study Form and submit it to the instructor and Office of the Registrar prior to the last day to add (see University Academic Calendar). Students on academic probation are not permitted to enroll in independent study courses in any department of the University. The following School of Engineering and Computer Science policies apply:

1. The course(s) may not be substituted for a regularly scheduled course unless approved by the department.
2. If the course is to be used as an elective, approval by the student's advisor and the department chairperson is required.
3. All courses must be taken for a letter grade; the pass/no credit option is not allowed for independent study courses.
4. Each course may be taken for one (1), two (2), three (3), or four (4) units. The unit value for the course is established between the student and the professor responsible for the course. The student's advisor should be informed of this decision.

### Course Substitutions

A maximum of six units of approved advanced undergraduate courses (100 level) can count toward the MS in Engineering Science.

### Admission Criteria for Master of Science in Data Science

All applicants for the Master of Science in Data Science program must submit the following materials via the GradCAS online application system. A completed application includes:

1. Online application via the GradCAS system (<https://gradcas.liaisoncas.org/apply/>)
2. Two letters of recommendation
3. Official transcripts. An official, course-by-course evaluation of any non-US transcripts with an overall U.S. GPA equivalent from one of the agencies accepted by the University (see full list here (<https://www.pacific.edu/admission/graduate-programs/international-applicants.html>))
4. A 2.65/4.0 GPA on the last 60 units of undergraduate study
5. For students whose first language is not English, Test of English as a Foreign Language (TOEFL) is required. The minimum score for admission is 550 (paper) or 213 (computer) and the minimum score for a teaching assistantship award is 575 (paper) or 231 (computer). Alternatively, we accept IELTS
6. A personal statement of interest. The statement of interest allows applicants to demonstrate their motivation, skills, and abilities that will contribute to their academic success in our program. While there is no specific format required for this statement, applicants are advised to give particular consideration to:
  - Academic credentials
  - Experience in the foundational concepts of:

- Statistics
- Linear Algebra
- Computer programming (any language, but Python and R are preferred)
- Commitment and personal stamina to undertake fast paced, intensive academic program
- Enthusiasm for this particular course of study

- Official, course-by-course evaluation of their transcripts with an overall U.S. GPA equivalent from one of the agencies accepted by the University.

## Academic Policies for Master of Science in Data Science

### Engineering and Computer Science Prerequisite Requirement

All course prerequisites in the MS in Data Science program must be passed with a grade of C or higher.

### Courses Taken Pass/No Credit

All courses that count toward the MS in Data Science must be taken for a letter grade, with the exception of ANLT 283, which may be taken on a Pass / No Credit basis.

## Data Science

Phone: (209) 946-2992

Location: San Francisco

Website: Data Science (<http://www.pacific.edu/analytics/>)

## Degrees Offered

### Master of Science in Data Science

## Data Science Program Overview

The MS in Data Science prepares graduates for careers in data analytics and related fields. This is a science (as opposed to business) based program that is focused on developing students' math foundation in statistics and linear algebra, and computer programming to prepare them for coursework in topics like machine learning, time series analysis, customer analytics, and data visualization.

This 32-unit, 4-semester degree culminates in a Capstone Project, in which students work on an analytics problem with a corporation in the Silicon Valley/Northern California region.

Prerequisite entry requirements include:

- A Bachelors degree
- GPA of 2.65 or above
- Educational qualifications and/or work experience in:
  - Statistics
  - Linear Algebra
  - Computer programming (any language, although Python and R are preferred)
  - Basic calculus (derivatives)
- In addition, international students must also have:
  - The US equivalent of a GPA of 2.65 or above
  - TOEFL (or equivalent) English language proficiency. A minimum score of 90 or a score of at least 550 (213 on the computer-based test) is required.

## Data Science Program Educational Objectives

The MS in Data Science prepares graduates for careers in data analytics and related fields. This is done by developing students' math foundation in statistics and linear algebra, and learning skills in the areas of data preparation, data modeling, predictive modeling, and a variety of data science / analytic solution areas such as customer analytics, fraud detection and healthcare analytics.

The education that students receive will allow them after graduation to:

- Extract value from data to assist organizations in understanding past performance, predicting future events, and optimizing processes;
- Apply the methods of data wrangling, analytic programming, data mining, quantitative methods, modeling, to prepare very large data sets for analysis;
- Design and develop practical data oriented solutions using modern analytic techniques such as machine learning, time series analysis, and clustering;
- Apply the scientific method to develop and test hypotheses using mathematical and statistical principles;
- Conduct compelling communications through informative visualizations and effective presentation skills.

### Data Analysis

- Analyze various forms of data (e.g. numerical, categorical, textual, objects, etc.) using appropriate mathematical and/or machine learning techniques.

### Data Engineering

- Apply modern programming and data engineering skills, extract data from files, databases, or online resources, and transform it for appropriate analysis.

### Professional Presentation

- Effectively communicate results in a format that is appropriate to the audience, via written, oral, and graphical media.

## Master of Science in Data Science

Students must complete a minimum of 32 units with a Pacific cumulative grade point average of 3.0 to earn the master of science in data science degree.

ANLT 201	Linear Algebra for Data Science	2
ANLT 202	Frequentist Statistics	1
ANLT 203	Bayesian Statistics	1
ANLT 208	Research Methods for Data Science	1
ANLT 210	Software Methods for Data Science	1
ANLT 212	Analytics Computing for Data Science	2
ANLT 214	Data Engineering for Data Science	1
ANLT 222	Machine Learning for Data Science	2
ANLT 224	Data Wrangling	1
ANLT 232	Introduction to Data Visualization	1
ANLT 233	Dynamic Visualization	1
ANLT 234	Analytics Storytelling for Data Science	1
ANLT 242	Relational Databases	1

ANLT 243	NoSQL Databases	1
ANLT 272	Healthcare Case Studies	1
ANLT 276	Emphasis Case Studies	1
ANLT 282	Capstone Project	6
ANLT 283	Weekly Hot Topics *	3
Select three of the following:		3
ANLT 205	Consumer Analytics	
ANLT 206	Sentiment Analysis and Opinion Mining	
ANLT 207	Time Series Analysis	
ANLT 223	Advanced Machine Learning	
ANLT 273	Fraud Detection	
ANLT 274	Customer Analytics	
ANLT 275	Text Mining	

\* Students will take three semesters of ANLT 283.

## Course Descriptions

### Predoctoral Courses

#### ANLT 201. Linear Algebra for Data Science. 2 Units.

Linear algebra is the generalized study of solutions to systems of linear equations. In this course, students will begin by focusing on developing a conceptual understanding of computational tools from linear algebra, which are frequently employed in the analysis of data. These tools include: formulating linear systems as matrix-vector equations, solving systems of simultaneous equations using technology, performing basic computations involving matrix algebra, solving eigenvalue-eigenvector problems using technology, diagonalization, and orthogonal projections. Students will then be exposed to more advanced topics, such as singular value decomposition, principle component analysis, Random Walk, Markov Chains, and applications of linear algebra in data mining. The use of software to perform computations will be emphasized. Prerequisite: Graduate status in the Data Science program.

#### ANLT 202. Frequentist Statistics. 1 Unit.

A survey of regression, linear models, and experimental design. Topics include simple and multiple linear regression, single- and multi-factor studies, analysis of variance, analysis of covariance, model selection, and diagnostics. This class will focus more on the application of regression methods than the underlying theory through the use of modern statistical programming languages. Prerequisite: Graduate status in the Data Science program.

#### ANLT 203. Bayesian Statistics. 1 Unit.

This course introduces Bayesian statistical methods that enable data analysts and scientists to combine information from similar experiments, account for complex spatial, temporal, and other relationships, and also incorporate prior information or expert knowledge into a statistical analysis. This course explains the theory behind Bayesian methods and their practical applications, such as social network analysis, predicting crime risk, or predicting credit fraud. The course emphasizes data analysis through the use of modern analytic programming languages. Prerequisite: Graduate status in the Data Science program.

#### ANLT 205. Consumer Analytics. 1 Unit.

This course introduces the techniques used to analyze consumer shopping and buying behavior using transactional data in industries like retail, grocery, e-commerce, and others. Students will learn how to conduct item affinity (market basket) analysis, trip classification analysis, RFM (recency, frequency, monetary) analysis, churn analysis, and others. This class will teach students how to prepare data for these types of analyses, as well as how to use machine learning and statistical methods to build the models. The class is an experiential learning opportunity that utilizes real-world data sets and scenarios. Prerequisite: Graduate status in the Data Science program.

#### ANLT 206. Sentiment Analysis and Opinion Mining. 1 Unit.

This course introduces the algorithms and methods used to analyze the subjective opinions and sentiments of the author of a free text document such as a tweet, blog post, or article. The class will examine the applications of this type of analysis as well as its benefits and limitations. Sentiment analysis is closely tied to text mining and uses techniques such as natural language processing, text analysis, and computational linguistics for feature extraction and preprocessing of the data. Students will explore the current state of usage of sentiment analysis, as well as future implications and opportunities. Prerequisite: Graduate status in the Data Science program.

#### ANLT 207. Time Series Analysis. 1 Unit.

This course introduces the theory and application of statistical methods for the analysis of data that have been observed over time. Students will learn techniques for working with time series data and how to account for the correlation that may exist between measurements that are separated by time. The class will concentrate on both univariate and multivariate time series analysis, with a balance between theory and applications. Students will complete a time series analysis project using real-world scenario and data set. Prerequisite: Graduate status in the Data Science program.

#### ANLT 208. Research Methods for Data Science. 1 Unit.

Students learn about research design, qualitative and quantitative research, and sources of data. Topics will include a variety of research topics, including such things as data collection procedures, measurement strategies questionnaire design and content analysis, interviewing techniques, literature surveys; information databases, probability testing, and inferential statistics. Students will prepare and present a research proposal (with emphasis on technical writing/presentation principles) as part of the course. Prerequisite: Graduate status in the Data Science program.

#### ANLT 210. Software Methods for Data Science. 1 Unit.

Students learn the tools, methodology, and etiquette in developing data science applications, tools, and analytical workflows in collaborative environments. Data scientists are at the nexus of software engineering, science, and business. In order to thrive in this world, they must work collaboratively across these fields and skill sets, while ensuring that work is accessible and digestible to everyone involved. Moreover, they must ensure their work is production-worthy and extensible. This course teaches all of the elements, both technical and conceptual, to create productive, helpful, and professional data scientists. Prerequisite: Graduate status in the Data Science program.



**ANLT 212. Analytics Computing for Data Science. 2 Units.**

This course introduces computational data analysis using multi-paradigm programming languages. By the end of the course, students will tackle complex data analysis problems. The course emphasizes the use of programming languages for statistical and machine learning analysis, and predictive modeling. Graphical analytics tools will also be used. The course will also cover the various packages for accessing data that come with the various languages, manipulating and preparing data for analysis, conducting statistical and machine learning analyses, and graphically plotting and visualizing data and analytical results. The course emphasizes hands-on data and analysis using a variety of real-world data sets and analytical objectives. Prerequisite: Graduate status in the Data Science program.

**ANLT 214. Data Engineering for Data Science. 1 Unit.**

This course introduces students to data warehousing architectures, big data processing pipelines, and in-memory analytic techniques. Students will learn how to design systems to manage large volumes of multidimensional data. Currently, this includes the map-reduce paradigm, distributed file systems (HDFS), The Spark distributed computing platform, and how to sign up cloud computing resources (AWS EC2). Prerequisite: Graduate status in the Data Science program.

**ANLT 216. Legal Analytics for Data Science. 1 Unit.**

This course introduces students to how the law applies to the practice of data science. This course will expose students to: the ways in which data science assists with the practice of law, legal compliance and regulations that affect how data science tasks can be conducted, and the diverse ways in which the law affects the data scientist in his/her capacity as a practicing professional. Pre-requisite: Graduate status in the Data Science program.

**ANLT 222. Machine Learning for Data Science. 2 Units.**

Machine learning is the artificial intelligence discipline for uncovering patterns and relationships contained in large data sets. Students will be exposed to the supervised learning methods such as neural networks and decision trees. Practical application of these techniques will be tools like R and Python. Students will also learn: proper techniques for developing, training, and cross-validating predictive models; bias versus variance; and will explore the practical usage of these techniques in business and scientific environments. Students will also be introduced to unsupervised learning – the class of machine learning for uncovering patterns and relationships in data without labeling the data or establishing a preconceived set of classes or results. Students will learn through hands-on programming projects. Prerequisite: Graduate status in the Data Science program.

**ANLT 223. Advanced Machine Learning. 1 Unit.**

This course builds on the fundamentals introduced in ANLT 222 Machine Learning, by examining more machine algorithms and neural network topologies, and studying their respective applications. The course includes an overview of the TensorFlow language, Decision Tree methods, and an introduction to Natural Language Processing (NLP). Prerequisite: ANLT 222 (or concurrent enrollment in ANLT 222).

**ANLT 224. Data Wrangling. 1 Unit.**

This course will teach you how to retrieve data from disparate sources, combine it into a unified format, and prepare it for effective analysis. This aspect of data science is often estimated to be upwards of 80% of the effort in a typical analytics process. Students will learn how to read data from a variety of common storage formats, evaluate its quality, and learn various techniques for data cleansing. Students will also learn how to select appropriate features for analysis, transform them into more usable formats, and engineer new features into more powerful predictors. This class will also teach students how to split the data set into training and validation data for more effective analytical modeling. Prerequisite: Graduate status in the Data Science program.

**ANLT 232. Introduction to Data Visualization. 1 Unit.**

This course introduces tools and methods for visualizing data and communicating information clearly through graphical means. The class covers various data visualizations and how to select the most effective one depending on the nature of the data. Students will practice using the data visualization methodology by walking through a case study with the instructor and then practicing the steps on their own. Students will work with modern analytic graphics packages, and will be introduced to open source libraries, and to commercial visualization products. Prerequisite: Graduate status in the Data Science program.

**ANLT 233. Dynamic Visualization. 1 Unit.**

This course introduces advanced visualization techniques for developing dynamic, interactive, and animated data visualization. Students will learn a variety of techniques for the visualization of complicated data sets. These techniques are valuable for visualizing genomic data, social or other complex networks, healthcare data, business dynamics changing over time, weather and scientific data, and others. Often the visual presentation of data is enhanced when it is made interactive and dynamic, allowing users to “move through” the data and manipulate the data graphically for exploratory analysis. This presentation often involves web application development, and students will be exposed to these rudiments as well as tools that enable faster development of data visualization. Prerequisite: Graduate status in the Data Science program.

**ANLT 234. Analytics Storytelling for Data Science. 1 Unit.**

This course builds upon ANLT 232. It will dive into how visualizations should be presented differently when presenting to lay people, business executives, and a technical group. It will also consider visualizations meant for exploratory analysis versus persuasive argument versus survey, or “30,000 foot” analysis. Working alone and in teams, students will create visualizations using their own findings and using provided case studies. Prerequisite: Graduate status in the Data Science program.

**ANLT 242. Relational Databases. 1 Unit.**

This course introduces relational database management systems (RDBMS) and the structured query language (SQL) for manipulating data stored therein. The class is focused on the applied use of SQL by data scientists to extract, manipulate and prepare data for analysis. Although this class is not a database design class, students will be exposed to entity-relationship (ER) models and the benefits of third normal form (3NF) data modeling. The class employs hands-on experiential learning utilizing the modern relational database querying languages and graphical development environments. Prerequisite: Graduate status in the Data Science program.

**ANLT 243. NoSQL Databases. 1 Unit.**

This course will examine different non-relational (NoSQL) database paradigms, such as Key-Value, Document, Column-family, and Graph databases. Students will learn about advantages and disadvantages of the different approaches. The class will include hands-on experience with a representative sample of NoSQL databases. Computing developments that spurred the existence of NoSQL databases, such as big data, distributed and cloud computing will also be discussed. Prerequisite: Graduate status in the Data Science program.

**ANLT 272. Healthcare Case Studies. 1 Unit.**

This course is a culmination of the first semester of the MS Analytics program. It provides an experiential learning opportunity that ties together the statistical, computational analytics and database concepts in a series of case studies in the Healthcare sector. Students will examine four separate case studies of the use of data analytics in healthcare. Students will work in teams to dissect these case studies and evaluate the business opportunity, the analysis methodology, the raw data, the feature engineering and data preparation, and the analytical outcomes. Students will present their evaluation and make recommendations for improvements in the analysis and related opportunities. Prerequisite: Graduate status in the Data Science program.

**ANLT 273. Fraud Detection. 1 Unit.**

This course introduces the use of analytics to detect fraud in a variety of contexts. This class shows how to use machine learning techniques to detect fraudulent patterns in historical data, and how to predict future occurrences of fraud. Students will learn how to use supervised learning, unsupervised learning, and social network learning for these types of analyses. Students will be introduced to these techniques in the domains of credit card fraud, healthcare fraud, insurance fraud, employee fraud, telecommunications fraud, web click fraud, and others. The course is experiential and will apply concepts taught in prior data wrangling and machine learning courses using real-world data sets and fraud scenarios. Prerequisite: Graduate status in the Data Science program.

**ANLT 274. Customer Analytics. 1 Unit.**

This course introduces the techniques used to analyze consumer shopping and buying behavior using transactional data in industries like retail, grocery, e-commerce, and others. Students will learn how to conduct item affinity (market basket) analysis, trip classification analysis, recommender systems, RFM (recency, frequency, monetary) analysis, churn analysis, and others. This class will teach students how to prepare data for these types of analyses, as well as how to use machine learning and statistical methods to build the models. The class is an experiential learning opportunity that utilizes real-world data sets and scenarios. Prerequisite: Graduate status in the Data Science program.

**ANLT 275. Text Mining. 1 Unit.**

This course introduces the essential elements of text mining, or the extension of standard predictive methods to unstructured text. The class will explore the use of text mining in domains such as digital security, bioinformatics, law, marketing, and social media. Students will be exposed to information retrieval, lexical analysis, pattern recognition, meta-data tagging, and natural language processing (NLP). A large portion of this class will be devoted to the data preparation and wrangling methods needed to transform unstructured text into a suitable structure for analysis. Prerequisite: Graduate status in the Data Science program.

**ANLT 276. Emphasis Case Studies. 1 Unit.**

This course provides a real-world learning opportunity that ties together the concepts and practice of data science through a series of case studies in the finance, manufacturing, telecommunications and retail sectors. Students evaluate the business opportunities and challenges, explore, wrangle, and prepare the raw data, compare, select, implement, and validate statistical and machine learning models. Students present their evaluations and make recommendations for improvements.

**ANLT 282. Capstone Project. 6 Units.**

This course is a culmination of all modules in the MS Data Science program. It provides an experiential learning opportunity that connects all of the materials covered in the MS Analytics program. Students will be formed into teams and assigned to an industry sponsored project. Capstone projects will be agreed in advance with sponsoring companies and will represent real-world business issues that are amenable to an analytic approach. These projects will be conducted in close oversight by the sponsoring company, as well as, a University faculty member and may be conducted on the sponsoring company's premises using their preferred systems and tools, at the sponsoring company's discretion. Prerequisite: Graduate status in the Data Science program.

**ANLT 283. Weekly Hot Topics. 1 Unit.**

This course consists of a set of weekly presentations and discussions around key analytic issues and current case studies. These hot topics will be presented by a combination of guest speakers – industry luminaries in the area of analytics – and University of the Pacific faculty members, including the MS Analytics program director. Many of these topics will be drawn from relevant real-world contemporary analytic stories that reinforce specific elements of the academic content being taught and cannot be predicted in advance. Prerequisite: Graduate status in the Data Science program.

**ANLT 287B. Internship. 1-4 Units.****ANLT 287A. Internship. 1-4 Units.****ANLT 287. Internship. 1-4 Units.****ANLT 297. Graduate Research. 1-6 Units.**

## School of Health Sciences

<https://www.pacific.edu/academics/schools-and-colleges/school-of-health-sciences.html>

Nicoleta Bugnariu, Dean

## Programs Offered

**Master of Science in Athletic Training (Stockton)**

**Master of Science in Clinical Nutrition (Sacramento)**

**Master of Science in Nursing (Sacramento)**

**Master of Physician Assistant Studies (Sacramento)**

**Master of Social Work (Sacramento)**

**Master of Science in Speech-Language Pathology (Stockton)**

**Doctor of Audiology (San Francisco)**

**Doctor of Occupational Therapy (Sacramento)**

**Doctor of Physical Therapy (Stockton)**

## Vision

The vision of the School of Health Sciences is to lead in advancing the lifelong wellness of our communities.

## Purpose

Prepare all graduates for leadership roles that advance lifelong wellness of diverse communities through learning, discovery and innovation. Taking advantage of the unique mix of programs, the School of Health Sciences will develop innovative curricula that takes advantage of the university's opportunities in interprofessional education. Students from the School of Health Sciences, Thomas J. Long School of Pharmacy, and Arthur A. Dugoni School of Dentistry will share classrooms and learn with, from and about each other, preparing them for interprofessional practice in settings where integrated teams provide optimal patient care.

## Audiology

Pacific's doctor of audiology (AuD) program is the only three-year accelerated program in California. Students with a bachelor's degree in any major and an interest in the profession of audiology are encouraged to apply. While in the program, students will gain rich and diverse clinical experiences through the onsite audiology clinic, nearby medical and audiology centers as well as the audiology clinic in Stockton. This program is offered at Pacific's new state-of-the-art campus in the SoMa district of San Francisco.

## Mission

The mission of the Audiology department is to prepare reflective audiologists for lifelong success by providing an excellent student-centered, experiential learning environment. Our students are mentored in developing professionalism, leadership, critical thinking skills, and a strong commitment to their profession and society. These efforts are assisted by the department's commitment to professional growth through clinical practice, scholarly activity, and service to the profession and the community. The programs are developed in accordance with state and national accreditation standards and guidelines to ensure that graduates provide exemplary professional practice throughout their careers.

## Program Highlights

- Pacific's Doctor of Audiology program is the first in Northern California.
- It is one of four accelerated programs in the country, and the only one in California.
- A strong and cohesive group of full-time faculty with areas of expertise covering a wide variety of the topics within the scope of practice of audiology.

## Rewarding Career Opportunities

According to the Bureau of Labor Statistics of the U.S. Department of Labor, "Employment of audiologists is expected to grow by 37% from 2010 to 2020, much faster than the average for all occupations. Hearing loss increases as people age, so an aging population is likely to increase demand for audiologists. The early identification and diagnosis of hearing disorders in infants also will spur employment growth. Advances in hearing aid design, such as the reduction of feedback and a smaller size, may make the devices more appealing as a means to minimize hearing loss, leading to more demand for the audiologists who provide hearing aids."

## Accreditation

The doctor of audiology program at the University of the Pacific has been awarded candidacy status by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association and a ten-year accreditation status by the Accreditation Commission for Audiology Education (ACAE). **Learn more** about the accreditation process.

## How To Apply

Submit your applications through the Communication Sciences & Disorders Centralized Application Service (CSDCAS) at <https://csdcas.liaisoncas.com/applicant-ux/#/login>.

**Priority Deadline:** February 1st

**Final Deadline:** March 1st

Admission interviews are conducted via Skype. Qualified applicants who meet the February 1st priority deadline will be invited to participate in admission interviews prior to March 1st. Incomplete and unverified applications will not be reviewed.

## Admission Requirements

- Self-reported grades for prerequisites
- Official transcripts from all institutions attended post-high school
- Minimum GPA of 3.0
- Official GRE General Test score report (ETS code: 0773)
- Three letters of recommendation (at least one from a college or university faculty member)
- Personal statement that answers the following questions:
  - Why are you pursuing a Doctor of Audiology degree? (max 500 words)
  - Why is the University of the Pacific a good fit for you? (max 500 words)
  - Describe a time when you experienced failure/setback. (max 500 words)
  - Discuss the strategies you used to overcome this challenge. What did you learn as a result? (max 1000 words)
- **Format:** Arial, Calibri, or Times New Roman; size 12; double-spaced.

## Prerequisites

Applicants are required to have earned a bachelor's degree from an accredited college or university. Admission is competitive and a minimum cumulative 3.0 GPA is required for all undergraduate coursework. All prerequisite courses must be completed before the March 1st final application deadline with a grade of "C" or above. Online coursework is accepted.

- **Biological Sciences:** General Biology OR Human Anatomy & Physiology
- **Physical Sciences:** Chemistry OR Physics
- **Social/Behavioral Sciences:** Introduction to Psychology OR Introduction to Sociology OR Anthropology
- **Mathematics:** Statistics OR Calculus OR Pre-Calculus

## International Students

International student applicants must supply additional documents such as TOEFL score report and international transcript evaluation. Required documents must be submitted six weeks prior to the posted deadlines

to be considered for admission. If this applies to you, please find your additional requirements here (<https://www.pacific.edu/admission/graduate-programs/international-applicants.html>).

### Graduates of the Doctor of Audiology program will demonstrate: Humanistic Leadership

- Conceptualizes how to advance the community's hearing health, and integrates diverse perspectives on how to build access to hearing healthcare.

### Evidence-based Practice

- Critically evaluate the quality of evidence from research and practice-based sources and uses these to educate about prevention, provide screening, and appropriate clinical treatment, including advanced diagnostic procedures.

### Integrative Clinical Practice

Think critically and problem solve in the process of analyzing complex and diverse concepts, that require application of professional judgment

- Independently makes appropriate differential diagnoses that require the application of complex and diverse audiology concepts
- collaborates with other practitioners to critically evaluate diagnoses in the course of developing and implementing treatment plans that are appropriate to the diagnosis and the client's situation and concerns.

### Professional Communication

- Communicates results of diagnostic assessments, and treatment options effectively, both orally and in writing, to patients and to other clinical providers.

### Ethical Competence

- Articulates the bases for the ethical standards in the audiology profession, explains how ethical principles can be applied to resolving ethical challenges in practice, and consistently adheres to ethical standards in the practice of audiology.

### Interpersonal Interaction

- Interacts effectively and respectfully with people from diverse backgrounds and cultures and works through differences with civility.

## Doctor of Audiology

Students must complete a minimum of 124 units with a Pacific cumulative grade point average of 3.0 in order to earn the doctor of audiology degree.

AUDI 301	Anatomy and Physiology of Hearing	3
AUDI 303	Signals and Systems	3
AUDI 305	Diagnostic Audiology I	3
AUDI 307	Diagnostic Audiology II	3
AUDI 309	Diagnostic Electrophysiology I	3
AUDI 311	Pediatric Audiology	3
AUDI 313	Central Auditory Processing - Diagnosis & Management	3
AUDI 315	Amplification I	3
AUDI 317	Amplification II	3
AUDI 319	Amplification III	3
AUDI 321	Auditory Implants	3
AUDI 325	Aural Rehabilitation	3
AUDI 331	Vestibular Assessment I	3
AUDI 337	Speech-Language Pathology for Audiologists	3

AUDI 339	Deaf Culture and Communication Systems	3
AUDI 341	Psychoacoustics	3
AUDI 343	Research Methods	3
AUDI 345	Hearing Disorders	3
AUDI 347	Tinnitus Assessment and Treatment	3
AUDI 349	Industrial Audiology	3
AUDI 353	Professional Issues	3
AUDI 355	Practice Management	3
AUDI 357	Pharmacology	3
AUDI 359	Tinnitus Management	3
AUDI 361	Comprehensive Differential Diagnosis	3
AUDI 363	Diagnostic Electrophysiology II	3
AUDI 365	Advanced Topics in Research, Practice and Technology	3
AUDI 367	Vestibular Assessment II	3
AUDI 369	Physical and Behavioral Health for Audiology	3
AUDI 385A	Audiology Practicum I	1
AUDI 385B	Audiology Practicum II	1
AUDI 385C	Audiology Practicum III	1
AUDI 387A	Internship I	2
AUDI 387B	Internship II	2
AUDI 388A	Externship I	9
AUDI 388B	Externship II	9
AUDI 388C	Externship III	9
AUDI 389A	Externship Seminar I	1
AUDI 389B	Externship Seminar II	1
AUDI 389C	Externship Seminar III	1
Total Hours		124

## Course Descriptions

### Predoctoral Courses

#### AUDI 301. Anatomy and Physiology of Hearing. 3 Units.

An in-depth course on the anatomy and physiology of the hearing mechanism primarily as it related to hearing.

#### AUDI 303. Signals and Systems. 3 Units.

Basics of signal processing for hearing aids and equipment that measure hearing. IEC/ANSI standards of performance for the instrumentation, calibration procedures, and compliance.

#### AUDI 305. Diagnostic Audiology I. 3 Units.

Foundation and orientation to audiological equipment and testing. Basic audiometric tests and underlying principles, case history and universal precautions.

#### AUDI 307. Diagnostic Audiology II. 3 Units.

Evaluation of middle ear function by using the principles of acoustic immittance. Principles underlying otoacoustic emissions. Implementation of tests and formulation of diagnosis based on test results.

#### AUDI 309. Diagnostic Electrophysiology I. 3 Units.

Diagnostic electrophysiological techniques, assessment of hearing using auditory evoked responses across all age ranges. Evidence-based best practices for determining threshold and neurophysiological integrity with the auditory brainstem response (ABR).

#### AUDI 311. Pediatric Audiology. 3 Units.

Diagnostic assessment of children from ages 0-18. Embryology and hearing development and genetics of hearing loss.

**AUDI 313. Central Auditory Processing - Diagnosis & Management. 3 Units.**

Assessment (screening and diagnostic) and treatment options for auditory processing disorders.

**AUDI 315. Amplification I. 3 Units.**

Theoretical and applied understanding of current technology in hearing aids. Electroacoustic analysis and programming of hearing instruments and verification of the performance of hearing instruments using objective and subjective measurements.

**AUDI 317. Amplification II. 3 Units.**

Theoretical and clinical aspects of advanced signal processing schemes and verification procedures are taught. Selection and fitting of amplification for special populations.

**AUDI 319. Amplification III. 3 Units.**

Advanced application of knowledge and skills obtained in AUDI 315 and AUDI 317. Personal and sound field FM systems, classroom listening, and assessment beyond the sound booth, classroom acoustics, assistive listening devices and counseling techniques.

**AUDI 321. Auditory Implants. 3 Units.**

This course covers a variety of auditory prosthetic devices with emphasis on cochlear implant technology. History, pediatric and adult candidacy, signal processing strategies and fitting protocols will be explored in detail.

**AUDI 323. Pediatric Aural Rehabilitation. 3 Units.**

This course is an overview of current management options for the (re)habilitation of children with hearing loss.

**AUDI 325. Aural Rehabilitation. 3 Units.**

Rehabilitation of children and adults with hearing loss. Current rehabilitation strategies and outcome measures that assess patients' success.

**AUDI 327. Auditory Verbal Therapy. 3 Units.**

Key principles and components of a successful auditory-verbal program along with procedural outlines to formulate a strategy to implement goals, including audiological monitoring, parent training and therapy components.

**AUDI 331. Vestibular Assessment I. 3 Units.**

Anatomy and physiology of the vestibular mechanism, diagnostic tests, case history, bedside evaluations, and ENG/VNG test battery.

**AUDI 333. Vestibular Treatment. 3 Units.**

Didactic and hands on approach to management and treatment of vestibular disorders. Causes and pathophysiology of vestibular loss, treatment programs. Interdisciplinary approach to the patient management.

**AUDI 335. Speech and Language Development. 3 Units.**

Overview of the normal processes underlying speech and language development across the lifespan.

**AUDI 337. Speech-Language Pathology for Audiologists. 3 Units.**

Overview of the speech and language disorders, screening and identification of children at risk for speech and language disorders. Basic phonetics and transcription, basic speech and language screening protocols.

**AUDI 338A. Externship I. 3 Units.**

Clinical Experience in an off-campus placement to develop advanced audiology skills and provide patient care. Minimum of 500 hours of clinical experience required.

**AUDI 339. Deaf Culture and Communication Systems. 3 Units.**

Introduction to Deaf Culture and American Sign Language (ASL), with emphasis on signs most useful to audiologists working clinically.

**AUDI 341. Psychoacoustics. 3 Units.**

Physical and psychological attributes related to sound in normal hearing and impaired ears. Classical psychophysical methods discussed, with an emphasis on their application to audiological testing.

**AUDI 343. Research Methods. 3 Units.**

Introduction to research methods used in audiology. Statistical analyses in descriptive and experimental research.

**AUDI 345. Hearing Disorders. 3 Units.**

Etiology, pathophysiology, diagnosis and treatment of diseases of the outer, middle, inner ear and the central auditory system. Syndromic and non-syndromic genetic disorders along with their impact on the development and function of the auditory system.

**AUDI 347. Tinnitus Assessment and Treatment. 3 Units.**

Causes and pathophysiology of tinnitus. The various therapies, pharmacological agents, and management of tinnitus.

**AUDI 349. Industrial Audiology. 3 Units.**

Introduction to the basic principles of sound and its measurement, including Damage Risk Criteria and its application to noise-induced hearing loss will be addressed, as well as components of hearing conservation programs in a variety of settings and evaluation of their effectiveness in the prevention of hearing.

**AUDI 353. Professional Issues. 3 Units.**

Current issues in the profession of audiology including audiology scope of practice, audiology employment opportunities, state licensure requirements to practice audiology, and professional certification options for audiologists.

**AUDI 355. Practice Management. 3 Units.**

Operational and business management of a clinical practice setting. Developing an appropriate business plan; startup and long term planning; essential legal considerations.

**AUDI 357. Pharmacology. 3 Units.**

Basic concepts and terminology of pharmacology will be explored, including pharmacokinetics, pharmacodynamics and ototoxic drugs. Medications that may contribute to or treat audiological and vestibular diagnoses will be discussed. Legislation and regulatory issues related to drug clinical trials and the Food and Drug Administration (FDA) will be reviewed.

**AUDI 359. Tinnitus Management. 3 Units.**

Management of the tinnitus patient with various therapies including pharmaceuticals, cognitive behavior therapy, and hearing devices.

**AUDI 361. Comprehensive Differential Diagnosis. 3 Units.**

Comprehensive review of use of auditory and vestibular test batteries in different diagnosis and management of patients.

**AUDI 363. Diagnostic Electrophysiology II. 3 Units.**

Advance assessments of hearing using auditory evoked responses across all age ranges. Evidence based review of the measurement and interpretation of the neurophysiological and electrophysiological methods of auditory function assessment in adults and children. Prerequisite: AUDI 309.

**AUDI 365. Advanced Topics in Research, Practice and Technology. 3 Units.**

Advance topics of current trends in the field of audiology. Seminars in contemporary research topics, developments in evidence-based practice, and advancement in technology in the industry.

**AUDI 367. Vestibular Assessment II. 3 Units.**

Anatomy and physiology of the vestibular mechanism, case history, bedside evaluations, advanced diagnostic tests, introduction to vestibular rehabilitation, and advanced topics in vestibular research. Prerequisite: AUDI 331.

**AUDI 369. Physical and Behavioral Health for Audiology. 3 Units.**  
Referral and management of common health conditions including physical and behavioral health. Implications for hearing loss and clinical management.

**AUDI 385C. Audiology Practicum III. 1 Unit.**  
Guided clinical experience of a variety of audiological activities in diagnostic evaluations and hearing aid fittings under the guidance of clinical supervisors. Students will accrue a minimum of 40 patient contact hours.

**AUDI 385B. Audiology Practicum II. 1 Unit.**  
Guided clinical experience of a variety of audiological activities in diagnostic evaluations and hearing aid fittings under the guidance of clinical supervisors. Students will accrue a minimum of 40 patient contact hours.

**AUDI 385A. Audiology Practicum I. 1 Unit.**  
Guided observations of a variety of audiologic activities and preliminary structured participation as aide in diagnostic evaluations under the guidance of clinical supervisors. Students will accrue a minimum of 40 patient observations and/or contact hours.

**AUDI 387B. Internship II. 2 Units.**  
Clinical Experience in an off-campus placement to develop intermediate audiology skills and provide patient care. Minimum of 200 hours of clinical experience required.

**AUDI 387A. Internship I. 2 Units.**  
Clinical Experience in an off-campus placement to develop beginning audiology skills and provide patient care. Minimum of 200 hours of clinical experience required.

**AUDI 388C. Externship III. 9 Units.**  
Clinical Experience in an off-campus placement to develop advanced audiology skills and provide patient care. Minimum of 500 hours of clinical experience required.

**AUDI 388B. Externship II. 9 Units.**  
Clinical Experience in an off-campus placement to develop advanced audiology skills and provide patient care. Minimum of 500 hours of clinical experience required.

**AUDI 388A. Externship I. 9 Units.**  
Clinical Experience in an off-campus placement to develop advanced audiology skills and provide patient care. Minimum of 500 hours of clinical experience required.

**AUDI 389C. Externship Seminar III. 1 Unit.**  
Utilizing an evidence-based approach, case presentations are made by students in a grand rounds format (presenting a particular patient's medical problems, diagnostic testing results and treatment effects) to other audiology students and faculty incorporating various clinical practices and evaluation and treatment protocols.

**AUDI 389B. Externship Seminar II. 1 Unit.**  
Utilizing an evidence-based approach, case presentations are made by students in a grand rounds format (presenting a particular patient's medical problems, diagnostic testing results and treatment effects) to other audiology students and faculty incorporating various clinical practices and evaluation and treatment protocols.

**AUDI 389A. Externship Seminar I. 1 Unit.**  
Utilizing an evidence-based approach, case presentations are made by students in a grand rounds format (presenting a particular patient's medical problems, diagnostic testing results and treatment effects) to other audiology students and faculty incorporating various clinical practices and evaluation and treatment protocols.

**AUDI 391. Graduate Independent Study. 1-4 Units.**

**AUDI 397. Graduate Research. 1-6 Units.**

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