

1967

## **PAC Bulletin 1967-1968**

Pan American College

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*“A College  
for All  
the Americas”*

# Pan American College

EDINBURG, TEXAS

# **PAN AMERICAN COLLEGE**

## **BULLETIN**

**EDINBURG, TEXAS**

### **CATALOG FOR 1967-1968**

**(With Announcements for 1968-1969)**

**Member of**

**Association of Texas Colleges and Universities**

**American Council on Education**

**Association of American Colleges**

**American Association of Colleges for Teacher Education**

**Southern Association of Colleges and Schools**

**Approved for Teacher Education by the  
Texas Education Agency**

#### **Photo Credit**

**The cover photo of Pan American College students on the West Campus was taken by Jack Purnell of Harlingen. Other pictures in this bulletin were snapped by Gerald Whitaker, a student photographer in the Office of Public Information.**

**Volume XII, Number 3, issued May, 1967, of the Pan American College Bulletin published by Pan American College, Edinburg, Texas.**

# PHILOSOPHY

Pan American College is a democratic institution which is dedicated to the preservation and extension of responsible human freedom and to the enlightenment of the Rio Grande Valley community.

As such an institution, it is dedicated to the following:

The belief that it is the obligation of Pan American College to help perpetuate the best American cultural heritage and to blend with it the outstanding features of Latin-American culture, and to propagate the best that is known and thought in the world.

The belief that every student should be considered an individual with individual needs and, as such, be counseled into pursuing the areas of learning for which he is capable and suited, and in which he is interested, and into pursuing the broader areas available to him in a first-class senior college, basically a liberal arts college.

The belief that every student should be stimulated to know and cherish his American heritage, to develop adequate skills in oral and written communication, to understand his place in the physical universe and to appreciate, enjoy, and participate in the fine arts.

The belief that the College should provide the highest possible professionally trained faculty and administrative staff for its students.

The belief that the faculty and administrative staff should provide a functional, adequate, and aesthetically planned physical plant and campus for the use and enjoyment of college personnel, students and citizens in the area.

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# CALENDARS FOR 1967, 1968 AND 1969

## 1967

| JULY |    |    |    |    |    |    | SEPTEMBER |    |    |    |    |    |    | NOVEMBER |    |    |    |    |    |    |
|------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----------|----|----|----|----|----|----|
| S    | M  | T  | W  | T  | F  | S  | S         | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  |
|      |    |    |    |    |    | 1  |           |    |    |    |    | 1  | 2  |          |    |    | 1  | 2  | 3  | 4  |
| 2    | 3  | 4  | 5  | 6  | 7  | 8  | 3         | 4  | 5  | 6  | 7  | 8  | 9  | 5        | 6  | 7  | 8  | 9  | 10 | 11 |
| 9    | 10 | 11 | 12 | 13 | 14 | 15 | 10        | 11 | 12 | 13 | 14 | 15 | 16 | 12       | 13 | 14 | 15 | 16 | 17 | 18 |
| 16   | 17 | 18 | 19 | 20 | 21 | 22 | 17        | 18 | 19 | 20 | 21 | 22 | 23 | 19       | 20 | 21 | 22 | 23 | 24 | 25 |
| 23   | 24 | 25 | 26 | 27 | 28 | 29 | 24        | 25 | 26 | 27 | 28 | 29 | 30 | 26       | 27 | 28 | 29 | 30 |    |    |
| 30   | 31 |    |    |    |    |    |           |    |    |    |    |    |    |          |    |    |    |    |    |    |

| AUGUST |    |    |    |    |    |    | OCTOBER |    |    |    |    |    |    | DECEMBER |    |    |    |    |    |    |   |
|--------|----|----|----|----|----|----|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|---|
| S      | M  | T  | W  | T  | F  | S  | S       | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  |   |
|        |    |    |    |    |    | 1  | 1       | 2  | 3  | 4  | 5  | 6  | 7  |          |    |    |    |    |    | 1  | 2 |
| 2      | 3  | 4  | 5  | 6  | 7  | 8  | 8       | 9  | 10 | 11 | 12 | 13 | 14 | 3        | 4  | 5  | 6  | 7  | 8  | 9  |   |
| 9      | 10 | 11 | 12 | 13 | 14 | 15 | 15      | 16 | 17 | 18 | 19 | 20 | 21 | 10       | 11 | 12 | 13 | 14 | 15 | 16 |   |
| 16     | 17 | 18 | 19 | 20 | 21 | 22 | 22      | 23 | 24 | 25 | 26 | 27 | 28 | 17       | 18 | 19 | 20 | 21 | 22 | 23 |   |
| 23     | 24 | 25 | 26 | 27 | 28 | 29 | 29      | 30 | 31 |    |    |    |    | 24       | 25 | 26 | 27 | 28 | 29 | 30 |   |
| 30     | 31 |    |    |    |    |    |         |    |    |    |    |    |    | 31       |    |    |    |    |    |    |   |

## 1968

| JANUARY |    |    |    |    |    |    | APRIL |    |    |    |    |    |    | JULY |    |    |    |    |    |    | OCTOBER |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|-------|----|----|----|----|----|----|------|----|----|----|----|----|----|---------|----|----|----|----|----|----|
| S       | M  | T  | W  | T  | F  | S  | S     | M  | T  | W  | T  | F  | S  | S    | M  | T  | W  | T  | F  | S  | S       | M  | T  | W  | T  | F  | S  |
|         |    |    |    |    |    | 5  |       |    |    |    |    |    | 5  | 6    |    |    |    |    |    |    |         |    |    |    |    | 5  |    |
| 7       | 8  | 9  | 10 | 11 | 12 | 13 | 7     | 8  | 9  | 10 | 11 | 12 | 13 | 7    | 8  | 9  | 10 | 11 | 12 | 13 | 6       | 7  | 8  | 9  | 10 | 11 | 12 |
| 14      | 15 | 16 | 17 | 18 | 19 | 20 | 14    | 15 | 16 | 17 | 18 | 19 | 20 | 14   | 15 | 16 | 17 | 18 | 19 | 20 | 13      | 14 | 15 | 16 | 17 | 18 | 19 |
| 21      | 22 | 23 | 24 | 25 | 26 | 27 | 21    | 22 | 23 | 24 | 25 | 26 | 27 | 21   | 22 | 23 | 24 | 25 | 26 | 27 | 20      | 21 | 22 | 23 | 24 | 25 | 26 |
| 28      | 29 | 30 | 31 |    |    |    | 28    | 29 | 30 |    |    |    |    | 28   | 29 | 30 | 31 |    |    |    | 27      | 28 | 29 | 30 | 31 |    |    |

| FEBRUARY |    |    |    |    |    |    | MAY |    |    |    |    |    |    | AUGUST |    |    |    |    |    |    | NOVEMBER |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|-----|----|----|----|----|----|----|--------|----|----|----|----|----|----|----------|----|----|----|----|----|----|
| S        | M  | T  | W  | T  | F  | S  | S   | M  | T  | W  | T  | F  | S  | S      | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  |
|          |    |    |    |    |    | 1  |     |    |    |    |    |    | 1  |        |    |    |    |    |    |    |          |    |    |    |    | 1  |    |
| 4        | 5  | 6  | 7  | 8  | 9  | 10 | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 4      | 5  | 6  | 7  | 8  | 9  | 10 | 3        | 4  | 5  | 6  | 7  | 8  | 9  |
| 11       | 12 | 13 | 14 | 15 | 16 | 17 | 12  | 13 | 14 | 15 | 16 | 17 | 18 | 11     | 12 | 13 | 14 | 15 | 16 | 17 | 10       | 11 | 12 | 13 | 14 | 15 | 16 |
| 18       | 19 | 20 | 21 | 22 | 23 | 24 | 19  | 20 | 21 | 22 | 23 | 24 | 25 | 18     | 19 | 20 | 21 | 22 | 23 | 24 | 17       | 18 | 19 | 20 | 21 | 22 | 23 |
| 25       | 26 | 27 | 28 | 29 |    |    | 26  | 27 | 28 | 29 | 30 | 31 |    | 25     | 26 | 27 | 28 | 29 | 30 | 31 | 24       | 25 | 26 | 27 | 28 | 29 | 30 |

| MARCH |    |    |    |    |    |    | JUNE |    |    |    |    |    |    | SEPTEMBER |    |    |    |    |    |    | DECEMBER |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----------|----|----|----|----|----|----|
| S     | M  | T  | W  | T  | F  | S  | S    | M  | T  | W  | T  | F  | S  | S         | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  |
|       |    |    |    |    |    | 1  |      |    |    |    |    |    | 1  |           |    |    |    |    |    |    |          |    |    |    |    | 1  |    |
| 3     | 4  | 5  | 6  | 7  | 8  | 9  | 2    | 3  | 4  | 5  | 6  | 7  | 8  | 8         | 9  | 10 | 11 | 12 | 13 | 14 | 8        | 9  | 10 | 11 | 12 | 13 | 14 |
| 10    | 11 | 12 | 13 | 14 | 15 | 16 | 9    | 10 | 11 | 12 | 13 | 14 | 15 | 15        | 16 | 17 | 18 | 19 | 20 | 21 | 15       | 16 | 17 | 18 | 19 | 20 | 21 |
| 17    | 18 | 19 | 20 | 21 | 22 | 23 | 16   | 17 | 18 | 19 | 20 | 21 | 22 | 22        | 23 | 24 | 25 | 26 | 27 | 28 | 22       | 23 | 24 | 25 | 26 | 27 | 28 |
| 24    | 25 | 26 | 27 | 28 | 29 | 30 | 23   | 24 | 25 | 26 | 27 | 28 | 29 | 29        | 30 |    |    |    |    |    | 29       | 30 | 31 |    |    |    |    |
| 31    |    |    |    |    |    |    | 30   |    |    |    |    |    |    |           |    |    |    |    |    |    |          |    |    |    |    |    |    |

## 1969

| JANUARY |    |    |    |    |    |    | MARCH |    |    |    |    |    |    | MAY |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|-------|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| S       | M  | T  | W  | T  | F  | S  | S     | M  | T  | W  | T  | F  | S  | S   | M  | T  | W  | T  | F  | S  |    |    |    |    |    |    |    |
|         |    |    |    |    |    | 1  |       |    |    |    |    |    | 1  |     |    |    |    |    |    |    |    |    |    |    | 1  |    |    |
| 5       | 6  | 7  | 8  | 9  | 10 | 11 | 2     | 3  | 4  | 5  | 6  | 7  | 8  | 4   | 5  | 6  | 7  | 8  | 9  | 10 |    |    |    |    |    |    | 1  |
| 12      | 13 | 14 | 15 | 16 | 17 | 18 | 9     | 10 | 11 | 12 | 13 | 14 | 15 | 11  | 12 | 13 | 14 | 15 | 16 | 17 | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
| 19      | 20 | 21 | 22 | 23 | 24 | 25 | 16    | 17 | 18 | 19 | 20 | 21 | 22 | 18  | 19 | 20 | 21 | 22 | 23 | 24 | 8  | 9  | 10 | 11 | 12 | 13 | 14 |
| 26      | 27 | 28 | 29 | 30 | 31 |    | 23    | 24 | 25 | 26 | 27 | 28 | 29 | 25  | 26 | 27 | 28 | 29 | 30 | 31 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|         |    |    |    |    |    |    | 30    | 31 |    |    |    |    |    |     |    |    |    |    |    |    | 22 | 23 | 24 | 25 | 26 | 27 | 28 |

| FEBRUARY |    |    |    |    |    |    | APRIL |    |    |    |    |    |    | JUNE |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|-------|----|----|----|----|----|----|------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| S        | M  | T  | W  | T  | F  | S  | S     | M  | T  | W  | T  | F  | S  | S    | M  | T  | W  | T  | F  | S  |    |    |    |    |    |    |    |
|          |    |    |    |    |    | 1  |       |    |    |    |    |    | 1  |      |    |    |    |    |    |    |    |    |    |    | 1  |    |    |
| 2        | 3  | 4  | 5  | 6  | 7  | 8  | 6     | 7  | 8  | 9  | 10 | 11 | 12 | 1    | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 |
| 9        | 10 | 11 | 12 | 13 | 14 | 15 | 13    | 14 | 15 | 16 | 17 | 18 | 19 | 8    | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 16       | 17 | 18 | 19 | 20 | 21 | 22 | 20    | 21 | 22 | 23 | 24 | 25 | 26 | 22   | 23 | 24 | 25 | 26 | 27 | 28 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 23       | 24 | 25 | 26 | 27 | 28 |    | 27    | 28 | 29 | 30 |    |    |    | 29   | 30 |    |    |    |    |    | 29 | 30 |    |    |    |    |    |

# COLLEGE CALENDAR, 1967-1968

## FIRST SEMESTER

### August 14, Monday

Deadline for filing **Application for Registration** and supporting documents (health certificate, transcript of credits, ACT test results) with the Registrar. Prospective students are urged to file as early as possible before this cut-off date.

### September 1, Friday

Residual ACT tests, beginning at 8:00 a.m. in the College Auditorium, for those with no ACT test results on file with the Registrar.

### September 5, Tuesday

1. Division Directors and Department Heads will be available in their offices daily. Transfer students and those students previously enrolled at Pan American College should arrange any needed counseling during this period prior to their actual registration.
2. Dormitories available for occupancy.
3. Orientation, beginning at 8:00 a.m. in the College Auditorium, for **all beginning freshmen and all transfer students with fewer than 30 semester hours** whose last names start with the letters **A through H**. Speech tests will be administered and registration assignments will also be made during this period.

### September 6, Wednesday

1. Orientation, at 8:00 a.m. in the College Auditorium, for **beginning freshmen and for transfer students with fewer than 30 semester hours credit** whose last names begin with the letter **I through Z**.
2. A second residual ACT examination will be administered at 6:00 p.m. in the Auditorium for the benefit of those planning to enroll only in evening classes and for any others who may have missed the previous ACT tests.

### September 7-9, Thursday through Saturday forenoon

Counseling and registration, **according to previous appointment**, for beginning freshmen.

Registration for evening classes, also by appointment only.

### September 11-12, Monday and Tuesday

Registration, **by previous appointment**, for students other than beginning freshmen. All registration after these dates requires payment of the late registration fee.

**September 13, Wednesday**

Evening classes begin as scheduled.

**September 14, Thursday**

Day classes begin as scheduled.

**September 14-15, Thursday through Friday**

Schedule changes permitted only on these days.

**September 26, Tuesday**

Twelfth class day and the last day for any tuition or fee refund.

**October 13, Friday**

Last day to drop a course or to withdraw from the College without having a grade recorded.

**November 1, Wednesday**

Application for registration for the second semester will be issued in the Registrar's Office.

**November 13, Monday**

1. Unsatisfactory reports are due in the Office of the Registrar by 9:00 a.m.
2. Deadline for filing Request for Graduation forms, with the Registrar, for students who expect to graduate in January, 1968.

**November 22-25, Wednesday evening through Saturday**

Thanksgiving recess, begins at 5:00 p.m., Wednesday, November 22.

**December 20-January 2, inclusive**

Christmas vacation.

**January 3, Wednesday**

Classes resume at 8:00 a.m.

**January 8, Monday**

Application for Registration for second semester must be submitted by this date.

**January 15-20, inclusive**

First semester final examinations.

**January 22, Monday**

Grade reports due in Registrar's Office by 9:00 a.m.

**SECOND SEMESTER**

Note the January 8 date mentioned above, by which time Applications for Registration for the second semester should be submitted.

**January 23, Tuesday**

8:00 a.m., Orientation for entering freshmen and for transfer students.  
1:00 p.m., Residual ACT tests, in Auditorium.  
6:00 p.m., Residual ACT tests for those planning to enter evening classes only.

**January 25-26, inclusive**

Registration according to previous appointment.

**January 27, Saturday**

Saturday classes begin.

**January 29, Monday**

Day and evening classes begin.

**January 29-30, Monday and Tuesday**

Schedule changes may be made only on these days.

**February 9, Friday**

Twelfth class day and the last day for any tuition or fee refund.

**February 24, Saturday**

Last day to drop a course or to withdraw from the College without having a grade recorded.

**March 1, Friday**

Deadline for filing Request for Graduation forms with the Registrar.

**March 18, Monday**

Unsatisfactory reports due in Registrar's Office by 9:00 a.m.

**April 12-15, Friday until Monday at 5:00 p.m.**

Easter recess.

**May 17-23, Friday at 3:20 p.m. through Thursday**

Second Semester final examinations.

**May 24, Friday**

Grades for prospective graduates due in Registrar's Office by 9:00 a.m.

**May 26, Sunday**

Commencement exercises.

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**SUMMER SESSION, 1968****May 1, Wednesday**

Application for Registration forms for the Summer Session should be in the Registrar's Office by this date.

**May 20-23, Monday through Thursday**

Appointment for registration will be issued in Registrar's Office.

**May 31, Friday**

Registration according to appointment.

**June 3, Monday**

Classes begin.

**June 5, Wednesday**

Last day to register or change schedule.

**June 14, Friday**

Deadline for filing Request for Graduation forms with the Registrar.

**July 4, Thursday**

Independence Day, holiday.

**July 12, Friday**

First term final examinations.

**July 13, Saturday**

Registration.

**July 15, Monday**

Classes begin.

**July 17, Wednesday**

Last day to register or change schedule.

**August 21, Wednesday**

Second term final examinations

**August 25, Sunday**

Commencement exercises.

# OFFICERS AND COMMITTEES

## 1966-1967

### PAN AMERICAN COLLEGE

#### THE BOARD OF REGENTS

|   |              |
|---|--------------|
| Henry C. Morris, Jr., Chairman .....    | McAllen      |
| John C. Jones, Jr., Vice Chairman ..... | La Feria     |
| Carl C. Conley, Secretary .....         | Raymondville |
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| Felix T. Martinez .....                 | Mission      |
| Mrs. Allan Shivers .....                | Austin       |

#### ADMINISTRATIVE OFFICERS AND STAFF

##### Office of the President

|                       |           |
|-----------------------|-----------|
| Ralph Schilling ..... | President |
| Roma Lindquist .....  | Secretary |

##### Office of the Dean of the College

|                     |           |
|---------------------|-----------|
| H. A. Hodges .....  | Dean      |
| Gardis Sumers ..... | Secretary |
| Jane Johnson .....  | Secretary |

##### Offices of Instruction

##### Division of Arts and Sciences

|                     |           |
|---------------------|-----------|
| Orlan L. Sawey..... | Director  |
| Donna Board .....   | Secretary |

##### Department of Biology

|                      |                 |
|----------------------|-----------------|
| L. O. Sorensen ..... | Department Head |
|----------------------|-----------------|

|                                |                 |
|--------------------------------|-----------------|
| Department of Chemistry        |                 |
| J. Lell Elliott .....          | Department Head |
| Department of Communications   |                 |
| Orlan L. Sawey .....           | Department Head |
| Department of Fine Arts        |                 |
| John D. Anderson .....         | Department Head |
| Department of Foreign Language |                 |
| Charles E. Beaudry .....       | Department Head |
| Department of Mathematics      |                 |
| Sidney S. Draeger .....        | Department Head |
| Department of Physical Science |                 |
| L. A. Youngman .....           | Department Head |
| Department of Social Studies   |                 |
| Raymond H. Miller.....         | Department Head |

#### Division of Business Administration

|                           |           |
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| *Letitia Arnold .....     | Secretary |
| †Sandra Beverly .....     | Secretary |

#### Division of Education

|                                  |                 |
|----------------------------------|-----------------|
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| Ruth Van Dresar .....            | Secretary       |
| Department of Education          |                 |
| L. D. Gilmore .....              | Department Head |
| Department of Physical Education |                 |
| Harry E. Larche.....             | Department Head |

#### Athletics

|                         |                              |
|-------------------------|------------------------------|
| J. A. Brooks .....      | Director                     |
| Patricia Woodward ..... | Secretary                    |
| Larry Ensminger .....   | Athletics Publicity Director |

#### Inter-American Institute

|                        |           |
|------------------------|-----------|
| T. Lawrence White..... | Director  |
| Bennie Carlson .....   | Secretary |

\*Resigned, January, 1967.

†Effective, January, 1967.

**Library**

|                       |                     |
|-----------------------|---------------------|
| Leslie M. Gower ..... | Librarian           |
| Jody Feldtman .....   | Secretary           |
| Anne Floyd .....      | Assistant Librarian |
| Ruth Graham .....     | Assistant Librarian |
| Thelma McLain .....   | Assistant Librarian |

**Observatory**

|                  |          |
|------------------|----------|
| Paul Engle ..... | Director |
|------------------|----------|

**Office of the Comptroller**

|                            |                                       |
|----------------------------|---------------------------------------|
| John R. Sawyer .....       | Comptroller                           |
| Irene Peterson .....       | Secretary                             |
| Billy J. Barker .....      | Accountant                            |
| Gertrude N. Wright .....   | Bursar                                |
| Betty Kotila .....         | Operator, Data Processing             |
| Samuel R. Odstreil .....   | Purchasing Agent and Property Manager |
| Louis S. deVries .....     | Physical Plant Director               |
| B. J. Pigg .....           | College Bookstore Manager             |
| John A. Mitchell, Jr. .... | College Cafeteria Manager             |

**Office of the Dean of Students**

|                        |  |
|------------------------|--|
| Robert S. Burks .....  | Dean   |
| Dorothy Smith .....    | Secretary and<br>Financial Aid Representative      |
| Glynn R. Morgan .....  | Director of Placement and Testing                  |
| Helen Badillo .....    | Secretary  |
| Bonnie Powers .....    | Dean of Women                                      |
| Jessie Humphries ..... | College Center Coordinator<br>and Nursing Services |

**Office of Public Information**

|                         |                    |
|-------------------------|--------------------|
| Vernon L. Davis .....   | Director           |
| Maria O. Espinoza ..... | Secretary          |
| Harry Quin .....        | Assistant Director |

**Office of the Registrar and Director of Admissions**

|                       |                        |
|-----------------------|------------------------|
| Nelia Mai Smith ..... | Registrar and Director |
| Helen Snider .....    | Secretary              |
| H. Gene Otwell .....  | Assistant              |



**COMMITTEES****ADMINISTRATIVE STAFF**

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 H. A. Hodges  
 John R. Sawyer  
 Robert S. Burks

Carlos Calderon  
 Winnefred Bradway  
 Charles Otken  
 Sherman W. Eager  
 Sidney R. Garrett  
 William C. Ferguson  
 Amilda Thomas  
 Phelma N. Moore

**ADMINISTRATIVE ADVISORY COUNCIL**

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 Vernon L. Davis  
 Leslie M. Gower  
 T. L. White  
 Robert N. McMichael  
 Orlan L. Sawey  
 Charles E. Beaudry  
 L. A. Youngman  
 Sidney S. Draeger  
 L. D. Gilmore  
 Harry E. Larche  
 John D. Anderson  
 J. Lell Elliott  
 Lazern O. Sorensen  
 Raymond Miller

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 Harry Quin  
 Helen J. Blackburn  
 Clare Dugan  
 Ex-officio—Vernon L. Davis  
 Robert S. Burks

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 Rudolph V. Pharis  
 Phelma N. Moore  
 Lazern O. Sorensen  
 Lyle G. Bounous  
 Harry Lund  
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 Lazern O. Sorensen  
 J. Lell Elliott  
 Orlan L. Sawey  
 Glvnn Morgan  
 Rudoluh V. Pharis  
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 Robert N. McMichael  
 Ex-officio—Ralph Schilling  
 H. A. Hodges  
 Nelia Mai Smith  
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**ATHLETIC COUNCIL**

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 John Hook  
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**CURRICULUM COMMITTEE**

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 Lyle G. Bounous  
 Estella H. Godfrey  
 Joe C. Murrell  
 L. A. Youngman  
 Rudolph V. Pharis

**FACULTY ADVISORY COMMITTEE**

Carl C. Wright  
 Wm. H. Fagerstrom  
 Joseph Tallant

(Eight public school personnel also serve on this committee.)

# HISTORY OF THE COLLEGE

On September 1, 1965, Pan American College made its greatest step forward when it became the 22nd Texas institution of higher learning to receive state support. This ultimate goal was the climax of an impressive record of achievement during the past 38 years of operation in the lower Rio Grande Valley. During this period, Pan American College has moved forward in all areas of leadership and great advances have been made in the field of higher education as well as physical plant facilities and curricula.

This institution first began operation in September, 1927, as Edinburg Junior College and served as a two-year junior or community college. During this quarter century period, as the population grew, there was a steadily increasing demand that the Edinburg Regional College be expanded to a four-year college to better service the needs of the citizenry. In response to this demand, a law was passed by the Legislature and signed by the Governor on May 13, 1951, enabling the people of Hidalgo County to vote on the expansion of the college which would serve the needs of this section. The election held December 29, 1951, resulted in the establishment of the Pan American Regional College District which included all of Hidalgo County.

In accordance with the provisions of the law, members of the Board of Regents were appointed by the Commissioners Court of Hidalgo County. Shortly after their appointment in January of 1952, the Board met and selected a President, Vice President and Dean of the College. By the end of the 1951-1952 school year, a plan of organization was adopted and a large portion of the faculty selected.

In September of 1952, a full four-year program was offered. Each year of operation saw a steady increase in the enrollment and in the number of students graduating. In the 14-year period as a senior college, the enrollment of students has increased from 693 to 3,357 in 1966. As a junior institution, the physical worth was \$557,178 in 1951. Current property assets at Pan American are in excess of \$3.5 million. During this period, rapid progress in scholastic programs have increased offering degrees in three areas of study. As a consequence of these growth records and the strained financial resources of the college district, the college reached its goal of state-support in 1965.

# BUILDINGS AND EQUIPMENT

## EAST CAMPUS

The **Old Administration Building** contains administrative offices, including two of the Division Directors, the Director of the Inter-American Institute, and some of the Department Heads. In addition, it contains classrooms and faculty offices.

The **Art Building**, located between the old Administration Building and the Faculty Offices, contains classrooms and laboratories for the Art Department and offices for the art faculty.

The **Auditorium** is completely and adequately equipped for the presentation of plays, musical productions, and any other programs requiring for their presentation stage and lighting facilities of the best type. The building can seat 1,200 or more persons and is used for a variety of Valley programs in addition to its use by college groups.

The **Drama Building** houses the offices for student publications and contains one large classroom.

The **Faculty Offices** (formerly Administration Annex) is used for faculty offices.

The **Industrial Education Building** contains the laboratory equipment used in several areas of Industrial Education: power technology, welding metallurgy, machine shop, sheet metal, and electricity; also, it has an air-conditioned lecture-demonstration room, and provides space requirements for some of the Fine Arts crafts, as well as offices and storerooms.

The **Woods Laboratory** provides the housing for the tools and equipment necessary for all areas of wood-working: crafts, pattern-making, cabinet-making, upholstery, and a complete finishing area.

The **Piper Building** is a small building housing the offices of the School of Education and other faculty offices.

The **Science Building** contains laboratories, offices, and classrooms for the Departments of Biology and of Chemistry. In addition, other classrooms and laboratories are used for classes in Agriculture and other academic areas. When the new Science Building is completed on the West Campus, the Departments of Chemistry and Biology will be moved to the new complex.

## WEST CAMPUS

Since the beginning of the four-year institution established in 1951, approximately 120 acres of land have been purchased by Pan American College, with the aid of the citizens of Edinburg. This acreage was acquired and expanded the existing eight and one-half acres, purchased and used by the Edinburg Regional College for physical education classes where a field house had been constructed in 1950. This area became known as the West Campus and is now in process of intensive development.

nine new buildings are completed and form the nucleus for the beautiful campus envisioned on the Master Plan for the College.

The **Administration Building** is the most recently constructed building on the West Campus. Located just west of the Library, it contains the administrative offices of the President, Dean of the College, Comptroller, Registrar, Dean of Students, Public information, and the Data Processing Center.

The **Chapel of the Lord's Prayer**, completed early 1967, was made possible through the generosity of Mrs. Joe Crump of Mission and Midland and her late husband. The building, located directly north of the College Library, is beautifully furnished with an organ and with seats for 48 persons.

The **College Center** is the focus of student life on the campus and serves a variety of student and faculty organizations which use it as a meeting place. The structure is completely air-conditioned and contains a lounge which seats over 100 and a cafeteria which seats almost 200. Also contained in the building is a large bookstore, a game room, two small dining or conference rooms, a television room, a clinic and offices for officials of the College and for the student government. A large covered patio offers opportunity for lounging, dancing and games.

The **Engineering Building** which is the most expensively constructed building to date, contains 25,000 square feet of floor space. The completely air-conditioned structure is fully equipped with new furniture and laboratory facilities. Classrooms, reading and conference rooms are provided as well as laboratories for physics, geology, mechanical drawing and physical science, which are used in regular class work and research.

A **Field House** with a full-size basketball court, and showers and dressing rooms for both men and women, was constructed before the College became a four-year institution. Subsequently, additional showers and locker spaces have been provided.

The **Liberal Arts Building** is fully air-conditioned and contains modern furnishings in the 17 classrooms. Also provided in the building are 17 individual offices for faculty members and an office for the secretary. This building was constructed and ready for use in the fall semester of 1963.

The **Library** is rapidly expanding in order to meet the needs of a first class senior college and now contains a collection of 62,000 volumes of book stock. This collection contains extensive reference works and periodicals which cover almost every academic field of study and is housed in an attractive, modernistic, centrally air-conditioned building. In addition to the main and periodical stacks and reference section, the Library contains separate areas for curriculum books and children's literature, as well as a browsing area featuring new and popular titles. The Pan American Collection contains many valuable books about the Southwest, Texas, the Rio Grande Valley, Mexico and Latin America, which are placed in a specially provided room.

The Library provides seating for more than 250 students. The Pan American Room and the browsing area contain comfortable lounge furniture. Individual study carrels are available and conference rooms are designed for use by students who wish to study in groups or to type. Also provided, are facilities for photoduplication of periodicals, articles and books, phonograph discs for listening and microfilm reading.

The **Observatory and Astro-Science Center** on the West Campus presently includes: an Observatory Dome, housing a 17-inch telescope; a well-equipped Planetarium, presenting public programs at regular intervals; a number of smaller telescopes and astronomical cameras housed in separate structures; and adequate office space for the Staff. A new radio telescope is being constructed and will be located at the Observatory Complex.

At the former Moore Air Base, a few miles west of the campus, an astronautics laboratory, rocket range, and astronomical instruments are in regular use as a part of the astro-science program. A new astronomical camera and dome have been installed at Moore Air Base for the National Aeronautics and Space Administration in a geodetic satellite program under a government contract. Pan American College is operating this facility with the help of Astro-Science majors.

A 41-inch astronomical telescope mirror has been finished and will be used in a new telescope and observatory. A site in the western Rio Grande Valley is planned and the equipment from Mt. Infiernillo in Mexico has been returned to the United States after completion of three years of research sponsored by the National Science Foundation.

The **Orville I. Cox Tennis Stadium** offers some of the finest playing surfaces to be found in the Southwest. The Stadium, which was built through contributions from a number of interested friends of the College, has acquired a reputation as the location of the Annual Pan American Invitational Tennis Tournament which is held each spring.

**Southwick Hall** for men and **Emilia Hall** for women are the only dormitories and are completely modern in every respect. The completely air-conditioned structures each contain space for 60 students, two living in each room, and also provide lounge space, auxiliary rooms such as laundry room, as well as quarters for the directors. Meals are served in the cafeteria in the College Center which is conveniently located to both dormitories. Information concerning reservations, costs and regulations may be obtained from the Office of the Dean of Students.

A **Baseball Field** is located north of the Observatory and is the playing field for the varsity team. Seating accommodations are provided for 200 spectators.

Classes in agriculture use a **Semi-shade** for growing plants and shrubs which are affected by too much sunlight. This building is adjacent to the experimental plots used by the department.

Construction of a new **Science Building** is now in process on the West Campus. The structure is valued at \$1.5 million and is on the northern part of the campus. The two-story air-conditioned building contains classrooms,

darkrooms, faculty offices and laboratories for biology and chemistry. Also included is a large auditorium with seating facilities for 486 persons. On completion, this new complex will replace present facilities on the East Campus.

## ADMISSION

### METHODS OF ADMISSION

A student is admitted to Pan American College through the Office of the Registrar. He may gain admission by:

1. Presentation of a transcript of his high school record showing that he is a graduate of an approved high school and that he has earned at least 16 accredited high school units. Included among the 16 units must be: three units in English; two units in mathematics; and a minimum of six units from the three fields of: a foreign language, social science, and natural science (with at least two units from each of two of these fields). All these units must be accredited by the Texas Education Agency.

If the graduate receives his diploma in any type of program not designed to meet college entrance requirements, the applicant will not be accepted unless: (1) he is recommended by his high school principal; and (2) his composite grade on the required ACT tests show that he would have scored above the lowest quartile of the entering freshmen of the preceding year.

2. A mature person who is at least 21 years of age and who has never graduated from high school may enter on condition. Conditional entrance may only be secured by making an average score of 45 on the General Education Development test.

3. A student transferring from another college may be admitted after having his previous college work evaluated in terms of Pan American College standards. Such students must be eligible to return to the institution from which they came and must also meet the grade point average required of Pan American College students. A person ineligible to return to the college he last attended, for any reason, will not be permitted to enter this College until such time as he would also be eligible to return to the institution previously attended.

Any student who has ever been enrolled in another college, must present a transcript from that institution before he can be considered for admission to Pan American College. Failure to submit such transcripts is grounds for immediate dismissal from this College when admission has been gained by ignoring previous college work.

Students who are on academic suspension at this, or any other college, will not be granted admission for any long-term or Summer Session.

A transfer student on scholastic probation must be approved for conditional admission by the Registrar.

## PROCEDURE FOR ADMISSION

Any student entering Pan American College for the first time, except those entering for a Summer Session **only**, must submit the following:

1. A **complete transcript** of previous work, whether from high school alone or, for transfer students, from other collegiate institutions attended.

2. A **record of a recent physical examination**. The approved examination forms may be obtained from the office of the Registrar or the detachable form in the back of the catalog may be used. The applicant's personal physician should examine him, complete the blanks on the examination form, and return the form to the Registrar.

3. Scores from the **American College Testing Program** tests. Students who have not filed test results with the College may take the test at Pan American College at the time indicated on the official calendar as published in this catalog. A fee will be required.

4. Scores on Speech, English, or such other local tests as may be administered during the **Orientation Program** for new students. Dates for this Program are shown in the Calendar or are stated in notices mailed to the applicant. New students are **required** to be present for this Program.

All registration is by appointment only and no appointments will be issued until the applicant has complied with the requirements as listed above, by the date listed in the Calendar. It is the individual responsibility of each student to see that transcripts, test scores and health record are filed in the Registrar's office.

## DEFINITIONS

The rules and regulations of the College use terms that have specific meaning but which are not always clearly understood by the student. For his benefit, some of the more common terms are defined in this section. The listing is alphabetical.

**Advanced Level Work:** Courses numbered either 3000 or 4000 are called advanced or upper division courses. Normally, a student with fewer than 60 semester hours of credit may enroll in 3000 or 4000 courses only when his schedule includes enough lower level (1000 and 2000 courses) work to total at least 60 semester hours, in addition to the upper level courses for which he wishes to enroll. Approval of the Department Head or Division Director is required if the conditions given above are not met for advanced level enrollment.

**Auditor:** A student who has special permission to audit or visit a class without receiving academic credit is listed as an auditor. One may enroll as an auditor at any time by: obtaining the proper audit card from the Registrar, having it approved by the instructor of the class to be audited, paying the required fee to the Comptroller's office, and using the paid receipt as an admission card to the class. Enrollment as an auditor does not permit the enrollee to take examinations, have test or other

papers checked by the instructor, or to participate in the class discussion. Students may not receive credit for a course taken by audit, nor is a student eligible for Advanced Standing Examination over a course which has been audited. Audited courses are not posted on the student's permanent record.

**Classification of Students:** Students are classified according to the number of semester hours of college credit they have earned.

A student is classified as a **freshman** if he has fewer than 30 semester hours of college credit.

**Sophomores** must have 30-59 semester hours of credit.

**Juniors** have credit for 60-89 hours.

**Seniors** are students who have credit for 90 or more semester hours.

Students who hold a degree are classified as **special students**.

**Course Numbers:** Courses are numbered to show both the collegiate level at which they are offered and the semester hour value of the course. The first digit shows the level and the second digit shows the credit hours. The last two digits are merely departmental designations.

1000 courses are at the freshman level

2000 courses are at the sophomore level

3000 courses are at the junior level

4000 courses are at the senior level

Where the course named is followed by two numbers, separated by a comma, the course consists of two semesters of work and both semesters must be completed in order to receive credit.

Since the four-digit system was used for the first time in 1965-1966, the former course numbers are shown in parentheses. For example the catalog entry, English 2305, 2306 (253, 263) shows that the course is given in the sophomore year; that it carries three hours of credit per semester; that its former designation was Eng. 253, 263; and that both semesters must be completed for credit to be received in either.

**Degree Plan:** A Degree Plan is an outline of the courses a student must complete or other conditions he must comply with in order to meet the requirements for graduation for a specific degree. This Degree Plan should be made out not later than the first semester of the junior year and it is often helpful to complete it earlier than this. While a student may make out a Degree Plan without consulting any source except listed catalog requirements, he must have the Plan approved by the Dean of the College before he can submit an Application for Degree to the Registrar.

**Full-time Student:** One who is enrolled for twelve or more semester hours of credit is classified as a full-time student. Persons enrolled for fewer than twelve hours of credit are classified as part-time students.



**Grade Point Average:** The grade point average is computed by dividing the total grade points earned by the total semester hours attempted. (See the sections on Quality of Work: (1) Grading System and (2) Grade Points.)

**Graduation Under a Specific Catalog:** The student must meet the requirements for graduation that are listed in the catalog of the year in which he enters Pan American College; provided that, he must graduate within a period of seven years from date of entrance. If he takes more than seven years he must graduate under the provisions of a subsequent catalog approved by his Department Head and by the Dean of the College. In any case the catalog he elects must be within seven years of the date of his graduation and will, usually, be the one in effect at the end of the seven year period.

**Honor Roll:** Each semester an honor roll is published of the names of all full-time students who have no grade below "B."

At graduation, students are listed with "Honors" in accordance with the following standards:

Cum Laude — A grade point average of 3.0 to 3.49.

Magna Cum Laude — A grade point average of 3.5 to 3.74.

Summa Cum Laude — A grade point average of 3.75 or more.

Students who transfer must have an overall average equivalent to these grade point limits and, in addition, their work at Pan American College must meet these grade point averages.

**Non-credit Enrollment:** A student who is eligible to enroll for credit may, if approved by the Dean, enroll for a course on non-credit basis. He may take tests, have papers graded, and receive the same classroom attention given students enrolled for credit but may not receive credit for the course — either at the close of the semester or by an advanced standing examination later. Any change from non-credit to credit status must be made, through the Registrar's office, not later than one month from the date classes begin.

**Prerequisite:** This term means that specified requirements must be met before one can enroll in a course which has a prerequisite listed in its description.

**Probation:** A student is placed on scholastic probation when he fails to achieve the required grade point average. A student may be placed on disciplinary probation for infraction of any college regulation. In either case, he must satisfy specific limitations placed on him before he can return to a non-probationary status.

**Proficiency Tests:** Any student who fails to meet the standards required in speech, English, or computational ability will take proficiency tests in these areas. These tests will be administered once each semester or summer term and failure to pass the tests will prevent graduation. (See the section on Graduation Requirements.)

**Semester Hour:** College credit is measured in terms of semester hours. Ordinarily, a class that meets one period per week for a semester will carry a credit of one semester hour. Since the majority of classes meet three periods, or their equivalent, each week, these classes carry three semester hours of credit. Two or three laboratory hours are usually required for any semester hour of credit.

### GENERAL REGULATIONS

College students are expected to demonstrate a sense of responsibility for their actions and behavior. Each student is expected to become familiar with the working rules which have been adopted for the benefit of the entire student body.

**Alcoholic Beverages:** The college prohibits the possession or consumption of alcoholic beverages on the campus or in college buildings, and in student residences, both on-campus dormitories and off-campus housing. Students are held individually responsible for compliance with this regulation. Under this rule the college does not permit student organizations to serve alcoholic beverages at student functions or meetings held on the campus.

**Attendance:** Work missed because of absence can be made up only by arrangement with the instructor or on recommendation of the appropriate Division Director. It is the individual responsibility of the student who is absent for any reason to notify the proper persons of the reason for his absence and to contact the appropriate Division Director for any permit required by his instructors. It should be obvious that work must be made up as soon as practicable. Students who expect to be absent will notify their instructors in advance of the absence. Students who miss a final examination must notify the instructor of the reason at once. There are no approved "cuts."

**Bulletin Boards:** Official administrative bulletin boards are located in several campus buildings. Notices from administrative offices are posted in duplicate on each board and students are responsible for checking at least once daily. Such posted material constitutes official notice to the persons who may be involved.

**Citizenship and Deportment:** Observance of all local city ordinances, state laws, and national laws is expected of each student. It is the responsibility of each student to conduct himself in such a manner that his deportment, either on or off campus, will not lead to the embarrassment of the students nor to the college as a whole. Failure to assume the responsibility will result in disciplinary action.

**Class Responsibility:** Each student is responsible for all of the work in each of his class groups. Failure to meet this obligation may lead to dismissal from the class or, in the case of the student on probation, from the college.

**Eligibility for Representation:** To represent the college in any type of contest or to receive awards for previous participation, a student must meet the college eligibility requirements:

- a. The student must be a full-time student. During his last semester in college, he must have passed at least 12 semester hours of work with a minimum of 24 grade points. He must meet quality standards as indicated under **Quality of Work**.
- b. In addition, the student must meet eligibility requirements of any conference or association in which he competes as a representative of the College.
- c. Before leaving the campus on any college sponsored trip, each student is required to have his eligibility certified by the Director of the Division in which the student is enrolled.

**Gambling:** State law specifically forbids gambling of any form on State property. Gambling in on-campus or off-campus housing may result in legal procedures and disciplinary action. Gambling on the campus by Pan American College students is in direct violation of college policy and may lead to disciplinary action.

**Hazing:** Hazing at any state educational institution is prohibited by law. Hazing is defined according to the General Laws, Regular Session, 33rd Legislature 1913, Article 1152.

**Official Clearance:** No transcript of credits or grades will be released to a student or to any designated person unless the student has settled all accounts due the College and has effected an official clearance through the offices of the Registrar, the Comptroller, and the Office of the Dean of Students.

**Respect for Property Rights:** Each student must assume the sole responsibility for his personal property. The very nature of group living and working demands that the members of the group respect the property rights of others. Any student brought to the attention of the administration for failure to respect the property rights of others will be subject to severe disciplinary action.

**Scholastic Dishonesty:** Any student guilty of scholastic dishonesty, which includes plagiarism, collusion, or cheating on any examination or test is subject to suspension from the College. Cheating involves either the giving, receiving, offering or soliciting of information, or the use of prepared material in an examination.

**Social Functions:** Any social function held under the name of the college or of any college organization or group requires the written approval of the Coordinator of Student Activities prior to the date of the function. For further details, refer to the Code of Student Affairs.

**Summons to Administrative Offices:** At times it becomes necessary that a student be requested to report to an administrative office for a conference. The summons may be transmitted by letter, by telephone, by notices on bulletin boards, or by other means of communication. A student who receives a summons is expected to report immediately and to do so in preference to other duties. Failure to heed such summons makes a student liable to suspension.

**Unlawful Assembly and Publications:** Any individual student or organization at Pan American College who is identified while participating in an unscheduled and/or unapproved campus activity, either on or off campus, which leads to embarrassment of the student body or the college as a whole, will be subject to disciplinary action.

## HOUSING

### ON-CAMPUS HOUSING

**Unmarried students who do not live at home or with a close relative must live in housing approved by the Office of the Dean of Students.**

Two dormitories are provided on the Pan American College campus for housing:

Emilia Hall — Women's dormitory

Southwick Hall — Men's dormitory

Both dormitories are air-conditioned and centrally-heated for year-around comfort.

#### List of Articles for Dormitory Living

- 4 to 6 sheets (beds are too long for fitted sheets)
- 2 to 3 pillow cases
- 4 to 6 towels
- 2 to 4 wash cloths
- 1 waste basket
- 1 quilted pad for single bed
- 1 bedspread for single bed (optional)
- Curtains and rod for one window, size 56" x 65" (optional)
- 1 shower curtain and rings to attach it to rod (Emilia Hall, only)
- 1 desk lamp (not clamp-on type)
- 1 alarm clock (optional)

If you would like to match your bedspreads, etc., may we suggest that you wait to buy them until you reach school and have been assigned a roommate, so that you may discuss together your color scheme and design.

If you wish to hang **anything** on your wall, see the director of your dormitory for directions before doing so.

**Linen Service:** Arrangements have been made with the Edinburg Laundry & Dry Cleaners for linen service for those students who want this service.

This company will provide the following, upon request:

- |  |               |
|--|---------------|
| I. To be delivered each week: 2 sheets | 1 pillow case |
| 4 bath towels                          | 4 wash cloths |

- Cost: 1 long-term semester — \$12.00  
2 long-term semesters — \$22.50  
1 6-wk summer semester — \$ 5.00  
2 6-wk summer semesters — \$ 9.00

- II. Over-night service, consisting of 2 sheets, 1 pillow case, 1 towel and 1 wash cloth—50c per night

**Conditions:** Students will be expected to pay for lost linens, burns and unnecessary tears while linens are in his possession. If a student leaves the college within the first six weeks of the semester, a refund of 50% of deposit will be made. After the first six weeks there will be no refund.

Dormitory residents must comply with College regulations as stated above and, in addition, are subject to specific regulations governing each dormitory. These are posted in the dormitory or given to each occupant. Directions for making dormitory room reservations, the schedule of fees and deposits, and other details concerning dormitories will be found under the section of the catalog headed **Student Expenses**.

### OFF-CAMPUS HOUSING

**Correct Addresses:** It is necessary that each student have on file in the Office of the Dean of Students and in the Office of the Registrar a correct living address. A student who changes his address after registration cards have been filed must report to these offices immediately and have his address corrected or be subject to disciplinary action.

These regulations apply to all students at Pan American College who are single.

Any student who is not living at home and not living with a blood relative, must stay in an approved residence, and must first contact the Office of the Dean of Students and receive approval for his housing. A list of approved housing, from which he should choose a residence, will be furnished upon request of the student. After securing such residence, he must then report to the Office of the Dean of Students, bringing his address and the name of his landlord.

If a student's parents or guardians wish him to live in a residence not on the approved housing list, written permission from the parent or guardian must be filed at the time of registration with the Dean of Students or Dean of Women. This statement must include place of residence of the student and the reason for not residing in a residence on the approved housing list. Each case will be subject to individual approval by the Dean of Students or the Dean of Women.

If students wish to stay in apartments, approval must be secured from the Office of the Dean of Students. Approval will be made on an individual basis. No approval will be granted for any arrangement that permits single men and women to live in the same residence, either in rooms or apartments.

Periodic checks will be made by the Dean of Students and the Dean of Women or designated representatives, and any violations will be noted and necessary action will be taken.

## GRADING SYSTEM AND GRADE POINTS

The following grades are used to designate achievement in classwork. Their corresponding grade values are indicated.

A—Excellent (4 grade points per semester hour)

B—Good (3 grade points per semester hour)

C—Satisfactory (2 grade points per semester hour)

D—Below average (1 grade point per semester hour)

E—Conditional (0 grade points per semester hour)

F—Failure (0 grade points per semester hour)

I—Incomplete (0 grade points per semester hour)

N/C—No credit (Not considered in calculating grade points).

An E may be given **only at the end of the first half of a two-semester continuous course** if the second semester of the course has not been previously taken. An E is removed by doing work of at least C value during the second half of the course. It may be raised only to a grade of D and it must be raised within a year or it automatically becomes an F.

A grade of I may be given **only for work which is incomplete because of reasons beyond the control of the student**. Such reasons might be illness which prevents him from taking the final examination, death in the family, or a similar serious circumstance. An I must be removed by the end of the following regular semester or summer session, **whichever comes first**. Failure to remove it within this period causes the I to be changed, **automatically**, to a grade of F. An I is not given simply because the student fails to complete assigned work on time.

While a grade of D is considered a pass in a subject, an overall average of C which corresponds to a grade point average of **two** must be maintained by the student if he expects to graduate or to transfer his work to another college. Pan American College has certain specific grade requirements also. For example, the student must maintain a C average in his required work in English; a D in English will have to be balanced by a B in English, not a B in another subject field. He must also make an average of C in both his major and his minor fields.

## QUALITY OF WORK

### GRADE POINT AVERAGES

A student is expected to maintain a satisfactory quality of work.

First year full-time students must pass at least nine hours with a total of at least 18 grade points. (A first year student is one who is in either the first or second semester of attendance in College; a full-time student is one enrolled for at least twelve hours.)

All other full-time students must pass a minimum of 12 semester hours with a minimum of 24 grade points.

Part-time students must pass all hours and make twice as many grade points as semester hours for which they are enrolled.

**Probation.** Students who do not meet minimum grade point averages will be placed on scholastic probation. Such a student is ineligible to participate in college functions, except those of a purely social nature, may not represent the College in any type of contest, is not eligible to receive an award from the College, and may not hold office in any student organization. His attendance must be maintained during the probationary period; **unexcused absences will cause him to be dropped from the rolls of the College.** During the period of probation, the student's enrollment is usually limited with respect to the total credit hours he may carry. His scholastic load must be approved by his Division Director and any absences must be excused by the Division Director.

To be removed from scholastic probation, students must meet the minimum grade point requirement as outlined under **Grade Point Averages.** This grade point average must be attained by the end of the first regular semester the student attends after being placed on scholastic probation. Unless approved by the Division Director, the student must be enrolled for as many credit hours during the probationary period as he was the preceding semester. A student who fails to remove himself from scholastic probation is ineligible to re-enroll for a period of one semester, at which time he may re-enter on probation.

Students on probation or suspension who may enroll in another College during the probationary period must get prior approval, from the proper Division Director, for any courses which they wish to have accepted by Pan American College.

Unless the student makes **specific written arrangements** with the Registrar, **at the time of registration,** Summer Session work **does not** count in removing probation, nor does the student go on probation for such work.

If a student elects to attempt removal of probationary status in the Summer Session, he must (1) notify the Registrar, (2) enroll for a **minimum** of 12 semester hours of work, (3) make a grade point average of 2.0 on all work taken. Failure to remove the probationary status will **bar** the student from enrolling in the following fall semester. Students on aca-

demetic suspension may not enroll in any semester or summer term until they have fulfilled the requirements for readmission.

A student may be readmitted, after the regular semester period of suspension, on probationary status only. If he fails to remove himself from probation the second time, he will be suspended for a period of two semesters. If he fails to remove himself from probation the third time, he will be suspended indefinitely.

If a student who has been suspended for failure to meet scholastic probation requirements feels that unusual circumstances warrant a review of his case, he may direct a written appeal to the Committee on Admissions. Such a petition should detail his reasons for thinking the circumstances of his case warrant special consideration and should indicate valid reasons why the circumstances will not recur. The Committee will reinstate a suspended student, who has not served the period of suspension, only when it is convinced the best interests of both the College and the student will be served by such action.

**Calculation of Grade Point Average.** An illustration of the method of calculating the grade point average follows:

| Course                | No.  | Semester Grade | Method of Calculating Grade Points | Grade Points |
|-----------------------|------|----------------|------------------------------------|--------------|
| English               | 1301 | C              | 3 sem. hrs. x 2 pts. per hr. =     | 6            |
| Mathematics           | 1301 | D              | 3 sem. hrs. x 1 pt. per hr. =      | 3            |
| History               | 2301 | B              | 3 sem. hrs. x 3 pts. per hr. =     | 9            |
| Chemistry             | 1401 | F              | 4 sem. hrs. x 0 pts. per hr. =     | 0            |
| Phys. Ed.             | 1101 | A              | 1 sem. hr. x 4 pts. per hr. =      | 4            |
| Total Hrs.            | 14   |                | Total grade points                 | 22           |
|                       |      |                | Total Grade points                 | 22           |
| Grade point average = |      |                | $\frac{22}{14} = 1.57$             |              |
|                       |      |                | Total semester hrs.                | 14           |

**Class Load.** Since the number of credit hours for which a student is enrolled has a close relationship to the quality of work he does, certain limitations are observed in scheduling. A freshman who has never received any college credit may not enroll for more than 17 semester hours of work, including one hour of physical education, unless his placement and orientation tests, and his high school grades, show him to be in the upper 20% of his class. The maximum class load is 18 semester hours for any student unless his schedule is approved by his Division Director; usually approval is granted only to students with a grade point average of three.

A student who works full time may enroll for no more than nine semester hours of credit per semester. Full-time public school teachers are limited, by the Texas Education Agency, from enrolling for more than three semester hours each semester unless the teacher is a candidate for a degree at the end of a specific semester. In such a case, he may enroll for six semester hours for that specific semester. Permission for enrolling for six semester hours must be granted by the teacher's superintendent.



**Grade Point Average for Graduation.** In order to graduate a student must maintain a grade point average of two for all work taken in college, including courses that have been failed. In addition, he must have a grade point average of two for all courses in his major and in his minor. Courses that have been dropped with a grade of Drop Pass will not be counted in the calculation of the average, but courses dropped with a Drop F or WF will be counted. A student who repeats a course must count the grade points received the last time he takes the course. While all grades are recorded, no matter how many times a course is repeated, the last grade is the only one used in the grade point calculations.

### ADVANCED STANDING EXAMINATIONS

To be eligible to receive credit by means of an advanced standing examination, a student must meet the following conditions:

1. He must have been enrolled as a full-time student at Pan American College for one semester.
2. He must have a grade point average of three (B) on work taken at Pan American College.
3. He must satisfy the Department Head of the department in which the course, over which he desires to be examined, is offered that he has the proper background to qualify him for the test. The application for the test must be approved by the Dean of the College.
4. He must make a grade of B on the test in order to establish credit for the course. A copy of the comprehensive test and the examination paper must be filed with the appropriate Division Director.
5. A student will not be approved to take an Advanced Standing Examination in any course which he may have audited, previously taken and failed, or which was waived as a prerequisite.

### ADVANCED PLACEMENT EXAMINATIONS

Advanced Placement Examinations are given in certain subjects in which the student has done creditable work in high school courses which were designed to offer college-level work. Usually the student should arrange to take the College Entrance Board Advanced Standing Examinations and should then present the results of such examinations to the Registrar. Where this is not done, the student should petition his Division Director for permission to take an Advanced Placement Examination. The Division Director will then determine if he is eligible for such an examination and will require that either the College Board or a locally prepared examination be taken. This must be done before or upon registration.

### WITHDRAWAL

The student must obtain the proper blank from the registrar and get such signatures as are prescribed by the registrar in order to withdraw from college. He must surrender his student identification card in order

to obtain any refund which may be due him. A grade of WP, indicating a passing grade at the time of the withdrawal, or a grade of WF, indicating a failing grade will be entered for each course, except for those who withdraw within one month, who will receive a W.

**Dropping a Course.** A student drops a course by following the steps outlined below:

1. Obtain the proper form at the Registrar's office.
2. Indicate the reason for dropping in the designated space.
3. Have the form signed by the class instructor.
4. Return the form to the Registrar's office.

Not until all four steps have been completed is the student formally dropped.

It should be noted that a student may also be dropped by his instructor or Division Director when he has had excessive absences.

Under no condition should the student fail to follow the above procedure in dropping a course. Failure to comply may jeopardize his standing in other courses.

Students who carry a course less than one month from the beginning of classes and drop it, will receive a Drop on the permanent record. Students who drop a course after one month (ten days in the Summer Session) will receive either a Drop F or Drop P (drop failing or drop passing) at the discretion of the instructor.

## CURRICULA AND DEGREES

Pan American College offers three types of curricula: those leading to one of the three degrees conferred by Pan American College; those satisfying the requirements for degrees offered at other institutions, such as: curricula leading to degrees in law, engineering, pharmacy, medicine, nursing education, and other specialized fields; and courses satisfying requirements for a minor field.

Within the Division of Arts and Sciences the following curricula and degrees are available:

1. The Bachelor of Arts with majors in: English, Speech, Government, History, Spanish, French, Art, and Music.
2. The Bachelor of Science with majors in: Mathematics, Biology, Chemistry, Astro-Science, Physics, and Medical Technology.
3. Curricula meeting the requirements for pre-medical, pre-dental, and similar pre-professional work.

The Division of Business Administration awards the B.B.A. degree in three areas of business:

1. Accounting
2. Secretarial Studies
3. General Business
4. The Division also offers a minor in Economics and lower division courses in Agriculture.

In the Division of Education the curricula and degrees include:

1. The Bachelor of Science in: Elementary Education, Industrial Education, and Physical Education.
2. Curricula meeting the certification requirements for teaching in secondary schools.

Minors are offered in all the fields which offer majors, but the student should have his minor field approved by his Division Director.

Supporting courses in a variety of fields are available in the various Departments of the College. These include: Geography, Journalism, Philosophy, Psychology, Sociology, Geology, Engineering Drawing, Mechanics, German, Russian, and Latin.

## GENERAL EDUCATION REQUIREMENTS

On January 13, 1964, the Texas Commission on Higher Education approved the organization and degree programs for Pan American College, with the effective date being September 1, 1965. The College operates under three divisions: the Division of Arts and Sciences, the Division of Education, and the Division of Business Administration. Three undergraduate degree programs were approved by the Commission: the Bachelor of Arts Degree (B.A.), the Bachelor of Science Degree (B.S.), and the Bachelor of Business Administration Degree (B.B.A.).

Because the College is convinced of the value of general, liberal education in developing worthy citizens of our nation and of our world, it expects all who plan to graduate from Pan American College to have some knowledge of the materials listed under this outline. There is no intention of stating that the classes and courses listed are the best or only ones for this purpose. Neither is it expected that the listed courses will not be changed from time to time, as experience may dictate. It does seem, however, that the pattern of courses offers the most acceptable program that the present thinking of the staff of the College can devise—commensurate with the limitations of time, facilities, and the state of knowledge of both faculty and students. Generally, the student should plan to complete most of the courses during his freshman and sophomore years; though certain professional objectives may make it necessary to postpone a portion until the junior or senior year.

A minimum of 48 semester hours of general, liberal education will be required for any degree. The following suggested courses offer considerable choice but the overall pattern may not be changed without consent of the Administrative Staff.

1. Communications
  - a. English 1301, 1302 unless Eng. 1301 is waived because of achievement in the required tests.
  - b. Speech, three semester hours will be required of all students who do not meet the standards prescribed in the speech test given at or before the time of registration. This is usually administered to freshmen the first semester of attendance, but may be given to transfer students at any level.
2. Humanities
  - a. English, American or World Literature—six semester hours.
  - b. Art 1301, except for students majoring or minoring in art.
  - c. Music 2307, except for students majoring or minoring in music.
3. Social Studies
  - a. State and Federal Government, Government 2313, 2314 (not open to freshmen).
  - b. History 2313, or 2333, 2314 (open to freshmen but may be taken in sophomore or junior year).
4. Mathematics, six semester hours.
5. Natural Science, six semester hours of a laboratory course.  
(Usually in a science not taken in high school.)
6. Foreign language, six semester hours (12 hours advised for those expecting to do graduate work).
7. Physical Activities, four hours (six required of P.E. majors). Only four hours in P.E. activity courses may be counted, except by P.E. majors.

## GRADUATION REQUIREMENTS

As noted under the heading of **Curricula and Degrees**, Pan American College offers three degrees: Bachelor of Arts, (B.A.), Bachelor of Science, (B.S.), and Bachelor of Business Administration, (B.B.A.). The general requirements for graduation are the same for each degree and are listed below. Specific requirements for each major field are listed in the catalog sections dealing with these majors. It is the responsibility of the student to be familiar with all the requirements for the degree he seeks.

1. A minimum of 124 semester hours of work with an overall grade point average of **two**, a grade point average of **two** in required English courses, and a grade point average of **two** in both the major and minor field, must be completed.
2. The completed courses must include 36 semester hours of advanced level work (courses whose numbers are 3000 or more).

3. The completed courses must include:
  - a. Texas and Federal Constitutions (Govt. 2313, 2314)
  - b. American Heritage (Hist. 2313, 2314 or Hist. 2333, 2314)
  - c. Four hours of physical education (activity courses). (No more than four semester hours of such P.E. courses may be counted toward graduation, except by P.E. majors.) Note exceptions listed in Department of Physical Education.
4. The work must include 30 semester hours in a major field of concentration, of which 15 hours must be advanced courses, and 18 semester hours in a minor field of concentration, of which six hours must be advanced. A total of 48 to 60 hours of work in a broadly integrated area (such as business administration or industrial education) may be substituted for the major and minor requirement. In general, the major should not include more than 36 semester hours of work in the specialized field, except as noted for the broad field. A minimum of 24 semester hours is required for a teaching field and two teaching fields must be completed by those seeking teacher certification.
5. The major-minor or broad field course distribution must follow the requirements set forth by the various divisions, as shown in the catalog. Transfer students who have a different pattern, or any student who wishes to vary from the stated requirements, must complete a Degree Plan, approved by the Dean, as soon as possible before the start of the junior year.
6. All students who plan to graduate from Pan American College must include a minimum of 48 semester hours of work in general education as outlined in the catalog. As noted, this ordinarily is taken in the freshman and sophomore years. Any variation from this general education requirement must receive the approval of the Administrative Staff.
7. All graduates of Pan American College must demonstrate proficiency in oral and written English, computational ability and civic responsibility. A committee of the faculty prescribes the requirements and arranges needed tests to measure proficiency. The following procedures have been established by the Committee on Senior Proficiency:
  - a. Students with a C average in required freshman and sophomore English and in speech are automatically exempt from the proficiency tests in both oral and written English, if not subsequently referred to the Committee on Proficiency. Transfer students who have credit for such courses from another college may be required to take a proficiency test in oral or written English at the discretion of the Committee.
  - b. Students with a C average in required mathematics courses are automatically exempt from a proficiency test in mathematics unless referred to the Committee on Proficiency because of subsequent evidence of a lack in mathematical proficiency.

- c. Civic responsibility is reflected by the student's record in his dealings with the Comptroller, the Library, the Registrar, the Administrative Staff, and the faculty. The Committee on Proficiency will consider reports from all these persons in making its determination of a student's civic responsibility.
  - d. Proficiency Tests are administered by the appropriate Departments prior to the catalog deadline for filing Request for Graduation forms with the Registrar. Students who fail to take the tests at the time set by the respective Departments will be charged a fee of \$4.00 for taking the test at another time.
8. The candidate for graduation must file an acceptable Request for Graduation form with the Registrar on or before the date specified in the College calendar.
  9. The student must complete a minimum of 24 semester hours of work in residence during the senior year. If he has not established credit in courses at Pan American College prior to his senior year, he must complete 30 semester hours in residence.

## DEGREE PLANS

As indicated under Selection of Courses, a student may follow listed catalog requirements in both the general and the specialized portions of his curriculum and thus plan his own schedule of courses. If, however, he deviates from these catalog requirements, he must work out a Degree Plan, on the proper form, and have this Degree Plan approved by the Dean. This should be done as soon as possible at the close of the sophomore year, before any advanced courses are taken. All students are advised to have a Degree Plan approved by the Dean. An approved Degree Plan is a prerequisite for making an Application for Degree.

Upon request, the Department Heads will aid students in preparing Degree Plans that may be required by agencies other than Pan American College. As an illustration, some public school systems require teachers who have not completed their degrees to file an approved Degree Plan in the superintendent's office.

## SELECTION OF COURSES

The student should plan to satisfy the requirement of a minimum of 48 semester hours of general education during his freshman and sophomore years. In addition to the general education requirement, he may need to take the introductory courses required in his major or minor field. As can be noted under the catalog section dealing with General Education requirements, there is a certain amount of flexibility of choice permitted among the required subjects.

Each of the Departments of the College lists the specific courses required of the major or minor in the specialized fields. Within the limitations imposed, there is usually some choice of courses at the advanced

level. The student should check these required courses and develop his own outline of subjects he will need for graduation. If he wishes to deviate from listed requirements in either the general education or the specialized portions of his work, he must work out a Degree Plan that the Dean will approve. Those students who do not deviate from catalog requirements are not required to have an approved Degree Plan, until they make an Application for Degree, but should be certain that they have not omitted any graduation requirement.

When a student enters this College with the expectation of subsequently transferring to another institution, he should be certain to obtain a copy of the catalog of that institution and use it as a guide of courses for which he will register at Pan American College. It is his responsibility to check the requirements for his course, though a faculty adviser will be glad to help him interpret requirements of other colleges.

### SUGGESTED CURRICULA

While Pan American College stresses flexibility in selecting courses so that each person may have that pattern of courses best suited to his needs, there are a few pre-professional curricula so rigidly prescribed that few electives are available.

As is stated elsewhere in this Catalog it is the responsibility of each student, who expects to transfer to another college or university to complete his work, to be certain that he is enrolled in the proper sequence of courses at Pan American. Registration advisers will be glad to help such a student plan his work with the aid of catalogs from the institution to which he expects to transfer but he must make the decisions about the classes he will need.

Students who plan to graduate from Pan American College should consult the catalog sections on: graduation requirements, general education, and the specific suggestions listed under the Divisions and Departments for major and minor requirements. The Division Directors will be glad to help clarify matters about which the student may be uncertain.

As a rule, general education requirements should be removed in the freshman and sophomore years. It is frequently necessary to complete introductory or prerequisite courses to the major or minor field during the first two years, and such courses are indicated in the suggestions given under the Divisions or Departments.

While the precise order may vary, the first two years of college work will follow the general pattern listed below. It should be noted that beginning freshmen may, as a rule, enroll for no more than 16 or 17 semester hours of credit each semester. The suggested pattern for the first year simply lists possible courses from which the student may select the hours for which he can enroll. As noted under departmental requirements for majors, there are some variations from these suggested courses but a student who is undecided about his major can usually feel safe in following the pattern.

It is expected that all beginning freshmen will meet with academic advisers prior to or at the time of actual registration and that they will be counseled concerning the best selection of courses. Sophomores and upper classmen are urged to see Division Directors and Department Heads, who are in their offices the week preceding registration, for advice about course selections and schedules.

#### FRESHMAN YEAR

- a. English 1301, 1302 (unless the student is excused on the basis of placement tests).
- b. Mathematics, six semester hours as advised.
- c. Natural Science, six semester hours of a laboratory subject. Unless required by his major or minor, the student is advised to enroll in a science not taken in high school.
- d. Art 1301 and Music 2307.
- e. Speech 1301, if required because of test results.
- f. Physical Education, two semester hours.
- g. French, German, Russian, or Spanish, six semester hours.

#### SOPHOMORE YEAR

- a. English, six semester hours in either American, English or World Literature.
- b. History 2313 or 2333, 2314.
- c. Government 2313, 2314.
- d. Any required course postponed from the freshman year.
- e. Six to eight semester hours in the major field.
- f. Physical education, two semester hours.

### SUMMER SESSION

As a part of its regular program, the College offers a Summer Session consisting of two terms of six weeks. Classes given in the summer are arranged to meet the requirements of students who need to do summer work and are selected on the basis of requests made by those who are enrolled during the regular term of the College. Usually one may complete twelve semester hours of work in the twelve-week period, though students with a good scholastic record may be allowed to enroll for as many as fourteen hours during the Session. Most classes, except those with laboratory sections, meet during the morning hours and are scheduled for five days of the week. Because some students must work during the day, a limited number of classes are offered in the evening. Generally, one may enroll for a maximum of eight hours for the entire Session in evening classes during the summer.

The 1968 Summer Session will begin on June 3.

### INTER-AMERICAN INSTITUTE

T. Lawrence White, Director

The Inter-American Institute of Pan American College was authorized by the Board of Regents on July 25, 1966, and officially began on September 1, 1966. The Institute is charged with coordinating and promoting all activities and programs in the Inter-American field. It is believed that these will increase rapidly, and in time, Pan American College will become one of the outstanding centers of the United States in this field.



The need to continue and expand intellectual communication and mutual understanding within the Western hemisphere, and with Mexico in particular, is of the utmost importance to the United States as well as to our neighbors to the South. To make a major contribution in this direction, the Inter-American Institute will develop as quickly as possible, an Inter-American Studies program. This will provide students with a wide general background in the history, geography, economics, languages, and literature of Hispanic America, and of Mexico in particular. Special emphasis will be placed upon achievement of sufficient knowledge of the Spanish language to make it an effective means of communication. This level of linguistic skill is essential to open the doors of cultural understanding and appreciation of Latin America to non-native speakers. The Inter-American Studies major will prepare the student to participate intelligently and effectively in business or government activities in Latin America or relating to Latin America.

This is an inter-departmental program and will involve the Departments of Biology, Business Administration, Communications, Fine Arts, Foreign Languages, and Social Studies.

A separate announcement on the Inter-American Studies curriculum is being prepared and will be distributed at a later date.



*BECOMING A REALITY*—Architect Kenneth Bentsen of Houston depicts in drawing the new \$1.5 million Science Building which was started early in 1967. On completion, the two-story facility will house the college's chemistry and biology departments. All future buildings on the expanding campus will utilize this type of modern architecture.



*CENTER OF ACTIVITY—The College Center is the focal point of campus activities, including recreation and dining. The college cafeteria is located in this building, along with the college-operated bookstore, game and television rooms and conference areas. On-campus dances are held in the College Center.*



*SLATED FOR EXPANSION—The Pan American College Library contains a collection of 62,000 volumes and a planned addition will provide further facilities for book stacks and reading areas. The library has extensive reference works and periodicals which cover every academic field of study at Pan Am.*

# STUDENT EXPENSES

The cost of attending Pan American College is reasonable; in fact, it is considerably less than at many institutions. Moreover, a broad student-aid program consisting of part-time employment, scholarships and loans provides opportunity for helping defray expenses. The cost of a Pan American College education should not stand in the way of any person determined to get such an education.

While the cost of attending college varies with the individual student, it generally conforms to a pattern. Therefore, in an attempt to assist the student in planning his budget, we have listed below the various expenses for which the student must make provision.

Note: Pan American College reserves the right to change tuition and fees in keeping with Acts of the Texas State Legislature or the Board of Regents.

## Payment of Fees

State colleges have no power to extend credit to any person. It is necessary, therefore, that any student registering at this college have the necessary finances to pay all expenses in advance at the time of registration. A student is not registered until all his fees are paid in full. Payment may be made by cash, check or money order payable to Pan American College. All checks, money orders and drafts are accepted subject to final payment.

## Tuition Fee

For each resident student enrolled for 12 or more semester credit hours the registration fee is \$50 per semester. State law requires that each non-resident student enrolled for 12 or more semester credit hours pay a non-resident registration fee of \$200 per semester. For each student enrolled for less than 12 semester credit hours there is a reduction in the amount of fee charged.

## TUITION FEE PER SEMESTER

| Semester<br>Hours               | Resident | Non-Resident |
|---------------------------------|----------|--------------|
| 12 or more                      | \$50.00  | \$200.00     |
| 11                              | 47.00    | 184.00       |
| 10                              | 43.00    | 167.00       |
| 9                               | 39.00    | 150.00       |
| 8                               | 35.00    | 134.00       |
| 7                               | 31.00    | 117.00       |
| 6                               | 27.00    | 100.00       |
| 5                               | 23.00    | 84.00        |
| 4                               | 19.00    | 67.00        |
| 3 or less                       | 15.00    | 50.00        |
| <b>Summer Session (6 weeks)</b> |          |              |
| 6 or more                       | 25.00    | 100.00       |
| 5                               | 23.00    | 84.00        |
| 4                               | 19.00    | 67.00        |
| 3 or less                       | 15.00    | 50.00        |

The responsibility of registering under the proper residence is placed upon the student, and it is his duty, at or before registration, if there is any possible question of his right to legal residence in Texas under the State law and College rules, to raise the question with the Registrar and have such question settled prior to registration. There can be no change of residence except upon express authorization by the Registrar. Attempt on the part of a non-resident to evade the non-resident fee will be taken seriously and may lead to expulsion.

### Resident and Non-resident Students

Pursuant to the authority granted by the Fifty-fifth Legislature, the Board of Regents has adopted the following non-resident regulations:

1. The term "residence" means "legal residence" or "domicile"; and the term "resided in" means "domiciled in."
2. A non-resident student is defined to be a student of less than twenty-one (21) years of age, who is living away from his family and whose family resides in another state, or whose family has not resided in Texas for the twelve (12) months immediately preceding the date of registration, or a student of twenty-one (21) years of age or over who resides out of the state or who has not been a resident of the state twelve (12) months immediately preceding the date of registration.
3. Individuals who have come from outside the state and who are gainfully employed within the state for a period of twelve (12) months prior to registering in an educational institution shall be classified as "resident students" as long as they continue to maintain such legal residence in the state.
4. Individuals who have come from outside the state and who register in an educational institution prior to having resided in the state for a period of twelve (12) months shall be classified as "non-resident students" and such "non-resident student" classification shall be presumed to be correct as long as the residence of such individuals in the state is during their attendance at educational institutions, regardless of whether such individuals have become qualified voters, registered motor vehicles and paid personal property taxes thereon, obtained Texas drivers' licenses, or have otherwise attempted to establish legal residence within the state.
5. Individuals of twenty-one (21) years of age or less whose families have not resided in Texas for the twelve (12) months immediately preceding the date of registration shall be classified as "non-resident students" regardless of whether such individuals have become the legal wards of residents of Texas or have been adopted by residents of Texas while such individuals are attending educational institutions in Texas or within a year prior to such an attendance or under circumstances indicating

that such guardianship or adoption was for the purpose of obtaining status as a "resident student."

6. The legal residence of one who is under twenty-one (21) years of age is that of the father. Upon death of the father, the legal residence of the minor is that of the mother. Upon divorce of the parents, the residence of the minor is determined by the legal residence of the persons to whom custody is granted by the court. In the absence of any grant of custody, the residence of the father continues to control. Upon death of both parents, the legal residence of the minor continues to be that of the last surviving parent until he becomes twenty-one (21) unless he makes his home with his grandparents, whereupon their residence is controlling.
7. The residence of a wife is that of her husband; therefore, a woman resident of Texas who marries a non-resident shall be classified as a non-resident and shall pay the non-resident fee for all semesters subsequent to her marriage. A non-resident woman student who marries a resident of Texas is entitled to be classified immediately as a resident student and is entitled to pay the resident fee for all subsequent semesters.
8. All aliens shall be classified as "non-resident students"; provided, however, that an alien who is living in this country under a visa permitting permanent residence or who has filed a Declaration of Intention to become a citizen with the proper federal immigration authorities shall have the same privilege of qualifying for resident status for fee purposes under this Act as has a citizen of the United States.
9. Officers, enlisted men and women, selectees or draftees of the Army, Army Reserve, National Guard, Air Force, Air Force Reserve, Navy, Navy Reserve, or Marine Corps of the United States who are stationed in Texas by assignment to duty within the borders of this State, shall be permitted to register themselves, their husband or wife as the case may be, and their children, in state institutions of higher learning by paying the regular tuition fees and other fees or charges provided for regular residents of the State of Texas, without regard to the length of time such officers, enlisted men or women, selectees or draftees have been stationed on active duty within the state.
10. Appointment as a member of the teaching or research staffs or the holding of a fellowship, scholarship, or assistantship shall not affect a student's residence status or the tuition fee to be paid.
11. It shall be the responsibility of the student to pay the correct fee at the beginning of each semester or term for which he may register, and a penalty of ten dollars (\$10) shall be assessed for failure to pay the proper fee.

**Exemptions from Tuition**

Under the authority of Senate Bill No. 6, enacted into law by the 56th Legislature, the following exemption from tuition is applicable:

"The Board of Regents of Pan American College is hereby authorized and directed to except and exempt all citizens of Texas, who have resided in Texas for a period of not less than twelve (12) months prior to the date of registration, and who served during the Spanish-American, and/or during the World War as nurses or in the Armed Forces of the United States during the World War and who are honorably discharged therefrom, and who were bona fide legal residents of this state at the time of entering such service, from the payment of all dues, fees and charges whatsoever, including fees for correspondence courses; provided, however, that the foregoing exemption shall not be construed to apply to deposits, such as library, or laboratory deposits, which may be required in the nature of a security for the return of or proper care of property loaned for the use of the students nor to any fees or charges for lodging, board or clothing. And provided further that the benefits and provisions of this Act shall also apply and inure to the benefit of the children of members of these armed services of the United States who were killed in action or died while in such service. The Board of Regents of Pan American College may and it shall be its duty to require every applicant claiming the benefit of the above exemption to submit satisfactory evidence that the applicant is a citizen of Texas and was a bona fide legal resident of Texas at the time of entering such service and is otherwise entitled to said exemption."

**STUDENT SERVICE FEE**

| <b>Semester<br/>Hours</b>       | <b>Each<br/>Semester</b> | <b>Each<br/>Summer Session</b> |
|---------------------------------|--------------------------|--------------------------------|
| 12 or more                      | \$22.00                  | \$                             |
| 11                              | 21.00                    |                                |
| 10                              | 19.00                    |                                |
| 9                               | 17.00                    |                                |
| 8                               | 15.00                    |                                |
| 7                               | 13.00                    |                                |
| 6 (or more for summer sessions) | 11.00                    | 11.00                          |
| 5                               | 9.00                     | 9.00                           |
| 4                               | 7.00                     | 7.00                           |
| 3 or less                       | 5.00                     | 5.00                           |

Under the authority of legislation enacted by the 55th Legislature, the Board of Regents has authorized the Student Service Fees as shown above. This fee is required of every student registering for credit, non-credit or audit.

Activities to be supported from this source of income include: Intra-mural and Intercollegiate Athletics, Student Publications, Band, Choir, Orchestra, Artists and Lecture Series, Cultural Entertainment Series, Debating and Oratorical Activities, Student Government, and other student activities and services as authorized by the Board of Regents.

Refund of the fee will be made under the same conditions as for the Tuition and Registration fee, upon surrender to the Comptroller's Office of the Student Identification Card and such other activity books or tickets as might be issued.

**BUILDING USE FEE**

|   |        |
|---|--------|
| Auxiliary Enterprise System (College Center)                        |        |
| per semester hour   | \$ .25 |
| General Academic Building System (Library and Engineering Building) |        |
| per semester hour   | .50    |

When a student completely and officially withdraws from College, a refund of building use fees will be made on the same refund schedule as tuition.

**Laboratory Fee:**

For each laboratory course a fee of \$2.00 to \$8.00 is charged depending upon cost of materials used in the course. For laboratory courses dropped, the laboratory fee will be refunded in full during the tuition refund period. After this date no refund of lab fees will be made.

**Applied Music Fee:**

Applied music fees include individual instruction in piano, voice, strings, brasses and woodwinds.

| Courses:                         | Regular<br>Session | Summer<br>Session |
|----------------------------------|--------------------|-------------------|
| One semester credit hour course  | \$20.00            | \$10.00           |
| Two semester credit hours course | 35.00              | 20.00             |

**Audit Fee:**

A student may, under certain conditions, enroll as an auditor for a fee of \$10.00 per course plus a student service fee of \$5.00. This may be done by obtaining the proper audit card from the Registrar, having it approved by the instructor of the class to be audited, paying the required fee to the Comptroller's Office, and using the paid receipt as an admission card to the class. Enrollment as an auditor does not permit the enrollee to take examinations, have tests or other papers checked by the instructor, or to participate in the class discussion. Students may not receive credit for a course taken by audit, nor is a student eligible

for advanced standing examination over a course which has been audited. Audited courses are not posted on the student's permanent record.

**Non-Credit Fee:**

A student who wishes to enroll in a course for non-credit will pay the same fees as one who enrolls for credit. The student should note the limitations for non-credit enrollment, as given in a preceding section of this Catalog.

**Parking Permit Fee:**

State law prohibits the use of appropriated monies for the construction, maintenance or operation of any parking facilities and directs that such facilities are to be provided from fees charged to those using such facilities. The Board of Regents has, therefore, approved a parking fee as follows for those students desiring to park cars on campus.

|                 |        |
|-----------------|--------|
| Fall Semester   | \$4.00 |
| Spring Semester | 2.50   |
| Summer Session  | 1.50   |

Note: The fee is payable only once during the school year and is in effect from the date paid to the end of the school year in which paid. There will be no refund made of the Parking Fee.

**Graduation Fee:**

A graduation fee of \$7.00 is required of candidates for graduation. The application for graduation to be presented to the Registrar must show payment or exemption from this fee. This fee, to be paid in the Comptroller's Office, must be paid each time an application for degree is filed. The graduation fee is not subject to refund.

**OTHER FEES AND CHARGES**

**See Note**

| Below | Fee or Charge                 | Amount |
|-------|-------------------------------|--------|
| (1)   | Late Registration             | \$2.00 |
| (2)   | Transcript                    | 1.00   |
| (3)   | Change of Schedule            | 2.00   |
| (4)   | Returned check charge         | 1.00   |
| (5)   | Proficiency Examination       | 4.00   |
| (6)   | Advanced Standing Examination | 15.00  |
| (7)   | ACT Test                      | 5.00   |
| (8)   | GED Test                      | 7.50   |
| (9)   | GRE Test                      | 8.00   |

(1) Late Registration Fee: A late registration fee of \$2.00 will be charged those students who fail to register on the days set aside for registration.



- (2) **Transcript:** No charge is made for the first copy of a transcript. A fee of \$1.00 is charged for each copy thereafter.
- (3) **Change of Schedule:** Change of schedule means the adding of a course, dropping of a course, or both, after the initial registration has been completed. A fee of \$2.00 will be charged for each such change except where the change is due to the fault of the College.
- (4) **Returned check charge:** If a check is returned from the bank unpaid for any reason, the student will be assessed a penalty of \$1.00 for each check returned. He must pay the full amount of the returned check and assessed penalty immediately or withdraw from college.
- (5) **English Proficiency Examination:** There is no charge for the first examination if the examination is taken on the regularly scheduled date. Any student taking the examination at any other time will make arrangements for the examination with the instructor giving such examination and will pay a fee of \$4.00 in advance at the Comptroller's Office. Any student taking the examination two or more times will pay a fee of \$4.00 each time the examination is taken.
- (6) **Advanced Standing Examination:** A fee of \$15.00 must be paid at the Comptroller's Office as part of the application for an Advanced Standing Examination.
- (7) **ACT Test:** A fee of \$5.00 must be paid at the Comptroller's Office as part of the application for an ACT Test administered at any time other than the regularly scheduled dates.

#### Schedule of Refunds:

If a student finds it necessary to drop one or more courses or to withdraw from college and if he formally drops or withdraws through the Registrar's Office, he may receive a refund of tuition and certain other fees, as follows:

##### Tuition and Fees Regular Session (following official withdrawal)

|  |     |
|--|-----|
| From Registration through first six class days | 90% |
| Next six class days                            | 50% |
| After this date no refunds                     |     |

##### Tuition and Fees Summer Session

|  |     |
|--|-----|
| From Registration through first six class days | 75% |
| After this date no refunds                     |     |

**Note:** Saturday is classified under this schedule as a class day regardless of class schedule.

The effective date of withdrawal will be the date as recorded by the Registrar when the withdrawal is **officially completed**.

Immediate refunds will not be made to students who withdraw during the refund period. Normally, refund checks will be mailed within 30 days to the student's address on file in the Comptroller's Office.

### SUMMARY OF ESTIMATED COST PER SEMESTER

Estimate based on 16 semester hours per semester and six semester hours during the summer session.

|  | Semester<br>(4 1/2<br>months) | Summer<br>Session<br>(6 weeks) |
|--|-------------------------------|--------------------------------|
| <b>Tuition and Fees</b>                                  |                               |                                |
| Tuition  | \$ 50.00                      | \$ 25.00                       |
| Student Service Fee                                      | 22.00                         | 11.00                          |
| Building Use Fee   |                               |                                |
| (\$ .50 per hr.—16 hrs.)                                 | 8.00 (6 hrs.)                 | 3.00                           |
| (\$ .25 per hr.—16 hrs.)                                 | 4.00 (6 hrs.)                 | 1.50                           |
|  | <hr/>                         | <hr/>                          |
| Total required fees                                      | \$ 84.00                      | \$ 40.50                       |
| Laboratory Fees (estimated)                              | 4.00                          | 2.00                           |
| Books and Supplies (estimated)                           | 40.00                         | 15.00                          |
|  | <hr/>                         | <hr/>                          |
| Estimated total for student<br>living off-campus         | \$128.00                      | \$ 57.50                       |
| Room and Board (including tax)                           | 346.41                        | 115.47                         |
|  | <hr/>                         | <hr/>                          |
| Resident of State of Texas,<br>Estimated Total           | \$474.41                      | \$172.97                       |
| Additional tuition for non-resident<br>of State of Texas | 150.00                        | 75.00                          |
|  | <hr/>                         | <hr/>                          |
| Non-resident of State of Texas,<br>Estimated Total       | \$624.41                      | \$247.97                       |

### DORMITORY FEES AND PAYMENTS

Charges for dormitory room and board are payable in full at the time of occupancy unless other arrangements are made with the Comptroller's Office. A single fixed charge will be levied for meals and rooms and may not be separated.

|   |  |
|---|--|
| <b>Full Payment (including tax)</b><br>Semester (4 1/2 months)<br><b>\$346.41</b> | <b>Summer Session (6 weeks)</b><br><b>\$115.47</b> |
|---|--|

**Installment Payments**

Students who wish to pay room and board by the month must have such arrangements approved by the Comptroller's Office. A carrying charge of \$1.00 per month will be made for deferred payments. The first payment each semester or summer session is payable at the time of registration. All other payments are due the first of each month. The following schedule includes the carrying charge and state sales tax on board.

|                       |         |         |         |         |         |
|-----------------------|---------|---------|---------|---------|---------|
|                       | Sept.   | Oct.    | Nov.    | Dec.    | Jan.    |
| First Semester        | \$77.98 | \$77.98 | \$77.98 | \$77.98 | \$38.99 |
|                       | Jan.    | Feb.    | Mar.    | Apr.    | May     |
| Second Semester       | \$38.99 | \$77.98 | \$77.98 | \$77.98 | \$77.98 |
|                       | June    | July    |         |         |         |
| First Summer Session  | \$77.98 | \$38.99 |         |         |         |
|                       | July    | Aug.    |         |         |         |
| Second Summer Session | \$38.99 | \$77.98 |         |         |         |

**Dormitory Reservation and Room Deposit:**

Applications for dormitory room reservations are to be made to the Office of the Dean of Students. A check for \$20.00 must accompany the request. This will serve as a reservation fee and will be held as a dormitory property and damage deposit. This fee is retained on deposit throughout the period of residence of the student as a guarantee against damage and breakage.

The deposit will be refunded, less any property or breakage charges, at the end of his residence in the dormitory, provided that residence terminates at the end of a normal semester or term. If a student moves from the dormitory during the semester, the \$20.00 deposit will not be refunded.

All unclaimed rooms in the dormitory will be declared vacant at 8:00 a.m. on the first day of classes and the \$20.00 deposit will be forfeited. Should a student find it impossible to enroll, he will receive a refund of his reservation deposit, if an application for refund is made by the following dates:

|                       |                                       |
|-----------------------|---------------------------------------|
| <b>Semester</b>       | <b>Refund request not later than:</b> |
| Fall                  | August 15                             |
| Spring                | January 15                            |
| First Summer Session  | May 15                                |
| Second Summer Session | June 30                               |

**STUDENT INSURANCE**

Each student is covered by a limited insurance policy for injuries sustained in attendance at the College or in going directly from home to the College, from the College directly home. There is protection up to \$2,500 for death, dismemberment, or loss of sight. Medical expenses, in excess of \$10, may be paid up to the amount of \$750.00.

Forms to be completed in case of injury may be obtained from the Comptroller and his office has a detailed description of the coverage offered by the policy. These forms must be completed within twenty days of the date of the accident.

The cost of this coverage is included in the student service fee paid by each student.

## **FINANCIAL AID TO STUDENTS**

There are several sources of student aid; through employment at the College, placement in part-time jobs off the campus, scholarships, grants and loan funds.

## **THE OFFICE OF PLACEMENT**

### **GRADUATE PLACEMENT:**

The Office of Placement provides a central office where graduating seniors and alumni of Pan American College may find assistance in searching for permanent employment at the time of graduation or later. The primary purpose of the Office of Placement is to bring together, in as effective a manner as possible, graduates of Pan American College and a wide variety of employers. In order to provide the best possible assistance for prospective graduates, the Office of Placement arranges for visits to the campus by various employers. These employers conduct personal interviews with graduating seniors and other interested students. Major companies, governmental agencies, and school districts are represented by such interviewers. Before a student may be interviewed on the campus, he must be registered with the Office of Placement.

The services of the Office of Placement are available to any student regardless of his major. All seniors, especially those majoring in business and those majoring in education and seeking teaching positions, should register with the Office of Placement as early in the senior year as possible.

### **EMPLOYMENT BY THE COLLEGE:**

There are some jobs available each year on the college campus, including work on buildings and grounds, secretarial work, library and laboratory assistantships, and similar places in college offices or buildings. Payment is usually on an hourly basis for these places and varies with the skill and experience of the student. Students whose scholastic records indicate ability to do creditable college work and who are unable to attend college without financial help, will be given first consideration for all available jobs. Applicants for such places should submit an application as early as possible. These applications should be directed to the Director of Placement. Applications should indicate the quality of school or college work the student has done, as shown by his grades, and should give the name and address of at least two persons, not relatives, who can answer questions about the financial status of the applicant.

**PART-TIME PLACEMENT:** To the extent of its ability, the Office of Placement will attempt to locate part-time employment for students attending college, but students who must work while attending school will often be able to find a position in their own communities. The Office of Placement can assume no responsibility other than helping to locate places of employment.

**WORK-STUDY PROGRAM:** The Federal Work-Study Program has enabled the college to employ a sizable number of students. To qualify for the program a student must satisfy both the economic and scholastic requirements set forth under the program. Employment is available under the Work-Study Program both on-campus and off-campus, and a student may work for a maximum of 15 hours a week during any week in which classes are in session and for a maximum of 40 hours during any other week in the semester. During the summer months any Pan American College student or any high school graduate who has applied for admission to Pan American College, has been accepted, and will enroll as a full-time student in September, is qualified for the Work-Study Program provided he satisfies the other requirements. It is possible to combine the Work-Study Program with other types of financial aid in order to help secure adequate finances for a student's college career. Application for work under this program should be made at the Office of the Dean of Students in the Administration Building.

## LOANS

**National Defense Education Act of 1958:** Recognizing the fact that loans are an increasingly important aspect of financing an education, Pan American College, by participating in the N.D.E.A. program, has some funds available with which a student may finance a substantial part of his education. Applicants are considered on the basis of financial need and demonstrated academic ability. Funds are limited and preference is given to the superior students. Continuance of a loan would depend upon a "C" average, or better. Applications should be filed by August 1 for the fall semester, December 1 for the spring semester, and May 1 for the summer sessions. Further information and application forms may be secured by addressing the Dean of Students.

### Memorial Loan Funds:

**The J. B. Speer Loan Fund:** Presented as a memorial by the family, faculty, students and other friends of Dr. J. B. Speer, Dean of the School of Education of Pan American College at the time of his death in May, 1960. Since Dean Speer dedicated his life to the education of young people, preference is given to loans to students expecting to teach.

### Karle-Wilder Loan Fund:

**The Karle-Wilder Memorial Loan Fund** was established in January 1967 by former members of the Pan American College Choir in honor of Mr. Robert Karle and Mr. Gene Wilder because of their devoted service and interest in the choir. While Mr. Karle was a student at Pan American

College, he was active as an officer and member of the choir, having served as president of the organization for several years. He remained a friend and supporter of the choir until his demise. Although not a member of the choir, Mr. Wilder, as a business man, showed a continuing interest and gave his loyal support to the choir and its activities. This loan fund is in no way restricted; however, preference may be given to members of the choir, or to students majoring in some field of music.

**Emilia Ramirez Loan Fund:** Funds contributed by the friends of Mrs. Emilia Ramirez, late professor of foreign language at Pan American College.

**Sally Ross Sanders Loan Fund:** Fund established by the past presidents of the Rio Grande Valley Federation of Women's Clubs. Loans are not to exceed \$25.00 and bear no interest. Loans must be repaid within the semester in which the loan is made.

**Eva L. Calderon Loan Fund:** Funds contributed by the family and friends of the late Eva (Mrs. Carlos I.) Calderon.

**College Short-Term Loans:** This loan fund has been made possible through donations from a number of individuals and organizations. It is administered by the college and is available for students for short-term loans. Generally, loans are limited to no more than \$200 and for no longer than six months. They are designed to aid students who lack sufficient funds to pay tuition in full, or to purchase books at the time of registration, but who expect to be able to repay the loan in a relatively short time.

## SCHOLARSHIPS

It is not possible to list all scholarships at present since many are being given directly to students from specific towns by organizations in the town or city. A partial list of some scholarships follows:

First honor graduates from accredited high schools of Texas are eligible for a scholarship which covers the cost of tuition for the freshman year in the College. These students are certified through the Texas Education Agency. Initial enrollment must be in this College.

Pan American College offers a partial scholarship to the salutatorian, or second honor graduate, of accredited Texas high schools. Certification must be made by the high school principal. The scholarship covers half the cost of the tuition and fees for the freshman year and is valid only during the college year immediately following high school graduation. This scholarship is valid in the **second** semester of the freshman year, and initial enrollment must be in this College.

The member of the Freshman class who makes the highest average in his class during a regular college year receives an award covering the cost of tuition and fees for the **second** half of his sophomore year. To be eligible for the award the student must have attended Pan American College the entire freshman year and must have carried at least 14 semester hours of credit work each semester.

The Texas Education Agency, through the Division of Vocational Rehabilitation, offers payment of tuition and other service to civilian students who have certain physical handicaps, provided the vocational objective selected by the student has been approved by a representative of the Division. Application for Vocational Rehabilitation should be made to the Division of Vocational Rehabilitation, 609 McKelvey Building, Harlingen, Texas, or to Director, Division of Vocational Rehabilitation, Capitol Station, Austin, Texas.

Typical of other available scholarships are those offered by the College through the generosity of interested individuals. The following illustrate the types of scholarships awarded:

**Alpha Phi Omega:** This fraternity sponsors a tuition scholarship (\$50.00 per semester). This scholarship is available to either men or women, and to be eligible a student must have been either a Boy Scout or Girl Scout, and must have completed at least 15 semester hours with a minimum grade point of 3.0. Applications may be secured from the Office of the Dean of Students.

**Band and Choir Scholarships:** Assistantships are available each year for band, orchestra, and chorus students and application should be made to the Head of the Fine Arts Department.

**Brown Foundation Scholarships:** In January of 1966 the Brown Foundation of Houston created a scholarship fund at Pan American College for students interested in the fields of journalism and Inter-American affairs. To qualify, students must wish to pursue a career in one of these fields. Applications may be secured through the Office of the Dean of Students.

**Central Power and Light Company Scholarships:** Each year Central Power and Light Company makes available to qualified students two scholarships in Business Administration. Each scholarship provides for one of the standard courses leading to a Bachelor's degree in Business Administration. Scholarships have a maximum value of \$2,400 payable at the rate of \$300 per semester until graduation as long as satisfactory standards are maintained.

An applicant for a Central Power and Light Company scholarship must:

1. Meet all entrance requirements of Pan American College.
2. Be and have been a resident of the general area served by Central Power and Light Company for not less than three years, and be a graduate of a high school or junior college in that area.
3. Show promise of success in the Business Administration field as determined by tests and the selection committee.
4. Have made a scholastic record that would justify consideration for a scholarship, and be in the upper quarter of his graduating class.
5. Follow one of the curricula prescribed for Business Administration majors.

6. Be of high moral character.
7. Maintain a scholastic record satisfactory to the committee while attending college.
8. Have filed a completed copy of application for scholarship in the Office of the Dean of Students by April 20.

Application blanks may be secured from your high school Principal, the manager of any Central Power and Light Company office, or by writing to the Office of the Dean of Students, Pan American College, Edinburg, Texas.

**Communication Workers of America, Local 6135:** The Communication Workers of America, Local 6135, offer a scholarship to a graduate of a high school located in the Hidalgo County area. A recipient of this scholarship must meet all entrance requirements of Pan American College (have on file in the Office of the Registrar, by April 20, a high school transcript and scores from the ACT tests); must be and have been a resident of the Hidalgo County area for not less than three years; be a full-time student; be of high moral character; maintain a scholastic record satisfactory to the committee while attending college; must have filed a completed application for scholarship in the Office of the Dean of Students by April 20.

This scholarship will be for the amount of \$150 for each semester of four and one-half months or a total of \$300 for two semesters.

**The Fred Moyer Scholarship:** For males regardless of race, creed, or color. The Tau Kappa Epsilon Fraternity will offer to one individual financial aid in the amount of \$50.00 per semester to be applied to tuition, books and fees, with the provision that the recipient make satisfactory progress. This scholarship will be offered to a Pan American College **sophomore**. Recipient may receive the scholarship again, if need, scholarship and desire still exist. In the event of loss of aid for second semester, no new recipient will be chosen. Application should be made through the Office of the Dean of Students before **March 15**.

**The Joe and Jess Crump Scholarship:** Graduates from Hidalgo County high schools with grades above the average in the school from which they have graduated may apply to the trustees of the Joe and Jess Crump Scholarship Trust for financial assistance in order to attend Pan American College. The trustees may advance at their discretion annually to such students an amount equal to the actual cost of college books, tuition, and required fees necessary for the particular year for which the application is made and approved and for succeeding years while such students are still attending Pan American College and are deemed worthy by the trustees. Applications should be made through the Office of the Dean of Students by **July 15** for the fall semester; **November 15** for the spring semester.

**Journalism Scholarships:** In lieu of salaries for work performed, scholarships in approximately the amount of tuition are offered certain workers



on Pan American College publications. Scholarships go to the editors of the college newspaper and the yearbook and often to other key workers on the publications. Applications may be obtained from the Office of Public Information or the publications adviser.

**The Harry E. Wilcox Engineering Scholarships:** This consists of two scholarships covering tuition, books, and fees. Application should be made to the Head of the Department of Physical Sciences.

**The Lemont Wilcox Music and Art Scholarships:** This consists of one Art scholarship and one Music scholarship covering tuition, books, and fees. Applications should be made in writing to the Head of the Department of Fine Arts.

**Tuition Scholarships:** A limited number of tuition scholarships will be available for the 1967-68 academic year. Applications should be made to the Office of the Dean of Students.

Among scholarships donated through the college, but with the recipients designated by the donor, are: The Edinburg High School Choir Scholarship; the Eighth District Federated Music Club Scholarship; the Rio Grande Valley Federation of Womens' Clubs Scholarship; the Pan American Round Table of McAllen Scholarship; the McAllen Music Club Scholarship; and the Pan American Round Table of Rio Grande City Scholarship; scholarships granted by certain religious or fraternal organizations such as the Division of National Missions of the Board of Missions of the Methodist Church, the Home Mission Board of the Southern Baptist Convention, and the Knights Templar Educational Foundation. Others are granted by individuals or organizations such as: McAllen Classroom Teachers Association; McAllen Elks Club; Wallace Gin Company; Women's Missionary Union (Baptist); Weslaco Rotary Club. Applications for these scholarships should be made directly to the sponsoring groups.



*AIR-CONDITIONED CLASSROOMS—The Liberal Arts Building houses 17 modern classrooms. Many classes are held here during the week with others in session in various structures on the East Campus. The Liberal Arts building was put into service in 1963.*



*STUDENT HOUSING ON CAMPUS—At the present time only two on-campus dormitories are available to Pan Am students. They are Southwick Hall for men, shown above, and Emilia Hall, for coeds, below. Each dormitory houses 60 students. Plans are in the making for larger dormitories to accommodate the growing need for such facilities.*



# **ARTS AND SCIENCES DIVISION**

# DIVISION OF ARTS AND SCIENCES

Professor Orlan L. Sawey, Director

## BIBLE COURSES

Bible courses are offered by recognized Bible Chairs which are College-affiliated agencies operated by the various religious denominations in locations adjacent to the college campus. A student may enroll in these courses for college credit by payment of regular fees, though the Bible Chairs are supported entirely by their respective denominations. The total number of hours for which credit may be counted toward a degree, at present, is limited to six hours. However, when a student's professional objectives require additional hours in Bible, his Department Head and the Dean of the College may allow him to enroll for additional credit.

### Bible 1214, Acts of the Apostles.

An historical study of the beginning and extension of Christianity, based on the Book of Acts.

### Bible 1310, Old Testament Survey.

A survey of the history and literature of the Old Testament. Particular emphasis is placed upon the teachings concerning God, man, salvation, and social relations; especially those teachings which deal with the preparation for the coming of Christ.

### Bible 1311, New Testament Survey.

A brief survey of the Christian movement in the Mediterranean world during the First Century. The life of Christ, the beginning of the Christian Church, the life and letters of Paul, and the general development of the New Testament as considered from the historical viewpoint.

### Bible 2301, The Life of Christ.

A study of the life of Christ as contained in the Gospels.

## DEPARTMENT OF BIOLOGY

Professor L. O. Sorensen, Head

### Degree Requirements

#### Major in Biology:

Biology 1401, 1402; 2401 or 2402; 3401 or 3405 with enough additional hours to complete a minimum of 30 semester hours in Biology, of which a minimum of 15 semester hours must be advanced courses in Biology. Of these additional hours no less than six hours must be in laboratory courses. The major in Biology should also complete at least eight semester hours in Chemistry: Chemistry 3401, 3403 and Physics 1401, 1402 are recommended though not required. By completing an additional three or more hour course in chemistry the student completes a chemistry minor.

**Major in Medical Technology:**

Students wishing to complete requirements for a Bachelor of Science in Medical Technology must complete the graduation requirements as outlined in the college catalog. In addition, they must complete the following:

- a. Complete a minimum of 95 semester hours (more may be required) of regular college work, of which the last 30 semester hours must be completed at Pan American College. This work must include at least eight semester hours of biology or chemistry, and a minimum of six advanced hours of work.
- b. It is expected that the courses below will be included in the total:
  - (1) Biology 1401, 1402, 3401, 3402, plus eight hours from 2401, 2402, and 2403.
  - (2) Chemistry 1401, 1402, 2401, 3401, and 3403.
  - (3) Physics 1401, 1402.
- c. Complete a minimum of 12 consecutive months of training in medical technology in a School of Technology, approved by the Council on Medical Education and Hospitals of the American Medical Association, with at least a "C" average.
- d. The sequence of courses listed under the major of medical technology should be as followed:

**Minor in Biology:**

Eighteen hours including Biology 1401, 1402 plus at least six hours advanced Biology.

**Twenty-four Hour Minor in Biology:**

(Second teaching field of those expecting to qualify for the provisional teaching certificate.)

**Elementary Plan I:** Biology 1401, 1402; 3405; plus six hours from 3403; 4401; 4301; 4402.

**Elementary Plan II:** Biology 1401, 1402; Biology 2401 or 2402 or 2403; 3405; plus eight hours from 3403; 3404; 3406 or 4401; 4402.

**Secondary:** Biology 1401, 1402; 2401 or 2402 or 2403; 3405; plus eight hours from 3401; 3403; 3404; 3406; 4401; 4402.

**Outline of Curricula****Biology Major**

**Freshman Year**  
 Eng. 1301, 1302.  
 Biol. 1401, 1402.  
 Chem. 1401, 1402.  
 Math. six hours  
 P. E. two hours

**Sophomore Year**  
 Biol. 2401 or 2402 and three or four hours.  
 Hist. 2313 or 2333, 2314.  
 Sophomore Literature, six hours.  
 Foreign Languages, six hours.  
 P.E., two hours.  
 Electives, four hours.

**Junior Year**

Art 1301.  
 Music 2307.  
 Biol. 3401 or 3405.  
 Govt. 2313, 2314.  
 Electives, fifteen hours.

**Senior Year**

Advanced Biology, eleven hours.  
 Advanced Electives, fifteen hours.  
 Advanced Minor, six hours.

**BIOLOGY MAJOR (Pre-dental or Pre-medical)****Should include Biology 2402****With a Chemistry Minor****Freshman Year**

Biol. 1401, 1402.  
 Chem. 1401, 1402.  
 Eng. 1301, 1302.  
 Math. 1304, 1305.  
 P.E., two hours.

**Sophomore Year**

Biol. 2401 or 2402.  
 Biol., three or four hours.  
 Sophomore Literature, six hours.  
 Chem. 2401.  
 Phys. 1401, 1402.  
 P.E., two hours.  
 Mus. 2307.

**Junior Year**

Biol. 3401 or 3405  
 Advanced Biology, six or eight  
 hours.  
 Chem. 3401, 3501.  
 Hist. 2313 or 2333, 2314.  
 Foreign Language, six hours.

**Senior Year**

Advanced Biology, six or eight  
 hours.  
 Govt. 2313, 2314.  
 Psy. 2313.  
 Advanced Electives, 11 hours.  
 Art 1301.  
 Electives, four hours.

**Major in Medical Technology****Freshman Year**

Eng. 1301, 1302.  
 Math. 1304, 1305.  
 Biol. 1401, 1402.  
 Chem. 1401, 1402.  
 P.E., two hours.  
 A summer if necessary between  
 1st and 2nd or 2nd and 3rd  
 years.  
 Art 1301.  
 Mus. 2307.

**Sophomore Year**

Hist. 2313, 2314.  
 Phys. 1401, 1402.  
 Eight hours from Biology 2403,  
 2401, 2402.  
 Chem. 2401.  
 P.E., two hours.

**Junior Year**

Govt. 2313, 2314.  
 American or World Literature, six  
 hours.  
 Foreign Language, six hours.  
 Psy. 2313.  
 Biol. 3401, 3402.  
 Chem. 3401, 3403.

**Nursing—Pre-RN****Freshman Year**

Biol. 1301, 1302, 1304.  
 Chem. 1301, 1302.  
 Eng. 1301, 1302.

Psy. 2313.  
 Soc. 2313.  
 Ed. 2301

**Biol. 1301, 1302 (113, 123). HUMAN ANATOMY AND PHYSIOLOGY FOR NURSES.**

The fundamental physiological processes and anatomy of the human body. Three hours lecture and two hours laboratory per week. This course will not be counted toward a major or minor in biology, nor for the general education requirement for the bachelor's degree. \$4.00 laboratory fee per semester.

**Biol. 1304 (143). MICROBIOLOGY FOR NURSES.**

Micro organisms with particular emphasis on those of significance from the medical standpoint. Problems of personal and community health are given special consideration. Laboratory includes preparation and sterilization of culture media, sterilization of glassware, cultivation and study of some of the common bacteria. This course is recommended for students in nursing education and will not be counted for a major or minor in biology or to satisfy general education requirements for the bachelor's degree.

Prerequisites: Biology 1301 (113) and Chemistry 1301 (113). Three hours lecture and two hours laboratory per week. \$4.00 laboratory fee.

**Biol. 1305, 1306. BIOLOGY FOR ELEMENTARY TEACHERS.**

Biology 1305 is a basic introductory course stressing fundamental zoological principles and concepts. It is designed to acquaint the future elementary teacher with the various structures, functions, life histories and occurrence of local animals. Two hours lecture, one hour quiz section, and two hours laboratory. \$3.00 laboratory fee.

Biology 1306 is an introductory course stressing basic botanical principles and concepts. It is designed to acquaint the future elementary teacher with the anatomy, physiology, development, and distribution of the local flora. Two hours lecture, one hour quiz section, and two hours laboratory. Prerequisite: Biology 1305. \$3.00 laboratory fee.

Biology 1305 and 1306 will not be counted toward a major in biology. These courses will be counted for a minor in biology or for the general education requirement for the bachelor's degree **only** for those students graduating with a major in elementary education.

**Biol. 1401, 1402 (114, 124). GENERAL BIOLOGY.**

Biology 1401 (114) is a basic introductory course stressing fundamental biological principles and concepts. Designed to acquaint students with structure, physiology and life histories of representative invertebrate and vertebrate forms with emphasis on invertebrates. Three hours lecture and three hours laboratory. \$3.00 laboratory fee.

Biology 1402 (124) is an introductory study of the anatomy and physiology of plants based on the study of higher plants, together with a correlative and comparative survey of the entire plant kingdom. The emphasis will be placed on the development, reproduction and relationships of plants to man. Three hours lecture and three hours laboratory per week. Prerequisite: Biology 1401 (114). \$3.00 laboratory fee.

**Biol. 2401 (234). VERTEBRATE ZOOLOGY.**

A basic introductory course dealing with the fundamental biological principles and concepts. Designed to acquaint the student with structure, physiology and life histories of representative vertebrate types. Three hours lecture and four hours of laboratory. Prerequisite: Biology 1401 (114). \$4.00 laboratory fee.

**Biol. 2402 (374). COMPARATIVE VERTEBRATE ANATOMY.**

Comparative studies of the morphological, embryological and physiological relationships among vertebrates, with the inclusion of histological and paleontological data. Two hours lecture, one hour discussion and four hours of laboratory per week. Prerequisite: Biology 1401 (114). \$5.00 laboratory fee.

**Biol. 2403 (274). ANATOMY AND PHYSIOLOGY.**

Gross anatomy of the human body: the various physiological processes and fundamentals of heredity. Prerequisite: six hours of Biology. Three hours lecture and three hours of laboratory per week. \$5.00 laboratory fee.

**Biol. 3401 (304). BACTERIOLOGY.**

A general survey of the field of bacteriology. The laboratory work includes culturing, staining and identifying of micro-organisms. Three hours lecture and four hours laboratory per week. Prerequisites: six hours of biology including Biology 1402 (124) and six hours of chemistry. \$4.00 laboratory fee.

**Biol. 3402 (304m). MICROTECHNIQUE.**

A course designed to teach the principles used in the preparation of tissue of cytological and histological observation. Prerequisite: 12 hours of biological science including Biology 1401, 1402 (114, 124). Two hours lecture and six hours laboratory per week. \$5.00 laboratory fee.

**Biol. 3403 (314). GENETICS.**

Introduction to genetics with consideration of its application in agriculture, biology, and human welfare. Three hours lecture and three hours laboratory per week. Prerequisite: 12 hours of biology. \$3.00 laboratory fee.

**Biol. 3404 (324). ORNITHOLOGY.**

Avian biology, an intensive study of the class Aves. Principles of classification, morphology, ecology and distribution. Emphasis on local forms: their migration, distribution, and relation to man. Prerequisites: Biology 1401 (114), and 4 hours from 2401 (234), 2402 (374), 2403 (274) with a grade of at least "C". Three hours lecture, four hours laboratory and field work per week. The student is expected to furnish his own transportation to the nine or ten field laboratory sessions. \$4.00 laboratory fee.



**Biol. 3405 (344). ADVANCED BOTANY.**

A study of the morphology, development, distribution, and relationships of fungi, algae, liverworts, mosses, ferns and gymnosperms. Particular attention is given to the evolution of these groups. Three hours lecture and four hours of laboratory per week. Prerequisite: 12 hours of biology including Biology 1402 (124). The student is expected to furnish his own transportation to the seven or eight field laboratory sessions. \$4.00 laboratory fee.

**Biol. 3406 (394). FIELD ZOOLOGY.**

A study of common vertebrate animals with emphasis upon classification, natural history, collection, preparation, and field techniques and methods. Includes both laboratory and field work. Prerequisites: Biology 1401 (114), and four hours from 2401 (234), 2402 (374), 2403 (274) with a grade of at least "C". The student is expected to furnish his own transportation to the 10 or 12 field laboratory sessions. Three hours lecture and four hours laboratory. \$3.00 laboratory fee.

**Biol. 3407. COMPARATIVE EMBRYOLOGY.**

Development studies from the zygote until the adult form is reached (chiefly for amphibians, birds, and mammals). Three hours lecture and four hours laboratory per week. Prerequisite: four hours from Biology 2401 (234), 2402 (374), or 2403 (274) with a grade of at least "C". \$4.00 laboratory fee.

**Biol. 4301 (423). BIOLOGY SEMINAR.**

History and philosophy of biology from the time of Aristotle to the present day. Emphasis is on the development of the important biological theories. Three hours lecture. Prerequisite: twelve hours of biology.

**Biol. 4302. BIOLOGY SEMINAR.**

A survey of recent advances in biology which includes reviews of classical and recent literature and reports of original investigations. Three hours lecture per week. Prerequisite: 12 semester hours of biology.

**Biol. 4401 (414) ECOLOGY.**

A study of the basic environmental factors affecting plants and animals with special emphasis on life histories of vertebrates and their relation to economic and conservation problems. Prerequisite: 14 semester hours of biological science. Three hours of lecture and four hours of laboratory and field work per week. The student is expected to furnish his own transportation to the nine or ten field laboratory sessions. \$4.00 laboratory fee.

**Biol. 4402 (424). NATURAL HISTORY OF MARINE ORGANISMS.**

A course designed to acquaint biology students and teachers with marine life along the Gulf Coast. Field trips will be made to various habitats including open sandy beaches, jetties, salt flats, bays and lagoons,

and young mangrove marshes. There will be opportunities to make personal teaching (or other) collections of marine organisms. Prerequisite: 12 hours of biology. Three hours lecture and four hours laboratory and field work per week. The student is expected to furnish his own transportation to the 11 or 12 field laboratory sessions. \$4.00 laboratory fee.

## DEPARTMENT OF CHEMISTRY

Professor J. Lell Elliott, Head

### Degree Requirements

#### Major in Chemistry:

|                   |                     |
|-------------------|---------------------|
| Chem. 1401, 1402. | Chem. 4401, 4402.   |
| Chem. 2401, 3402. | Chem. 3301.         |
| Chem. 3401, 3501. | Chem. 3403 or 4301. |

In addition, the major in Chemistry should complete Mathematics through Mathematics 2301 (required for Chemistry 4401, 4402). A minimum of eight semester hours of Physics and eight semester hours in Biology are recommended.

#### Minor in Chemistry:

Chemistry 1401, 1402; plus ten additional hours from 2401; 3401; 3301; 3403; 3501 or 4301.

#### Twenty-four Hour Minor in Chemistry:

(Second Teaching Field for those expecting to qualify for the provisional teaching certificate.)

**Elementary Plan I:** Chemistry 1401, 1402; plus ten hours from 3401; 3301; 3403; 4301.

**Elementary Plan II:** Chemistry 1401, 1402; 2401; 3401; plus eight hours from 3301; 3403; 4401; 4301.

**Secondary:** Chemistry 1401, 1402; 2401; 3401; plus eight hours from 3301; 3402 or 4401; 3403 or 3501; 4301.

### Pre-Pharmacy

#### Freshman Year

Biol. 1401, 1402.  
Chem. 1401, 1402.  
Eng. 1301, 1302.  
Math. 1304, 1305.  
Hist. 2313, 2314.  
P.E., two hours.

#### Sophomore Year

Eng. 2309 or Spee. 2304 or sophomore literature, six hours.  
Chem. 3401, 3501.  
Phys. 1401, 1402.  
Eco. 2351, 2352.  
P.E., two hours.

Additional courses transferrable for credit to complete the pharmacy degree are: Govt. 2313, 2314 and Chem. 2401. A knowledge of typing is expected.

## OUTLINE OF CURRICULA

## CHEMISTRY MAJOR (Physics or Math Minor)

**Freshman Year**

Eng. 1301, 1302.  
 Chem. 1401, 1402.  
 Phys. 1403.  
 Math. 1601.  
 P.E., two hours.  
 Hist. 2313 or 2333, 2314.

**Junior Year**

Chem. 3401, 3501.  
 Foreign Language, six hours.\*  
 (German or French recommended)  
 Eng. 2309, 2302 or 2303 or 2307.  
 Mus. 2307.  
 Chem. 3301, 3403 or 4301.

**Sophomore Year**

Chem. 2401, 3402.  
 Phys. 2401, 2402.  
 Biol. 1401, 1402.  
 Math. 2301.  
 Art 1301.  
 P.E., two hours.

**Senior Year**

Chem. 4401, 4402.  
 Govt. 2313, 2314.  
 Phys. 4301, plus three advanced hours.  
 Math. 3300, plus three advanced hours.  
 Elective, four hours.  
 Math., three hours.

## CHEMISTRY MAJOR (Biology Minor)

Pre-Dental or Pre-Medical see note below.

**Freshman Year**

Eng. 1301, 1302.  
 Chem. 1401, 1402.  
 Math. 1601.  
 Biol. 1401, 1402.  
 P.E., two hours.

**Junior Year**

Chem. 3401, 3501.  
 Math. 3300.  
 Biol. 3401 and advanced Biology three or four hours.  
 Eng. 2309, 2302 or 2303 or 2307.  
 Foreign Language, six hours.\*  
 (German or French recommended)

**Sophomore Year**

Chem. 2401, 3402.  
 Biol. 2401 or 2402.  
 Phys. 1401, 1402.  
 Hist. 2313 or 2333, 2314.  
 Math. 2301.  
 P.E., two hours.

**Senior Year**

Chem. 4401, 4402.  
 Mus. 2307.  
 Govt. 2313, 2314.  
 Art 1301.  
 Electives, six hours.  
 Chem. 3301, 3403 or 4301.

\*Students who expect to do graduate work in chemistry should take a second year of foreign language.

Note: For pre-medical or pre-dental the biology should include Biology 2402 and English 2309 must be replaced by sophomore literature.

**Chem. 1391, 1302 (113, 123). ELEMENTARY CHEMISTRY.**

Some of the principles of inorganic, organic and biochemistry. Only for nursing students. This course will not be counted toward a major or a minor in chemistry nor toward the general education requirements of the bachelor's degree. Three hours lecture and two hours laboratory. \$3.00 laboratory fee per semester.

**Chem. 1401, 1402 (114, 124). GENERAL CHEMISTRY.**

Fundamental principles of pure and applied chemistry. In the second semester the laboratory work includes semimicro qualitative analysis. Two hours lecture, one hour recitation, and three hours laboratory per week. Prerequisites: four years high school mathematics or Math. 1302 (163), 1303 (103), 1304 (113) or 1306 (193), or concurrent enrollment in Math. 1302 (163), 1303 (103), 1304, (113) or 1306 (193). \$3.00 laboratory fee per semester.

**Chem. 2401 (214). QUANTITATIVE ANALYSIS.**

An introductory study of methods, equipment, and practices of Quantitative Inorganic Chemistry. Both volumetric and gravimetric procedures will be covered in the laboratory work. Two lectures and six hours of laboratory per week. Prerequisite: Chemistry 1402 (124). \$4.00 laboratory fee.

**Chem. 3301 (323). INORGANIC CHEMISTRY.**

An introductory study of the elements, other than carbon, and their compounds based on the periodic classification and certain related theoretical concepts explaining structure and reactivity. Three lectures per week. Prerequisite: 12 hours of chemistry.

**Chem. 3401 (314). ORGANIC CHEMISTRY.**

A study of carbon compounds with aliphatics and aromatics considered in parallel. This course is either terminal or continuous with Chemistry 3501 (325). Laboratory work is mainly preparation and purification of compounds. Three hours lecture and three hours laboratory per week. Prerequisites: Chemistry 1401, 1402 (114, 124). \$4.00 laboratory fee.

**Chem. 3402 (324). QUANTITATIVE ANALYSIS.**

A continuation of Chemistry 2401 (214) covering the more advanced quantitative method, with special emphasis on separation and analysis of mixtures. Two lectures and six hours of laboratory per week. Prerequisite: a C or better in Chemistry 2401 (214). \$4.00 laboratory fee.

**Chem. 3403 (344). BIOCHEMISTRY.**

An elementary course in physiological chemistry or biochemistry. Three hours lecture and three hours laboratory per week. Prerequisite: Chemistry 3401 (314). \$4.00 laboratory fee.

**Chem. 3501 (325). ORGANIC CHEMISTRY.**

A continuation of Chemistry 3401 (314) for majors in chemistry. Coverage of compounds is detailed. Three hours lecture and six hours laboratory per week. Prerequisite: Chemistry 3401 (314). \$5.00 laboratory fee.

**Chem. 4201 (402). CHEMISTRY PROBLEMS.**

A course adapted to the study of special topics in chemistry. For advanced students capable of developing a problem independently through

conference and activities directed by the instructor. Problem is chosen by the student with the approval of the instructor prior to registration. Prerequisite: major in chemistry with at least junior standing. \$4.00 laboratory fee.

**Chem. 4202 (402). CHEMISTRY PROBLEMS.**

A continuation of Chemistry 4201 (402). Prerequisite: Chemistry 4201 (402). \$4.00 laboratory fee.

**Chem. 4301 (423). HISTORY AND PHILOSOPHY OF CHEMISTRY.**

A study of the historical and philosophical development of chemical concepts. Three lectures per week. Prerequisite: 12 hours of chemistry.

**Chem. 4401 (414). PHYSICAL CHEMISTRY.**

Explanation and mathematical development of the theories and principles of chemistry with attention to the subjects of atomic structure, the gas laws, thermodynamics, the phase rule, and similar topics. Three hours lecture and three hours laboratory per week. Prerequisites: Chemistry 2401 (214), six hours of physics, and six hours of calculus. \$4.00 laboratory fee.

**Chem. 4402 (424). PHYSICAL CHEMISTRY.**

A continuation of Chemistry 4401 (414). Three hours lecture and three hours of laboratory per week. Prerequisite: Chemistry 4401 (414). \$4.00 laboratory fee.



*NERVE CENTER OF COLLEGE—All decisions concerning the operation of Pan American College are made in the new Administration Building. This structure houses the offices of the president, dean, comptroller, registrar, dean of students, public information and data processing center. The college telephone switchboard also is quartered here.*

## DEPARTMENT OF COMMUNICATIONS

Professor Orlan L. Sawey, Head

### Degree Requirements

#### Major in English:

A minimum of 30 semester hours in English, of which 18 must be advanced. English majors are encouraged to register for English 2301 and English 2302 instead of for the readings courses. Either English 3312 or 3313 is required (both American literature courses are recommended). English 4301 and English 4302 are required. Six hours of speech, Speech 1303 and 2304, are recommended as electives for those who do not minor in speech.

#### Major in Speech:

A minimum of 30 semester hours, with 15 hours advanced distributed in dramatics, forensics, and speech correction.

## ENGLISH

### Eng. 1301, 1302 (113, 123). RHETORIC AND COMPOSITION.

A review of the fundamentals of English grammar and sentence structure with periodic short themes. In the second half more advanced composition with emphasis on writing the research paper and on analyzing expository prose. Collateral readings required. (English 1301 (113) may be omitted by qualified students.)

### Eng. 1303, 1304 (113, 123). COMMUNICATIONS (HONOR PLAN).

The psychology, philosophy, and art of communication. For the superior freshman, by invitation.

### Eng. 1305, 1306. ENGLISH FOR FOREIGN STUDENTS.

For foreign-speaking students who lack proficiency in English. Intensive practice and drill, both oral and written, in vocabulary and sentence patterns, with particular attention to the English idiom. Expository themes and readings in the essay, with an introduction to the short story and drama in the second half of the course.

### Eng. 2301 (213). SURVEY OF ENGLISH LITERATURE.

A chronological study of the principal authors, their works, and the trends in English literature from the Anglo-Saxon period to the beginning of the Romantic Movement. Prerequisite: six hours of freshman English.

### Eng. 2302 (223). SURVEY OF ENGLISH LITERATURE.

A chronological study of the principal authors, their works, and the trends in English literature from Pre-Romantic poetry to the twentieth century. Prerequisite: six hours of freshman English.

**Eng. 2303. READINGS IN AMERICAN LITERATURE.**

A study of several masterpieces of American literature, with emphasis on careful reading and on writing critical essays about individual works. Prerequisite: six hours of freshman English.

**Eng. 2307. READINGS IN GENERAL LITERATURE.**

A study of several masterpieces of ancient, continental, and English literature, with emphasis on careful reading and on writing critical essays about individual works. Prerequisite: six hours of freshman English.

**Eng. 2309 (273). TECHNICAL REPORT WRITING.**

A course designed especially for students who desire further training in composition of a practical and advanced character. Exercises in fundamental forms followed by the special types of reports used in engineering, science, and business, one research paper, letters, and oral reports. Students requiring three semester hours of literature may take three hours of any sophomore literature course.

**Eng. 3302 (313). THE RENAISSANCE IN ENGLAND.**

A study of the literature of the Renaissance period in England, with some time devoted to French and Italian backgrounds. Prerequisite: 12 semester hours of English.

**Eng. 3303 (323). THE SEVENTEENTH CENTURY.**

A study of the divergent tendencies of an important period of transition through the writings of such masters as Jonson, Donne, Milton and Dryden. Major French philosophers, critics and dramatists will also be read or discussed. Prerequisite: 12 semester hours of English.

**Eng. 3304 (343). THE EIGHTEENTH CENTURY.**

A study of eighteenth century poets, dramatists and prose writers (chiefly British), with special emphasis on the poetic tradition and its gradual disintegration. Prerequisite: 12 semester hours of English.

**Eng. 3308. DEVELOPMENT OF THE ENGLISH NOVEL.**

A study of the English novel from the eighteenth century to the present, with emphasis on the major novelists. Prerequisite: 12 semester hours of English.

**Eng. 3309. DEVELOPMENT OF THE AMERICAN NOVEL.**

A study of the American novel from its beginnings to the present, with emphasis on the major novelists. Prerequisite: 12 semester hours in English.

**Eng. 3310. TWENTIETH CENTURY ENGLISH AND AMERICAN POETRY.**

A study of the trends and movements in contemporary poetry, with emphasis on the works of the major writers. Prerequisite: 12 semester hours in English.

**Eng. 3311. CONTEMPORARY DRAMA.**

(See Speech 3311 for description.)

**Eng. 3312 (233). SURVEY OF AMERICAN LITERATURE.**

A chronological study of the principal authors, their works, and the trends in American literature, from the colonial period to the Civil War. Prerequisite: 12 semester hours of English. Credit will not be given for both this course and the sophomore survey of American literature, formerly offered as English 2303(233).

**Eng. 3313 (243). SURVEY OF AMERICAN LITERATURE.**

A chronological study of the principal authors, their works, and the trends in American literature from the Civil War to the twentieth century. Prerequisite: 12 hours of English. Credit will not be given for both this course and the sophomore survey of American literature, formerly offered as English 2304 (243).

**Eng. 4301 (413). SHAKESPEARE.**

A study of representative plays in comedy, history, and tragedy. May be counted for major or minor in speech and drama. Prerequisite: 12 semester hours in English.

**Eng. 4302 (433). ADVANCED GRAMMAR.**

A study of modern English usage in syntax, form, and sentence structure, with attention given to the history of the English language. Prerequisite: 12 semester hours of English.

**Eng. 4303 (443). THE ROMANTIC PERIOD.**

A study of the development of romanticism in France, Germany, and England, with the main emphasis on English writers. Prerequisite: 12 semester hours of English.

**Eng. 4304 (453). THE LATER NINETEENTH CENTURY.**

A study of literature from 1832 to the end of the Nineteenth Century, with the chief emphasis upon the great prose writers of Victorian England: Carlyle, Ruskin, Arnold, Huxley, Dickens, Thackeray. Prerequisite: 12 semester hours of English.

**Eng. 4305 (473). MEDIEVAL LITERATURE.**

A study of various types of medieval literature, including the epic, the romance, and the allegory, with special attention to Chaucer and other Middle English writers. Prerequisite: 12 semester hours of English.

**Eng. 4306. THE FRONTIER IN AMERICAN LITERATURE.**

A study of the influence of the American frontier on American literature, with special emphasis on the literature and folklore of the Southwest and of the cattle kingdom. Prerequisite: 12 semester hours of English.



**Eng. 4307. LITERARY CRITICISM.**

A study of modern literary criticism with a study of literary theory as background. Prerequisite: 12 semester hours of English.

**JOURNALISM****Jour. 1301 (2301). REPORTING.**

A study of news sources, newswriting, and news values. This course is designed to train the student for work on the college newspaper, particularly in reporting. The newspaper is used as a laboratory. Prerequisite: a knowledge of typing.

**Jour. 1302 (2302). REPORTING.**

A continuation of Journalism 1301.

**Jour. 1305. PHOTOGRAPHY.**

See Industrial Education 1305 (123) for course description. \$2.00 laboratory fee.

**Jour. 2303. RADIO AND TELEVISION REPORTING.**

A study of the principles of radio and television news and advertising with emphasis on the gathering and reporting of news, particularly on the differences between this type of reporting and that for a newspaper. Prerequisite: Journalism 1301.

**SPEECH****Spee. 1101. PARLIAMENTARY PROCEDURES.**

A study of the principles and practice of executing the rules of parliamentary procedure; duties of officers; committee procedures; and regulations for drafting constitutions and bylaws.

**Spee. 1301. PRINCIPLES OF PHONETICS.**

A study of phonetics as applied to problems of articulation and pronunciation.

**Spee. 1302 (113). FUNDAMENTALS OF SPEECH.**

Basic training in thought, language, and voice as fundamentals to communication.

**Spee. 1303 (143). ORAL READING.**

Introduction and practice in the principles of speech applied to oral presentation of literary forms. Of particular importance to teachers, ministers, and drama and radio students. Open to freshmen who have passed the proficiency test.

**Spec. 2301 (213). INTRODUCTORY STUDY OF THE THEATRE.**

An introduction to the various types and styles of plays and acting as well as to the major fields of theatre arts. Open to freshmen who have passed the proficiency test.

**Spec. 2302 (223). THE CONTEMPORARY THEATRE.**

A study and application of contemporary theatrical movements, methods, and ideas of play construction and presentation. Open to freshmen who have passed the proficiency test.

**Spec. 2303 (233). PRINCIPLES OF DISCUSSION.**

Principles, methods, and techniques applicable to various types of group discussion dealing with contemporary problems. Prerequisite: Speech 1302 (113)

**Spec. 2304 (243). ADVANCED INTERPRETATION.**

An advanced study of the problems or oral interpretation of various literary forms. Recommended for students preparing to teach literature, for students interested in radio, TV, and the ministry, and for speech majors. Prerequisite: Speech 1303 (143).

**Spec. 2305 (263). ARGUMENTATION AND DEBATE.**

Study of the principles of argumentation and debate; audience analysis; briefing and reasoning; strategy and refutation; debates on current questions. Prerequisites: six hours of speech including Speech 1302 (113)

**Spec. 3301 (333). PLATFORM SPEAKING.**

An intensive study of the methods of speech preparation, the techniques of persuasion and audience analysis. Organization and practice in the various types of speeches which act as a motivating force for human conduct in a democratic society. Prerequisites: six hours of speech including Speech 1302 (113). Not offered each year.

**Spec. 3302 (343). ADVANCED ARGUMENTATION AND DEBATE.**

A continuation of Speech 2305 (263). Prerequisites: nine hours of speech, including Speech 1302 (113) and Speech 2305 (263).

**Spec. 3303 (353). SPEECH FOR THE CLASSROOM TEACHER.**

A study of the relationship of the teacher's speech personality to desirable classroom techniques, and of speech activities for general classroom use. Special attention is given to the speech problems of the Spanish-speaking child, to story-telling, and to creative dramatics. Prerequisite: Speech 1301 or 1302 (113) or Speech 1303 (143).

**Spec. 3311. CONTEMPORARY DRAMA.**

A study of trends and movements in 20th Century American, British, and European drama, with emphasis on works of major playwrights. Prerequisite: six semester hours in speech and 12 semester hours in English.

**Spec. 4301 (413). PLAY DIRECTION AND PRODUCTION.**

Study, observation, and practice in selecting plays and working with problems, methods, and techniques of direction and production. Two hours lecture and two hours laboratory per week. Prerequisite: nine semester hours of speech.

**Eng. 4301 (413). SHAKESPEARE.**

May be counted for advanced credit in speech and drama. (See English 4301 (413) for description.)

**Spec. 4302 (423). PLAY DIRECTION AND PRODUCTION.**

A continuation of Speech 4301 (413) with stress upon student direction and production. Prerequisite: Speech 4301 (413).

**Spec. 4303 (433). INTRODUCTION TO SPEECH CORRECTION.**

Analysis of speech defects and articulation difficulties with emphasis on dialectical problems. Familiarization with clinical practice and therapy. Open only to speech majors or minors. Prerequisite: nine semester hours of speech.

**Spec. 4304 (433a). EXTEMPORANEOUS SPEAKING.**

Extensive practice in extemporaneous speaking on present day topics of current interest, both foreign and domestic, with emphasis placed on organization and delivery of content material. Open forum techniques used in the class will provide the speaker an opportunity for assembling facts, answering questions, and meeting various audience situations. Prerequisites: nine semester hours of speech including Speech 1302 (113). Not offered each year.

**Spec. 4305 (443b). EXTEMPORANEOUS SPEAKING.**

A continuation of Speech 4304 (443a).

**Spec. 4306. CREATIVE DRAMATICS AND CHILDREN'S THEATRE.**

Study and practice in principles and methods of developing original dramatizations with children in directing and staging plays with children and for children. Prerequisites: six hours of speech and three hours of education.

**Spec. 4307. DIRECTING SPEECH ACTIVITIES.**

A study of materials of interschool and intramural speech activities, and of the methods of selecting and training participants in these activities. Prerequisites: 12 hours of speech and/or six advanced hours in English.

**DEPARTMENT OF FINE ARTS****Professor John Anderson, Head**

Students may pursue studies in the Fine Arts Department leading to majors either in Art or Music. Art majors may elect a curriculum for the studio, or they may choose a curriculum leading to secondary, or the all-level teacher certification. Music majors may elect either a performance major, or they may prepare for elementary, secondary, or all level teacher certification.

**ART****Freshman Year**

Art 1311, 1331.  
 Eng. 1301, 1302.  
 Math., six hours.  
 Science, six hours.  
 Mus. 2307.  
 P.E. 1101, 1102.

**Junior Year**

Art 3381  
 Art History, three hours advanced.  
 Art Elective, three hours.  
 Art Elective, three hours advanced studio.  
 History 2313 or 2333, 2314.  
 Minor Elective, twelve hours.

**Sophomore Year**

Art 2321, 2332.  
 Eng. 2303, 2307.  
 Fr. 1321, 1322.\*  
 Govt. 2313, 2314.  
 Elective, six hours.  
 P.E., two hours.

**Senior Year**

Art 4354.  
 Art Elective, six hours.  
 Art Elective, three hours advanced studio.  
 Minor Elective, six hours advanced.  
 Electives, fifteen hours advanced.

\*Students wishing to concentrate in studies of Latin-American Art may substitute Spanish for French.

Students planning to teach Art in the secondary schools should confer with the Art Adviser for the purpose of arranging Art courses which will meet the requirements for Art as a teaching major.

Art majors should follow the schedule listed above.

**Transfers:**

Students wishing to transfer into Art at the junior level or above must submit a portfolio of their work and meet with the Art faculty for program planning.

**Majors:**

Students majoring in Art are required an interview with the Art faculty at the end of their junior year.

**Exhibits:**

Senior Art majors are required to exhibit at least three examples of their work completed during their senior year. This work must meet with faculty approval before exhibition.

The college reserves the right to retain any student work produced as part of the art curriculum.

## ART

### Art 1301 (173). ART APPRECIATION.

A course in art appreciation concerned with the value and meaning of the visual arts. This course is a general education requirement for all students except those majoring or minoring in Art. Three hours lecture, discussion, with some studio assignments.

### Art 1306. GENERAL INDUSTRIES LABORATORY.

(See I.E. 1306 (193) for description. May be counted as Art 1306 or I.E. 1306 but not as both. \$2.00 laboratory fee.)

### Art 1311 (133). DRAWING.

A course in drawing including perspective, still life and figure work from a number of approaches and with various media. Two hours lecture and four hours studio. \$4.00 laboratory fee.

### Art 1331 (143). CREATIVE DESIGN.

A course in the principles of design. Development of design structures on the two dimensional surface. Two hours lecture and four hours studio. \$4.00 laboratory fee.

### Art 2312 (233). FIGURE DRAWING.

A course in the study of the form, design, and anatomy of the human figure. Drawing in various media from a variety of concepts. Prerequisite: Art 1311 (133). Two hours lecture and four hours studio. \$4.00 laboratory fee.

### Art 2321 (213). PAINTING.

A course in painting with emphasis on individual development and concerned with the fundamental concepts and practices in painting. Prerequisites: Art 1311 (133) and 1331 (143). Two hours lecture and four hours studio. \$4.00 laboratory fee.

### Art 2332 (243). THREE DIMENSIONAL DESIGN.

A course in the development of three-dimensional structures with exercises and experiments relative to theories and techniques with specific projects using appropriate materials and processes. Prerequisite: Art 1331 (143). Two hours lecture and four hours studio. \$4.00 laboratory fee.

### Art 2333 (253). ADVERTISING DESIGN.

A course in the basic problems of advertising design, layout, lettering, illustration and typography. Two hours lecture and four hours studio. \$4.00 laboratory fee.

### Art 2361. GRAPHIC ARTS.

An introductory course in Relief Printing Process. Studio work in woodcuts and etching. Readings and discussion. Prerequisite: Art 1311 (133). \$4.00 Laboratory fee.

**Art 2371 (263). CERAMICS.**

A course in the practice of ceramic design, study and application of clay conditioning, handbuilding, use of the potter's wheel, glazing and firing with emphasis on creative design. Two hours lecture and four hours studio. \$4.00 laboratory fee.

**Art 2372 (273). CRAFTS.**

A course in general crafts using a variety of materials with emphasis on design, craftsmanship and individual projects. Two hours lecture and four hours studio. \$4.00 laboratory fee.

**Art 3322 (313). PAINTING.**

A second course in painting concerned with greater individual development and the exploration of various media. Prerequisite: Art 2321 (213). Two hours lecture and four hours studio. \$4.00 laboratory fee.

**Art 3342 (343). SCULPTURE.**

A course in the problems of sculpture with consideration of different concepts in various media and techniques. Prerequisite: Art 2332 (243). Two hours lecture and four hours studio. \$4.00 laboratory fee.

**Art 3351 (383). MEDIEVAL AND RENAISSANCE ART.**

A course in art history beginning with the Christian era after the fall of Rome, including the Byzantine, Romanesque, Gothic, early and high Renaissance, Baroque and Rococo. Prerequisite: junior standing.

**Art 3352 (393). CONTEMPORARY ART.**

A course in art history from the 18th century in Europe until modern times concerned with the development and logical growth of today's arts and aesthetics. Prerequisite: junior standing.

**Art 3373 (323). WEAVING.**

A course in weaving using two and four heddle looms and the making of simple looms for the weaving of small articles. Two hours lecture and four hours studio. \$4.00 laboratory fee.

**Art 3381 (353). INTRODUCTION TO TEACHING ART.**

An introductory course in the methods, techniques, and materials necessary for the teaching of creative art in the elementary schools. Prerequisite: junior standing. Three hours lecture and discussion with some studio assignments.

**Art 3382 (363). ART IN THE ELEMENTARY SCHOOL.**

A course in practice and methods necessary for the teaching of creative art in the elementary school with emphasis on design, crafts, drawing,

painting, and correlation, using many standard materials and exploring new materials. Prerequisite: Art 3381 (353). Studio assignments with lecture and discussion.

#### **Art 4301. PHILOSOPHIES OF ART.**

See Philosophy 4301 for description. May be counted as Music or Art or Philosophy.

#### **Art 4353 (403). AMERICAN ART.**

A course in the Art History of the United States from the Pilgrims to contemporary development. Prerequisite: junior standing.

#### **Art 4354 (473). ART SURVEY.**

An intensive historical survey of the arts from paleolithic to modern times. Emphasis on painting, architecture, and sculpture. For the student requiring a general historical background of man's artistic achievements. Prerequisite: junior standing.

#### **Art 4383 (453). ART IN THE SECONDARY SCHOOL.**

A course in practice and methods necessary for the teaching of creative art in the junior and senior high school. Required of student teachers in Art before practice teaching at the secondary level. Prerequisite: Art 3381 (353). Lecture and discussion, and studio assignments.

#### **Art 4391. INDIVIDUAL PROBLEMS.**

An advanced problems course in an area of the student's choice. Painting, Sculpture, Graphics, Art Education, Design, or Art History. Prerequisites: junior standing and two semesters of work in the area of choice. Conference and studio assignments.

## **MUSIC**

#### **Freshman Year**

Mus. 1401, 1402, 1201, 1202, 2123, 2124, Applied Music, two to four hours, and Ensemble, two hours.

Eng. 1301, 1302.

Math. six hours.

P.E., two hours.

#### **Junior Year**

Mus. 2125, 3305, 3211, Music Elective, three hours, Applied Music two to four hours, and Ensemble, two hours.

Science, eight hours.

Foreign Language, six hours.

Elective, six hours.\*

#### **Sophomore Year**

Mus. 2401, 2402, 2121, 2122, Applied Music, two to four hours, and Ensemble, two hours.

Sophomore Literature, six hours.

Hist. 2313 or 2333, 2314.

Art 1301.

Elective, three hours\*.

P.E., two hours.

#### **Senior Year**

Mus. 3301, 3302, 4203, 4205, Music Elective, six hours, Applied Music, two to four hours, and Ensemble, two hours.

Govt. 2313, 2314.

Elective, six hours.\*

\*Students desiring all-level teacher certification will select Education 3302; 3311; 3341; 4352; 4641; and Music 3312; 4311 as elective hours.

**Piano Proficiency:**

At the end of the Sophomore Year, Music Majors must pass an examination that indicates proficiency in piano, at a literature level comparable to the Little Preludes and Fugues or two-part inventions of Bach; and sonatinas of Clementi, Kuhlau, and Beethoven. The student should be able to improvise simple accompaniments, and transpose four-part hymns.

**Voice:**

Piano and other instrumental students in Music Education will study Applied Voice a minimum of two semesters.

**Applied Examinations:**

Examinations in Applied Music (private lessons in Voice and Instruments) are given at the end of each semester before a jury consisting of music faculty members.

**Ensembles:**

Each student must be a member of at least one of the major performing groups each semester during which he is enrolled although **no more than eight** semester hours may be counted towards the completion of degree requirements. Participation in smaller ensembles is encouraged where applicable.

**Comprehensive Examinations:**

Minimum Standards in Music Course Work: No grade below C in any of the required work in Music will apply toward a degree with a Major in Music.

At the beginning of the Junior Year all students will be required to demonstrate an ability to do successful Music Theory at the level required at the end of the Sophomore Year at Pan American College. Failure to demonstrate such a proficiency level will result in a requirement that the student enroll in further courses in Music Theory until such a proficiency level is demonstrated.

**Transfers:**

Students who transfer to Pan American College at the junior level, or above, must take an examination to establish their ability in theory. Failure to pass the examination will necessitate a repetition of sophomore theory (non-credit) until a passing grade is established before the student may graduate.

**Recitals:**

Students enrolled in Applied Music will appear in Student Recitals at the discretion of their instructors. All students enrolled in Music will attend college recitals and concerts as a part of their required work unless excused by the Department Head.



A Music major who selects the performance curriculum will perform one-half of a recital during his junior year and a complete recital during his senior year.

A Music major who selects the teacher preparation curriculum will perform one-half of a recital during his senior year.

**Maximum Credit Allowed for Ensemble Work:**

Students who are not Music majors or minors may earn a maximum of eight semester hours by participation in ensemble organizations.

## MUSIC

**Mus. 1101 to 4102 (111b to 421b). BAND.**

An instrumental music organization open to all college students. Activities include concerts on and off the campus, parades, and public relations performances on behalf of the college and the Valley. Smaller groups from the band perform for the benefit of athletic activities.

**Mus. 1103 to 4104 (111c to 421c). CHORUS.**

A vocal music organization open to all students by audition. Activities include concerts on and off the campus and an annual tour.

**Mus. 1105 to 4106 (111o to 421o). SYMPHONY ORCHESTRA.**

An instrumental music organization open to all college students who have an ability to play appropriate instruments. Activities include concerts on and off the campus.

**Mus. 1107 to 4108. STAGE BAND.**

An instrumental music organization open to all college students who have an ability to play an appropriate instrument. Membership is determined by audition. Organization rehearses and performs popular and dance music for its own musical development and to satisfy requests on and off the campus.

**Mus. 1111 to 4112. BRASS ENSEMBLE.**

A small group of brass players who are selected by audition. Activities include the preparation of repertoire from the wealth of literature for this instrumentation and performance as needed and requested.

**Mus. 1113 to 4114. PIANO ENSEMBLE.**

A course open to piano majors who are interested in the repertoire for two or more keyboard players.

**Mus. 1115 to 4116. STRING ENSEMBLE.**

A small group of string players who are selected by audition. Activities include the preparation of repertoire from the wealth of literature for this instrumentation and performance as needed and requested.

**Mus. 1117 to 4118. VOCAL ENSEMBLE.**

Small vocal groups selected by audition to perform repertoire for these groups. Activities include performances as requested and needed by school and non-school groups.

**Mus. 1119 to 4120. WOODWIND ENSEMBLE.**

A small group of woodwind players who are selected by audition. Activities include the preparation of repertoire from the wealth of literature for this instrumentation and performance as needed and requested.

**Mus. 1121, 1122. CLASS PIANO.**

A class for students who have no previous training in piano. Designed to satisfy the minimum piano requirements for non-pianist music majors.

**Mus. 1201, 1202. MUSIC LITERATURE.**

A survey of the literature of music for all media from the earliest available Greek music to contemporary works. Designed to acquaint the music major with the development of music and the relationship of music with simultaneous historical developments.

**APPLIED MUSIC:** Applied Music consists of private instruction in the concentration of the student's major interest. Credit may be earned on the basis of one-half hour lesson and one hour daily practice for one semester hour credit, or two half-hour lessons per week and two hours daily practice for two semester hours credit.

**Mus. 1131 to 4232. APPLIED PIANO.****Mus. 1133 to 4234. APPLIED VOICE.****Mus. 1135 to 4236. APPLIED PERCUSSION.****Mus. 1141 to 4242. APPLIED TRUMPET.****Mus. 1143 to 4244. APPLIED FRENCH HORN.****Mus. 1145 to 4246. APPLIED TROMBONE.****Mus. 1147 to 4248. APPLIED BARITONE HORN.****Mus. 1149 to 4250. APPLIED TUBA.****Mus. 1161 to 4262. APPLIED VIOLIN.****Mus. 1163 to 4264. APPLIED VIOLA.****Mus. 1165 to 4266. APPLIED VIOLONCELLO.****Mus. 1167 to 4268. APPLIED STRING BASS.****Mus. 1171 to 4272. APPLIED FLUTE.****Mus. 1173 to 4274. APPLIED OBOE.****Mus. 1175 to 4276. APPLIED CLARINET.**

**Mus. 1177 to 4278. APPLIED SAXOPHONE.****Mus. 1179 to 4280. APPLIED BASSOON.****Mus. 1401, 1402 (114, 124). FIRST YEAR MUSIC THEORY.**

A course dealing with intervals, scales, chord structures, chord progressions, simple cadences, uses of inversions, non-harmonic tones, seventh chords, simple modulations, and harmonization of melodies. Ear training is stressed. Prerequisite: one unit of music in high school. Three lectures and two laboratory hours a week.

**Mus. 2121. VOCAL METHODS AND MATERIALS.**

Methods and materials for the teaching of vocal soloists and groups.

**Mus. 2122. PERCUSSION METHODS AND MATERIALS.**

Methods and materials for the teaching of players of percussion instruments.

**Mus. 2123. BRASS METHODS AND MATERIALS.**

Methods and materials for the teaching of players of brass instruments.

**Mus. 2124. WOODWIND METHODS AND MATERIALS.**

Methods and materials for the teaching of players of woodwind instruments.

**Mus. 2125. STRING METHODS AND MATERIALS.**

Methods and materials for the teaching of players of string instruments.

**Mus. 2307 (273). MUSIC APPRECIATION.**

A general education music course required of all students except music majors and minors.

**Mus. 2401, 2402 (214, 224). SECOND YEAR MUSIC THEORY.**

Continuation of Music 1401, 1402 (114, 124). Harmonization of melodies, using diatonic and altered triads and seventh chords, non-harmonic tones, and modulations. Prerequisites: Mus. 1401, 1402 (114, 124) with at least a C grade. Three lectures and two laboratory hours a week.

**Mus. 3211 (432). CONDUCTING.**

Study of baton technique as related to both instrumental and choral conducting, fundamental phrasing, balance, mood, and attack and release technique.

**Mus. 3301, 3302 (313, 323). HISTORY OF MUSIC.**

Study of music from its origin to the present. The relation of music to the general pattern of cultural and social evolution. Prerequisite: junior standing.

**Mus. 3305 (333). COUNTERPOINT.**

A study of 17th and 18th century counterpoint in all species, and its application in arranging for two, three and four voices. Prerequisites: Music 2401, 2402 (214, 224).

**Mus. 3311 (233). ELEMENTARY SCHOOL MUSIC.**

A course designed to prepare elementary education majors for basic music instruction in the elementary grades. Notation, rhythmic reading, singing and ear training, building a repertoire of songs, and a study of the aims of elementary school music. Students majoring in elementary education who elect public school music and have had no previous musical experience must take this course.

**Mus. 3312 (243). ELEMENTARY SCHOOL MUSIC.**

A continuation of Music 3311 (233), emphasizing teaching methods and special problems related to class music instruction and the voice, explanation of special equipment and aids for the classroom music teacher, individual participation in conducting and leading class singing, and organizing materials for use in the classroom. Music 3312 (243) is required for music education majors.

**Mus. 4201 (412). FORM AND ANALYSIS.**

Historical development of form and consideration of balance, symmetry, and the principles of musical structure. Analysis of phrase structure, simple part forms, variation forms, contrapuntal forms. Special consideration of the sonata-allegro form as found in the symphony, concerto, and sonata. Two hours per week. Prerequisites: Music 2401, 2402 (214, 224).

**Mus. 4203, 4204 (452, 462). ORCHESTRATION AND ARRANGING.**

A study of the techniques of scoring for band and orchestra and arranging for ensembles. Consideration of the ranges, timbre, and limitations of the instruments. Prerequisite: Music 2402 (224) and junior standing.

**Mus. 4205 (482). CHORAL ARRANGING.**

Designed to provide experience in techniques of writing, arranging, and editing choral music ranging from two to eight parts, with emphasis upon music suitable for choral groups in the public school. Prerequisite: Music 2402 (224).

**Mus. 4207 (492). ADVANCED BAND TECHNIQUES.**

Band organization, recruiting, rehearsal procedures, instrumentation, library, uniforms, discipline, marching band, program planning and general administration of the band. Prerequisite: Music 2402 (224).

**Mus. 4301. PHILOSOPHIES OF ART.**

See Philosophy 4301 for description. May be counted as Music or Art or Philosophy.

**Mus. 4311 (303). SECONDARY SCHOOL MUSIC.**

The aims, contents, and procedures for teaching music in the junior and senior high school.

Some advanced classes will be offered in alternate years.

**DEPARTMENT OF FOREIGN LANGUAGE**

Professor Charles E. Beaudry, Head

**Degree Requirements****Major in Spanish:**

A minimum of 30 semester hours in Spanish are required for the major, 15 hours of which must be advanced and include Spanish 3306.

**Minor in French or Spanish:**

A minor may be obtained in French or Spanish by completing 18 hours, six of which must be advanced. Students studying French or Spanish as a second teaching field must complete 24 semester hours, 12 of which are to be advanced.

**FRENCH****Fr. 1321, 1322 (113, 123). BEGINNING FRENCH.**

A study of the essentials of French grammar, pronunciation, elementary conversation and prose reading.

**Fr. 2321, 2322 (213, 223). INTERMEDIATE FRENCH.**

A comprehensive review of French grammar with pronunciation, conversation, and additional prose reading.

**Fr. 3321 (313). SURVEY OF FRENCH LITERATURE.**

A general study of French literature from the early literary documents to the present. Prerequisites: French 1321, 1322 (113, 123) and 2321, 2322 (213, 223) or their equivalent.

**Fr. 3322 (323). SURVEY OF FRENCH LITERATURE.**

A continuation of French 3321 (313).

**Fr. 3323 (333). ADVANCED FRENCH.**

An advanced study of French grammar, composition, conversation and prose reading.

**Fr. 3324 (343). ADVANCED FRENCH.**

A continuation of French 3323 (343).

## GERMAN

### Ger. 1331, 1332 (113, 123). BEGINNING GERMAN.

A study of the essentials of German grammar, pronunciation, elementary conversation and prose reading.

### Ger. 2331, 2332 (213, 223). INTERMEDIATE GERMAN.

A comprehensive review of German grammar with pronunciation, conversation, and additional prose reading.

## LATIN

### Latin 1351, 1352 (114, 124). BEGINNING LATIN.

An introductory course in Latin designed especially for students who plan to major in English or a Romance language.

## RUSSIAN

### Rus. 1341, 1342 (113, 123). BEGINNING RUSSIAN.

A study of the fundamentals of the Russian language including grammatical principles, pronunciation, reading, and writing.

## SPANISH

Students who have completed two or more years of high school Spanish will take Spanish 2301, 2302 (213, 223).

Spanish-speaking students will take Spanish 1303, 1304 (183, 193) or 2301, 2302 (213, 223).

### Span. 1301, 1302 (113, 123). BEGINNING SPANISH.

A course designed to develop the ability to understand, speak, read and write the Spanish language. Open only to persons whose native tongue is not Spanish.

### Span. 1303, 1304 (183, 193). COMPOSITION AND READING.

A course for persons whose native tongue is Spanish but who have had no previous study of the language. Dictation, intensive reading in class, extensive outside reading, inductive study of grammar and a study of the culture of the Hispanic world.

### Span. 2301, 2302 (213, 223). INTERMEDIATE SPANISH.

A review of grammar and syntax, original theme writing, and a study of literary selections.

### Span. 2303 (273). HISTORY OF THE SPANISH LANGUAGE.

A study of the development of Spanish as a language, from its beginnings to the present. Given in Spanish.

### Span. 3301 (333). SPANISH LITERATURE (1100-1750).

A survey of the literature of Spain from the beginnings to Romanticism. Given in Spanish.

**Span. 3302 (343). SPANISH LITERATURE (1750 to our times).**

A survey of the literature of Spain from Romanticism to the modern period. Given in Spanish.

**Span. 3303 (313). ADVANCED SPANISH COMPOSITION.**

Intensive training in Spanish composition, including class publication of material in Spanish. Given in Spanish.

**Span. 3304 (323). ADVANCED SPANISH COMPOSITION.**

Additional work in composition similar to that given in Spanish 3303 (313). Given in Spanish.

**Span. 3305 (353). ADVANCED GRAMMAR AND SYNTAX.**

A careful examination of the structure of Spanish as shown in contemporary texts. Given in Spanish.

**Span. 3306 (373). PHONETICS.**

Emphasis on a practical mastery and on principles of teaching pronunciation. Three lectures a week for one semester. Given in Spanish. Required of all Spanish majors.

**Span. 3307. THE GOLDEN AGE OF SPANISH LITERATURE.**

A critical study of significant Golden Age works.

**Span. 4301 (453). SPANISH-AMERICAN LITERATURE (1500-1800).**

The literature of South American countries from colonial times to Romanticism. Both individual works and anthologies are read. Given in Spanish.

**Span. 4302 (463). SPANISH-AMERICAN LITERATURE (1800 to our times).**

The literature of South American countries from 1800 down through modernism and our day. Both individual works and anthologies are read. Given in Spanish.

**Span. 4303 (473). SPANISH CIVILIZATION.**

A survey course covering the entire range of Iberian history, and outlining the major differences between Spanish culture and the cultures of other western nations. Given in Spanish.

**Span. 4305. MEXICAN LITERATURE.**

A survey of the literature of Mexico from the beginning to the present.

**Span. 4306. SPANISH PLAY PRODUCTION.**

An analysis of several plays with emphasis of their staging. Public performance of one or more plays during the semester.

## DEPARTMENT OF MATHEMATICS

**Professor Sidney Draeger, Head**

### General Education Requirement:

The following courses are recommended in order to satisfy the general education requirement of six semester hours of mathematics:

Elementary Education Majors: Math. 1301, 1302.

Liberal Arts Majors: Math. 1301, 1302; or 1304, 1305; or 1601.\*

Science Majors: Math. 1304, 1305; or 1601.\*

Business Administration Majors: Math. 1304\*, 2303.

\*See prerequisites.

### Degree Requirements:

#### Major in Mathematics:

Math. 1601, 2301, 3300, 3301 plus 15 additional hours in mathematics (12 of which must be advanced).

#### Minor in Mathematics:

Math. 1601, 2301, 3300, plus six additional hours in mathematics (three of which must be advanced). Students taking mathematics as a second teaching field must have a total of 24 semester hours, 12 of which must be advanced.

## SUGGESTED OUTLINE OF CURRICULA

### Mathematics Major (Physics or Chemistry minor)

#### Freshman Year

Math. 1601, 2301.

Eng. 1301, 1302.

Foreign Language, six hours.

(French or German recommended)

Art 1301.

Phys. 1403 or elective.

P.E., two hours.

#### Junior Year

Math., three advanced hours.

Phys., three advanced hours or

Chem., six advanced hours.

Electives, six advanced hours.

Electives, 12 or 15 hours.

Math., three hours.

Music 2307.

#### Sophomore Year

Math. 3300, 3301.

Eng., six hours (literature).

Hist. 2313, or 2333, 2314.

Phys. 2401, 2402 or Chem. 1401, 1402.

Govt. 2313, 2314.

P.E., two hours.

#### Senior Year

Math., nine advanced hours.

Phys. 4301 or

Chem., four advanced hours.

Electives, six advanced hours.

Electives, 12 hours.

### Mathematics Major (certified for teaching)

#### Freshman Year

Math. 1601, 2301.

#### Sophomore Year

Math. 3300, 3301.



**(Freshman Year continued)**

Eng. 1301, 1302.

Foreign Language, six hours.

Art 1301.

Mus. 2307.

Minor or elective, three hours.

P.E., two hours.

**Junior Year**

Math., six advanced hours.

Govt. 2313, 2314.

Minor, six hours.

Minor, three advanced hours.

Ed. 3302, 3303.

Math., three hours.

**(Sophomore Year continued)**

Eng., six hours (literature).

Hist. 2313 or 2333, 2314.

Phys. 1401, 1402.

Minor, six hours.

P.E., two hours.

**Senior Year**

Math., six advanced hours.

Minor, nine advanced hours.

Ed. 4352, 3341 or 3342.

Ed. 4641.

Elective, three hours.

**Math. 1201 (112). SLIDE RULE.**

Theory and use of the slide rule. The trig and log scales are included. This course is recommended for mathematics teachers, engineers, and science majors.

**Math. 1301 (153). MATHEMATICS IN GENERAL EDUCATION.**

An introductory course for non-science and non-mathematics majors in which the basic concepts of mathematics are introduced and applied. Precise definitions, logical reasoning, and generalization of known concepts are used. It covers the axiomatic approach to the algebra of numbers, exponents, equations, and logarithms. The theory of sets is introduced and applied. Cannot be counted toward a major or minor in mathematics.

**Math. 1302 (163). MATHEMATICS IN GENERAL EDUCATION.**

A continuation of Mathematics 1301 (153) that includes topics in functions, relations, graphs, variation, simple statistical methods and probability. Cannot be counted toward a major or minor in mathematics. Prerequisite: Mathematics 1301 (153).

**Math. 1303 (103). ALGEBRA.**

Factoring, fractions, linear equations in one unknown, graphs and functions, systems of linear equations, exponents, and radicals. Three hours credit but does not count toward the six hours of mathematics required for a degree.

**Math. 1304 (113). COLLEGE ALGEBRA.**

Quadratic equations, ratio, proportion, variation, complex numbers, mathematical induction, binomial theorem, higher degree equations, progressions, determinants and partial fractions. Prerequisite: two years of high school algebra or Mathematics 1303 (103).

**Math. 1305 (123). TRIGONOMETRY.**

A study of the solution of right triangles and oblique triangles, functions of any angle, functions of multiple angles, radian measure, inverse

functions, identities, and the solution of trigonometric equations. Prerequisite: credit or concurrent enrollment in Mathematics 1304 (113).

**Math. 1306 (193). MATHEMATICAL STATISTICS.**

Topics covered by this course include descriptive statistics, the concept of probability and the calculation of probabilities, simple probability and frequency functions, and decision making. The applications of statistical methods include the fields of biology, social science, economics, business, etc. Prerequisite: Mathematics 1304 (113).

**Math. 1601 (133, 143). ANALYTIC GEOMETRY AND CALCULUS.**

Equation of a locus, locus of an equation, the straight line, circle, parabola, ellipse, hyperbola, variables, functions, limits, derivatives and differentials for polynomials and applications, integration of polynomials and applications, differentiation of algebraic functions. Prerequisites: Mathematics 1304 (113), 1305 (123) or two years of Algebra, one year of Geometry, and 1/2 year of Trigonometry in high school. Meets six hours weekly.

**Math. 2301 (223). CALCULUS II.**

This course is a continuing study of the limit, derivative, differential and the integral as applied to many types of functions. It contains a study of areas, volume, differentiation of implicit functions, special devices of integration with applications to work, pressure, centers of gravity and moments of inertia. Prerequisites: Mathematics 1601 (133, 143).

**Math. 2303 (B. Math. 323). MATHEMATICS OF FINANCE.**

A course designed for students who plan to major in Business Administration. Topics covered include fundamentals of algebra, linear programming, matrices, logarithms, progressions, compound interest, annuities, amortization, sinking funds, depreciation, computers, Boolean algebra, and binary, octal and hexadecimal number systems. Prerequisite: Mathematics 1304.

**Math. 3300 (323). CALCULUS III.**

This course covers continuity; indeterminate forms; partial differentiation; multiple integration; line, surface and space integrals; series and hyperbolic functions. Prerequisite: Mathematics 2301 (223). May be taken as a sophomore.

**Math. 3301 (313). DIFFERENTIAL EQUATIONS.**

This course contains a study of ordinary differential equations, formulation of practical problems, methods of solving type forms, systems of equations, singular solutions and methods of approximations. Prerequisite: Mathematics 3300 (323). May be taken as a sophomore.

**Math. 3302 (363). VECTOR ANALYSIS.**

A study of the application of vector methods to the problems of mathematics and physics. Topics discussed include elementary operations, vector and scalar products, differentiation of vectors, differential operations and integral theorems. Prerequisite: Mathematics 3300 (323).

**Math. 3303 (333). HISTORY OF MATHEMATICS.**

This course is a study of the sources of mathematical principles, growth of mathematical knowledge, and the contributions of outstanding mathematicians. Prerequisite: 12 hours of mathematics.

**Math. 3304 (343). MATHEMATICS FOR SECONDARY TEACHERS.**

The aims and content of courses in plane and solid geometry, algebra, and trigonometry will be discussed. Emphasis will be given to the study of subject matter. Geometry will receive the most attention. Other topics designed to help vitalize the teaching of mathematics will also be covered. Prerequisite: 12 hours of mathematics.

**Math. 3305 (353). FINITE MATHEMATICS.**

This course includes a study of compound statements, sets and sub-sets, partitions and counting, probability theory, vectors and matrices, linear programming and theory of games are included if time permits. Prerequisite: 12 hours of mathematics.

**Math. 4301 (303). PROBABILITY AND STATISTICS.**

This course consists of the basic mathematical concepts and applications of probability and statistics. Topics covered are probability computation, frequency distribution, the analysis of empirical data, and statistical models for decision making. Prerequisite: Mathematics 2301 (223).

**Math. 4302 (373). THEORY OF NUMBERS.**

This is a study of the properties of integers. The course topics include: Peano's postulates, mathematical induction, prime and composite integers, divisibility properties, number-theoretic functions, bracket functions, diophantine equations, Euler's phi-function, and congruence notation. Prerequisites: Mathematics 1601 (133, 143).

**Math. 4303 (433). LINEAR ALGEBRA.**

This course includes the following topics: vector spaces, linear transformation and matrices, bilinear and quadratic forms, characteristic values and vectors of linear transformations, and similarity of matrices. Prerequisite: Mathematics 2301 (223).

**Math. 4304 (423). MODERN ALGEBRA.**

This course includes a study of the basic number system of algebra, group theory, vectors and vector spaces, the algebra of matrices, linear groups, determinants and canonical forms. Prerequisite: Twelve semester hours of mathematics.

**Math. 4305 (453). ADVANCED CALCULUS.**

An introduction to the methods of classical analysis as applied to the calculus. Topics covered include infinite sequence, series, functions of one and several variables, proper and improper integrals, and functions defined by integrals. Prerequisite: Mathematics 3300 (323).

## DEPARTMENT OF PHYSICAL SCIENCE

Professor L. A. Youngman, Head

The subject areas of Astro-Science, Geology, Physics, Physical Science, and pre-Engineering are included in this Department.

The Department of Physical Science is concerned with instruction for the general or liberal education of those whose fields of specialization lie outside that of Physical Science. In addition, it is concerned with the technical training of those whose fields of specialization lie within its area.

The sub-department of Pre-Engineering offers a two year program in basic engineering. The student may complete work offered the first two years by most engineering schools.

Students majoring in geology may take one year at Pan American College. A B.S. degree is offered in Physics and Astro-Science.

### ASTRO-SCIENCES

#### Degree Requirements

In the freshman year, the student should complete Math. 1601, 2301; and Physics 1403. In addition, he should enroll for Astro. 1401, 1402. During the sophomore year, Physics 2401, 2402; Math. 3300, 3301; and Astro. 2403, 2404 should be included in the course work, if it is possible to arrange this and to take the regular general education work required. It is quite likely that some of this must be done in the Summer Session.

#### **Astro. 1401 (134). GENERAL ASTRONOMY.**

A study of basic concepts in astronomy and of the Solar System. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. Three hours lecture plus three hours of laboratory per week. Prerequisite: credit in or enrollment in a mathematics course. \$2.00 laboratory fee.

#### **Astro. 1402 (144). GENERAL ASTRONOMY.**

A study of the stellar universe. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. Three hours lecture plus three hours of laboratory per week. Prerequisite: credit in or enrollment in a mathematics course. \$2.00 laboratory fee.

#### **Astro. 2403. GENERAL ASTRONAUTICS.**

A presentation of the fundamental physical principles involved in space exploration, including an introduction to rockets, artificial earth satellites, lunar and planetary probes, space medicine, manned capsules, space stations, and interplanetary travel. Special emphasis will be given to a study of the extension of aviation into aerospace, and the impact of the space age on our society and culture. Three hours lecture plus three hours of laboratory per week. Prerequisite: six hours of mathematics. \$6.00 laboratory fee.

**Astro. 2404. GENERAL ASTRONAUTICS.**

A study of basic concepts with emphasis on applications of physics and astronomy to a detailed study of space exploration and technology. Tracking of artificial satellites and rocket experiments at the Astro-Science Laboratory at Moore Air Base are an integral part of the course. Three hours lecture plus three hours of laboratory per week. Prerequisite: minimum of one calculus course. \$6.00 laboratory fee.

**Astro. 3101 (311). JUNIOR LABORATORY.**

The course is designed to acquaint the student with the experimental method. Experiments and observational work are chosen to cover as many fields of astronomy, astronautics, and planetarium science as possible in keeping with the background and abilities of the students. Three hours of laboratory per week. Required of all Astro-Science majors. Not given each year. \$4.00 laboratory fee per semester.

**Astro. 3102 (321). JUNIOR LABORATORY.**

A continuation of Astro. 3101.

**Astro. 3301. (313). HISTORY OF ASTRONOMY AND ASTRONAUTICS.**

The development of astronomical and astronautical thought will be traced, and its impact on other sciences and on philosophy will be studied. Attention will be given to important astronomers and to their discoveries. Contemporary developments in astronautics will be included. Three hours of lecture per week. Prerequisite: eight hours of astronomy. Not given each year.

**Astro. 3302 (333). LUNAR AND PLANETARY ASTROPHYSICS.**

A more advanced point of view will be followed with emphasis on applications of physics to a detailed study of the Solar System. Observations of the moon and available planets will be made as an integral part of the course. Three hours of lecture per week. Prerequisite: Astro. 1401 (134), Math. 1601 (133, 143), and Physics 1401, 1402 (114, 124) or 2401 (214). Not given each year.

**Astro. 3303 (343). STELLAR AND GALACTIC ASTROPHYSICS.**

A more advanced point of view will be followed with emphasis on a study of the constitution of the stellar universe beyond our solar system. Observations of deep sky objects will be made as an integral part of the course. Three hours of lecture per week. Prerequisites: Astro. 1402 (144), Math. 1601 (133, 143), and Physics 1401, 1402 (114, 124), or 2401 (214). Not given each year.

**Astro. 4101 (411). SENIOR LABORATORY.**

The student performs experiments, and observational work of greater complexity and difficulty than those in the Junior Laboratory. In addition, the student is encouraged to design and carry out original study in his field of interest. Three hours of laboratory per week. Required of all Astro-Science majors. \$4.00 laboratory fee per semester.

**Astro. 4102 (421). SENIOR LABORATORY.**

A continuation of Astro. 4101.

**Astro. 4302 (423). SELECTED TOPICS IN ASTRONAUTICS AND ASTROPHYSICS.**

Topics selected include photometry, astrometry, cosmic rays, infra-red astronomy, relativity, observations from satellites, astro-navigation, or other topics which may become significant in the future, or which may be particularly appropriate for a current group of students. Three hours of lecture per week. Not given each year.

**Astro. 4303. ASTRONOMICAL INSTRUMENTATION.**

This course is concerned with the design and use of astronomical and astrophysical instruments earth based and in space, from an advanced point of view. Three hours of lecture per week. Prerequisites: eight hours of astronomy (or Mathematics or Physics major), credit in or concurrent enrollment in Physics 2402 (224) and Math. 2301 (223). Not given each year.

**Astro. 4304. RADIO ASTRONOMY.**

This course is concerned with the reception, reduction, and interpretation of radio frequency emission from members of the solar system, from constituents of the galaxy, and from extra-galactic objects. Thermodynamics of antennas, receiver noise, discrete sources and extended sources, the hydrogen lines, OH radiation, and emission mechanisms are discussed. Attention is given to correlations between the optical universe and the radio universe. Three hours of lecture per week. Prerequisites: eight hours of astronomy (or Mathematics or Physics major), credit in or concurrent enrollment in Physics 2402 (224) and Math. 2301 (223). Not given each year.

**Astro. 4305. ASTROMECHANICS.**

This course includes such topics as transformation of coordinate systems and orbital elements, two-body problems and Laplace's method, perturbations, virial theorem, galactic rotation, and motion where mechanical energy is not constant, such as a rocket in flight. Three hours of lecture per week. Prerequisites: eight hours of astronomy (or Mathematics or Physics major), Physics 1401 (114) or 1403 (144), 1402 (124), Math. 2301 (223). Not given each year.

## ENGINEERING

Since Pan American College does not offer a degree in engineering, it is the responsibility of each student to arrange his courses in accordance with the catalog requirements of the institution to which he plans to transfer. For those students who have not selected the institution to which they plan to transfer, the following curriculum is recommended for the first two years. It includes the basic courses taken during the first two years at most Colleges of Engineering.

**SUGGESTED ENGINEERING PROGRAM****Freshman Year**

Eng. 1301, 1302.  
 Engr. 1301, 1302.  
 Chem. 1401, 1402.  
 Math. 1601, 2301.  
 Phys. 1403.  
 P.E., two hours.

**Sophomore Year**

Eng. 2309 and English or American Literature, three hours.  
 Engr. 2301, 2302.  
 Math. 3300, 3301.  
 Chem. 2401.\*  
 Govt. 2313, 2314 or Hist. 2313, 2314.  
 Phys. 2401, 2402.  
 P.E., two hours.

\*Chemical and Petroleum Engineers.

**Note to Engineers:**

All engineering students will be held responsible for knowing how to use the **slide rule**.

Only those students satisfying the math and physics entrance requirements with a B or better average in math will be allowed to take prescribed curricula.

Students who have an average of less than B in their high school math, even though they satisfy the math entrance requirements, should take Math. 1304 and 1305 the summer prior to enrollment at Pan American College. Otherwise, their program will be delayed one year.

Students having only one year of high school algebra should enroll in Math. 1303 to make up this deficiency.

Those lacking high school trigonometry should take Math. 1305.

Students who lack credit in high school physics should take Physics 1401 the first semester of their first year.

**Engr. 1301 (113). ENGINEERING DRAWING.**

A consideration of theory and techniques in the making of assembly drawings. Two hours of lecture and four hours supervised drafting per week. \$2.00 laboratory fee.

**Engr. 1302 (123). DESCRIPTIVE GEOMETRY.**

A continuation of Engineering 1301 (113) including the methods of descriptive geometry. Two hours of lecture and four hours of supervised work per week. Prerequisite: Engineering 1301 (113). \$2.00 laboratory fee.

**Engr. 2301 (233). MECHANICS.**

Principles of mechanics applied to rigid bodies at rest and in motion. Newton's laws, work-energy, impulse-momentum principles for rigid bodies, static and dynamic friction. Prerequisite: Physics 1403 (144).

**Engr. 2302 (243). MECHANICS OF SOLIDS.**

The study of internal forces and deformations in solids of stress and strain for elastic and plastic solids and of applications to simple engineering problems. The laboratory demonstrations involve strain and deformation measurement and related properties of materials. Prerequisite: Engineering 2301 (233).

**GEOLOGY****Geol. 1301, 1302. EARTH SCIENCE.**

A course primarily for Earth Science teachers to acquaint them with the Earth and its position in time and space. The physical development of the Earth is discussed with special reference to the interface concept of the interaction of the atmosphere, hydrosphere, and lithosphere. Lecture, laboratory, and field trips, a total of five hours per week. Students are expected to furnish their own transportation on field trips. Two hours lecture and three hours laboratory. \$4.00 laboratory fee per semester. (Does not satisfy General Education requirements for a laboratory science.)

**Geol. 1401 (114). PHYSICAL GEOLOGY.**

Involves a comprehensive description of materials composing the earth, and deals with the classification and analysis of geologic agents responsible for the origin, structure and sculpturing of the earth's crust. Lectures, demonstration, laboratories and field trips, a total of six hours per week. Students will be expected to arrange for their own transportation on field trips. \$4.00 laboratory fee.

**Geol. 1402 (124). HISTORICAL GEOLOGY.**

A course dealing with the geological history of the earth and its inhabitants as revealed by the fossil record with emphasis on North America. Three hours of lecture and recitation. Three hours of laboratory and field trips per week. Students will be expected to arrange for their own transportation on field trips. \$4.00 laboratory fee.

**PHYSICS****Major in Physics:**

36 hours required

**Degree Requirements****Freshman Year**

Math. 1601, 2301.

Eng. 1301, 1302.

Chem. 1401, 1402.

Phys. 1403.

Foreign Language, six hours

(French or German recommended)

P.E., two hours.

**Sophomore Year**

Math. 3300, 3301.

Phys. 2401, 2402.

Eng. 2309 and English or American Literature, three hours.

Hist. 2313 or 2333, 2314.

Art 1301.

Mus. 2307.

P.E., two hours.



**Junior Year**

Math., Advanced, three hours.  
 Phys. 3101, 3102, and Physics Ad-  
 vanced, 12 hours.  
 Govt. 2313, 2314.  
 Elective, six hours.  
 Math., three hours.

**Senior Year**

Phys. 4101 or 4102, and Physics Ad-  
 vanced, nine hours.  
 Math., Advanced, six hours.  
 Elective, nine hours.

It is suggested that three hours of Advanced Mathematics be taken as one of the electives. This would give a major in Mathematics.

Recommended Electives: Chem. 4401; second year of Foreign Language; Engr. 1301, 1302; Psy. 2313; Eco. 2351; Speech 1302; Astro. 4301; I.E. 1305; B.A. 1331 and 1201.

**Minor in Physics**

Physics 1403; 2401; 2402; 4301; plus three additional advanced semester hours of Physics. If one desires to take Physics for a second teaching field, twenty-four hours are required.

### CO-OPERATIVE PROGRAM IN MATHEMATICS AND PHYSICS

Pan American College has a co-operative program with the National Aeronautics and Space Administration in Houston. To be eligible, students must be majoring in either mathematics or physics. A grade average of B or better must be maintained and the student must have a minimum of thirty hours, fifteen of which must be from Pan American College. Students interested in the program should contact the Director of Co-operative Education in the Engineering Building at least one semester prior to the time they wish to enter the program. Students who have more than 72 hours are not eligible.

**Phys. 1401, 1402 (114, 124). GENERAL PHYSICS.**

A presentation of the fundamental principles of mechanics, heat, and sound in the first semester with light, electricity, and modern physics being presented in the second semester. Three hours lecture, two hours laboratory, and one hour quiz section per week. Credit cannot be counted for both Physics 1401 (114) and Physics 1403 (144). \$4.00 laboratory fee per semester.

**Phys. 1403 (144). MECHANICS.**

This section is for engineers, chemistry, mathematics, and physics majors. Three hours lecture, two hours laboratory, and one hour quiz section per week. Prerequisites: Math. 1601 (133, 143), high school physics or Physics 1401 (114). Credit cannot be counted for both Physics 1401 (114) and Physics 1403 (144). \$4.00 laboratory fee.

**Phys. 2401 (214). HEAT, WAVE MOTION, SOUND, AND LIGHT.**

This course is for engineers, chemistry, mathematics, and physics majors. Three hours lecture, two hours laboratory, and one hour quiz section per week. Prerequisites: Physics 1403 (144) and Math. 1601 (133, 143). \$4.00 laboratory fee.

**Phys. 2402 (224). ELECTRICITY AND MODERN PHYSICS.**

Designed for engineers, chemistry, mathematics, and physics majors. Three hours lecture, two hours laboratory, and one hour quiz section per week. Prerequisite: Physics 2401 (214) or permission of the instructor. \$4.00 laboratory fee.

**Phys. 3101 (311). JUNIOR LABORATORY.**

The course is designed to acquaint the student with the experimental method. Experiments are chosen to cover as many fields of physics as possible in keeping with the background and abilities of the students. Three hours of laboratory per week. Credit, one hour. Required of all Physics majors. Prerequisite: 12 hours of physics. \$4.00 laboratory fee per semester.

**Phys. 3102 (321). JUNIOR LABORATORY.**

A continuation of Phys. 3101.

**Phys. 3301 (313). ELECTRICITY AND MAGNETISM.**

Theory of electrostatics, electromagnetics, magnetic properties of materials, units, and thermoelectricity, simple treatment of alternating current, oscillating circuits, electromagnetic radiation, and Maxwell's equation. Lecture three hours. Prerequisites: 12 hours of physics and Math. 2301 (233).

**Phys. 3302 (333). THEORETICAL MECHANICS.**

Emphasis is placed on Newton's laws of motion, the conservation laws and detailed motions resulting therefrom, and the relevance of these classical ideas to modern atomic physics. Other topics include oscillatory motion, wave motion, and mechanics of fluids. Three hours lecture. Prerequisites: 12 hours of physics and Math. 2301 (223).

**Phys. 3303 (343). HEAT AND THERMODYNAMICS.**

Study of heat measuring devices, thermal expansion, behavior of gases, elementary thermodynamics, change of state, specific heats, and transfer of heat. Lecture three hours. Prerequisites: 12 hours of physics and Math. 2301 (223).

**Phys. 3304 (353). OPTICS.**

A study of physical optics, including diffraction, interference, polarization, and the beginning of spectroscopy together with some geometrical optics. Lecture three hours. Prerequisites: 12 hours of physics and Math. 2301 (223).

**Phys. 3401 (324). ELECTRONICS.**

Study of the phenomena of electronics including the application of electronic devices. Lecture three hours. Laboratory three hours. Prerequisite: Physics 3301 (313). \$4.00 laboratory fee.

**Phys. 4101 (411). SENIOR LABORATORY.**

The student performs experiments of greater complexity and difficulty than those in Junior laboratory. In addition, the student is encouraged to design and carry out original experiments in his field of interest. Three hours of laboratory work per week. Required of all physics majors. Prerequisites: Physics 3101, 3102 (311, 321). \$4.00 laboratory fee per semester.

**Phys. 4102 (421). SENIOR LABORATORY.**

A continuation of Phys. 4101.

**Phys. 4103. SENIOR LABORATORY.**

A continuation of Phys. 4102.

**Phys. 4301 (413). TOPICS IN MODERN PHYSICS.**

A study of recent developments in physics, including atomic energy, nuclear structure, X-rays, cosmic rays, and radioactivity. For chemistry, mathematics, and physics majors. Three hours lecture per week. Not given each year. Prerequisite: 12 hours of physics.

**Phys. 4302 (444). NUCLEAR PHYSICS.**

Fundamentals of nuclear physics. Includes three hours lecture. Prerequisite: 12 hours of physics.

**Phys. 4304. PHYSICS FOR SECONDARY TEACHERS.**

A study of the material, techniques, and procedures involved in the teaching of high school physics. May be counted only toward a major or minor in physics when part of an approved teacher certification program with physics or mathematics as a teaching field. Two hours lecture and three laboratory hours. Prerequisite: 12 hours of physics. \$4.00 laboratory fee per semester.

## SCIENCE

**Phys. Sci. 1301, 1302. PHYSICAL SCIENCE FOR ELEMENTARY TEACHERS.**

A course in physical science designed for elementary education majors. Will not satisfy the general education requirement of other majors. Two hours lecture and two hours of laboratory. Laboratory fee, \$4.00 per semester.

**Phys. Sci. 1401, 1402 (114, 124). PHYSICAL SCIENCE.**

A course in science designed for the general education of non-science majors. Selected subjects from astronomy, geology, meteorology, physics, and chemistry illustrate the methods of science, and the capabilities and limitations of methods in solving problems in science and other fields. Relations between scientific development and cultural, political, and industrial development are studied. Three hours lecture and three hours laboratory per week. Prerequisite: credit or concurrent enrollment in a mathematics course. \$4.00 laboratory fee per semester.

**DEPARTMENT OF SOCIAL STUDIES****Professor Raymond H. Miller, Head****Degree Requirements**

A Bachelor of Arts degree is offered with majors in Government and History in the Department of Social Studies.

**Major in Government:**

The required courses are Government 2313, 2314, 2333; plus 21 semester hours of junior and senior level Government courses, totaling a minimum of 30 semester hours.

**Major in History:**

The required courses are History 2313, 2314, 2333; (History 2343, 2344 are strongly recommended), plus 15 to 20 semester hours of junior and senior level History courses, totaling a minimum of 30 semester hours.

**GEOGRAPHY****Geog. 2301. CONSERVATION OF NATURAL RESOURCES.**

A study of the use and conservation of our natural resources. Supplemented by consultants in soils, forestry, minerals, and wildlife. Designed to meet the conservation requirements of agriculture and elementary education. Can be counted in the supporting areas of elementary curriculum. Three hours lecture per week.

**Geog. 2313 (213). PRINCIPLES OF GEOGRAPHY: PHYSICAL ELEMENTS.**

An overview of the earth's natural features systematically described and interpreted through basic geographic principles. Emphasis will be given to earth-sun relations, maps, the world pattern and distribution of water and climate; landscape development under the influence of vulcanism and mountain-building forces, rivers, underground water, glaciers, waves and currents, and wind; the nature and classification of the principal soil and vegetable groups of the world.

**Geog. 2323 (223). PRINCIPLES OF GEOGRAPHY: CULTURAL ELEMENTS.**

A study of man's use of natural environment in creating his cultural setting. Emphasis will be placed upon the areas of production and consumption and their effects upon world population.

**Geog. 2333. LATIN AMERICAN GEOGRAPHY.**

A regional study of the geography of Mexico, Central and South America, including an investigation of the physical, cultural and economic factors of various regions and how these effect present day conditions.

## GOVERNMENT

### **Govt. 2313, 2314 (213, 223). AMERICAN GOVERNMENT.**

Fulfills the legislative requirement of six hours of American government. A functional study of the American constitutional and governmental system, federal, state, and local. Special attention and emphasis on U.S. and Texas Constitutions. Govt. 2313 (213). The origins and development of the American governmental system; federal-state and interstate relations; the individual as a citizen, person, and voter; political parties; and legislation. Govt. 2314 (223). Judicial, executive, and administrative functions in federal and state governments; lesser units of government; financing governmental activities; foreign relations and national defense and governmental services and functions in the field of business, labor, agriculture, social welfare, public safety and conservation. Prerequisite: sophomore standing.

### **Govt. 2333. INTRODUCTION TO POLITICAL SCIENCE.**

Emphasis on political fundamentals, public law, theory and organization of the modern state, political dynamics, and institutions. Required of all Government majors. Open to freshmen.

### **Govt. 3313 (313). RURAL AND LOCAL GOVERNMENT.**

A study of organization, functions, relationships, and activities of the taxing districts and of the counties of the state. Special reference is made to Texas and to the types of such districts encountered in the Rio Grande Valley. Prerequisites: Govt. 2313, 2314 (213, 223).

### **Govt. 3323 (323). INTRODUCTION TO PUBLIC ADMINISTRATION.**

A survey of public administration in the United States with emphasis upon its general machinery and on the powers, problems, and control of governmental agencies. Prerequisites: Govt. 2313, 2314 (213, 223).

### **Govt. 3343 (343). INTERNATIONAL POLITICS.**

Political principles, problems, and factors involved in the foreign policies and relations of the nation-states with particular emphasis on the sources and uses of national power and the difficulties in limiting the use of such power. Prerequisites: Govt. 2313, 2314 (213, 223).

### **Govt. 3363 (363). AMERICAN CONSTITUTIONAL LAW.**

A study of the development of the American Constitution through judicial interpretation with particular emphasis on cases dealing with federalism, Congress, the executive, commerce, due process, and civil rights. Prerequisites: Govt. 2313, 2314 (213, 223).

### **Govt. 3372. RUSSIA AND SATELLITES.**

A study of the evolution of Soviet Rule, the role of the Communist party, the people and institutions of Russia. Background and current trends in the Communist countries of Eastern Europe outside the Soviet Union. Prerequisites: Govt. 2313, 2314 (213, 223) and six hours of history.

**Govt. 3373 (373). AMERICAN POLITICAL PARTIES AND POLITICS.**

A study of the history, organization, function and leadership of political parties and the role they play in the operation of national, state and local governments in the United States. Prerequisite: Govt. 2313, 2314 (213, 223).

**Govt. 3383 (383). LATIN-AMERICAN POLITICS.**

A survey of politics in the area; competing ideologies, type of revolutions, sources of instability, party interest, group developments, relationship between political, social and economic structures and relations between the United States and Latin America. Prerequisites: Govt. 2313, 2314 (213, 223).

**Govt. 4313 (413). COMPARATIVE GOVERNMENTS: WESTERN DEMOCRACIES.**

A study of the major Democracies of Europe: Great Britain, France, West Germany, Italy, Low Countries, Scandinavian Countries, Switzerland, and Austria. A comparative study of peoples and their institutions. Prerequisites: Govt. 2313, 2314 (213, 223) and six hours of history. Not offered every year.

**Govt. 4323. HISTORY AND POLITICS OF EMERGING NATIONS: AFRICA.**

(See Hist. 4323 for description.)

**Govt. 4324. HISTORY AND POLITICS OF THE EMERGING NATIONS: MIDDLE EAST.**

(See Hist. 4324 for description.)

**Govt. 4333. POLITICAL THEORY (SOCRATES TO THE NINETEENTH CENTURY).**

A study of the political philosophy of Western Civilization from early to modern times; the works of Plato, Aristotle, Cicero, Machiavelli, St. Thomas Aquinas, Hobbes, Locke, and others will be examined and discussed. Prerequisites: Govt. 2313, 2314 (213, 223) and six hours of history.

**Govt. 4343. POLITICAL THEORY (NINETEENTH CENTURY TO THE PRESENT).**

Modern political thought since the eighteenth century; the doctrines of Western democracy, with special emphasis upon its development in the United States; Hegelian and fascist absolutism, Marxist communism, socialism, and problems of twentieth century nationalism. Prerequisites: Govt. 2313, 2314 (213, 223) and six hours of history. Not offered every year.

**Govt. 4353. INTERNATIONAL ORGANIZATION.**

An analysis of the juridical-political foundations, actual machinery and activities of the principal international organizations, particularly the

U.N. and related bodies. An appreciation of their achievements toward international peace. Prerequisites: Govt. 2313, 2314 (213, 223) and six hours of history.

## HISTORY

### Hist. 2313, 2314 (213, 223). AMERICAN HERITAGE.

An integration of social, political and economic history of the United States with constant attention directed to geography and its influences. Approach is by problems which move chronologically from the earliest Colonial period to the current great debate on foreign policy. Open to freshmen who have completed Hist. 2333 (233), or freshmen who enter with credit in American History from high school.

### Hist. 2333 (233). A GENERAL SURVEY OF THE HISTORY OF TEXAS.

This course gives a rapid survey of the history of Texas from the period of Spanish ownership of the land to the present. Open to freshmen. May be substituted for Hist. 2313 (213) to meet State requirement for students expecting to graduate from PAC only.

### Hist. 2343, 2344. HISTORY OF ENGLAND.

English history from earliest times through the period of the Stuart kings. Emphasis will be given to the factors which have influenced the development of British and American institutions. The second semester covers the period from the Glorious Revolution to the British Empire and Commonwealth of Nations. Open to freshmen.

### Hist. 3313 (313). EARLY AMERICAN HISTORY 1748-1789.

A study of the growth of early American civilization within the British Empire, the American Revolution, and creation of the Federal Constitution with particular attention given to the eighteenth-century origins of American political institutions. Prerequisite: six semester hours of history.

### Hist. 3323 (323). THE TRANS-MISSISSIPPI WEST.

A study of the acquisition, exploration, and settlement of the territory west of the Mississippi River from 1800 to 1900 with emphasis on Manifest Destiny and influences of the frontier upon American institutions. Prerequisite: six semester hours of history.

### Hist. 3333 (333). MEXICO, CENTRAL AND SOUTH AMERICA.

A study of the establishment of Spanish dominion; geography and natural resources; institutional and social development; cultural aspects and contributions. Prerequisite: six semester hours of history.

### Hist. 3343 (343). MEXICO SINCE INDEPENDENCE.

A study of political, social, and cultural developments since 1821; problems of Mexico and her role in Pan American relations. Prerequisite: six semester hours of history. History 3333 (333) is recommended to precede this course.

**Hist. 3353. SOUTH AMERICA SINCE INDEPENDENCE.**

The historical development of the major South American Republics; general trends in their social, economic and political growth. Prerequisite: six semester hours of history. History 3333 (333) is recommended to precede this course.

**Hist. 3363 (363). HISTORY OF ASIA.**

A brief survey of Asian history with special attention given to India, Japan, and China. Background and development of current problems of the Far East. Prerequisite: six semester hours of History.

**Hist. 3372. RUSSIA AND SATELLITES.**

(See Govt. 3372 for description).

**Hist. 3383 (383). EUROPE FROM 1870 TO 1919.**

A survey of European history and its relationship to the modern world through World War I. Prerequisite: six semester hours of history.

**Hist. 3393. EUROPE FROM 1919 TO THE PRESENT.**

Emphasis on World War II, resulting problems and current trends. Prerequisites: six semester hours of history.

**Hist. 4313 (413). TWENTIETH CENTURY AMERICA.**

A study of the rise of the United States to her present position as a world power. Particular attention will be given to domestic history and foreign policy with their relationship to and effect on each other. Prerequisite: six semester hours of history.

**Hist. 4323. HISTORY AND POLITICS OF THE EMERGING NATIONS: AFRICA.**

Analysis of differences between traditional political values, institutions of the African nations; impact of the West upon African developments; and the political problems of these emerging nations. Prerequisites: Govt. 2313, 2314 (213, 223) and Hist. 2343, 2344.

**Hist. 4324. HISTORY AND POLITICS OF THE EMERGING NATIONS: MIDDLE EAST.**

Analysis of differences between traditional political values, institutions of the Middle East nations; impact of the West upon Middle East developments; and the political problems of these emerging nations. Prerequisites: Govt. 2313, 2314 (213, 223) and Hist. 2343, 2344.

**Hist. 4333 (433). CIVILIZATION THROUGH THE CENTURIES.**

A thorough survey of the political, social, and cultural history of Europe through the treaty of Utrecht. Emphasis will be given to the contributions of Greece and Rome to the Western World, the fall of Rome, the beginning of feudalism and the rise of national states, the Renaissance and the Protestant Reformation. Prerequisite: six semester hours of history.



**Hist. 4334 (443). CIVILIZATION THROUGH THE CENTURIES.**

A continuation of History 4333 (433) to the present time. Emphasis will be given to European expansion, the French Revolution and Napoleon, the Industrial Revolution, the spread of Socialism, and the world conflicts of the twentieth century. Prerequisite: six hours of history.

**Hist. 4343. THE ERA OF SECTIONAL CONFLICT.**

United States history from 1820 to 1877 with emphasis upon the development of sectionalism, Southern nationalism, the breakdown of American political parties, Civil War, and Reconstruction. Prerequisite: six semester hours of history. Not offered every year.

**PHILOSOPHY****Phil. 2313 (213). INTRODUCTION TO PHILOSOPHY.**

A preliminary study of the great philosophic traditions developed by man in his unceasing efforts to understand himself and his world.

**Phil. 2323 (223). ETHICS.**

A survey of the rich heritage of human thought on what constitutes the good life.

**Phil. 2333 (233). PHILOSOPHY OF RELIGION.**

A study of man's religious concepts and experiences. Not offered every year.

**Phil. 2343 (243). BASIC LOGIC.**

An introduction to that branch of philosophy which deals with the nature and problems of clear and accurate thinking. Not offered every year.

**Phil. 3313 (313). AMERICAN PHILOSOPHY.**

An examination of the contributions of great American thinkers to the philosophical deposit of the world. Not offered every year.

**Phil. 3333. PLATO AND ARISTOTLE.**

English translations of selections from Plato and Aristotle's writings will be read and interpreted. Prerequisite: six semester hours of philosophy.

**Phil. 4301 (3323). PHILOSOPHIES OF ART.**

A study of the concept of beauty and of the Aesthetic experience of man. Not offered every year. May be counted as Music or Art or Philosophy.

## PSYCHOLOGY

### **Psy. 2313 (213). INTRODUCTION TO PSYCHOLOGY.**

An introduction to the study of the mental processes, including the scientific methods used in psychology, the influences of heredity and environment, the control of the emotions, intelligent behavior, and the conditions governing learning, social behavior, and the development of personality.

### **Psy. 2323 (223). GENERAL PSYCHOLOGY.**

Continuation of Psychology 2313. Emphasis is placed upon intelligence, personality, motivation, vocational choice, and the application of psychological principles to behavioral problems.

### **Psy. 3313. ABNORMAL PSYCHOLOGY.**

Analysis, etiology, and incidence of neurosis and psychosis; mental hygiene problems; and adjustive behavior. Prerequisite: six hours of psychology.

### **Psy. 3323. PSYCHOLOGY OF LEARNING.**

Methods, results and interpretations of experimental studies in learning. Attention will be given to methods of conditioning. This course will include the nature and conditions of the learning process and those factors related to its rate and efficiency. Prerequisite: six hours of psychology.

## SOCIOLOGY

### **Soc. 2313 (213). PRINCIPLES OF SOCIOLOGY.**

The social group, culture, and personality; social institutions: social interaction; and social change.

### **Soc. 2323 (223). A STUDY OF SOCIAL PROBLEMS.**

A sociological analysis of selected social problems present in current society.

### **Soc. 2333 (233). MARRIAGE AND THE FAMILY.**

A study of problems and an analysis of the factors contributing to successful marriages with a study of surveys that have been made of this aspect of the social relations of men and women. A combination lecture-discussion group with a great many selected readings and films.

### **Soc. 3303 (303). INTRODUCTION TO SOCIAL CASE WORK.**

A study of the development of social work and a survey of modern social case work practice. Primarily for those students intending to enter the profession of social case work or related fields. Offered on demand.

### **Soc. 3313 (313). CRIMINOLOGY.**

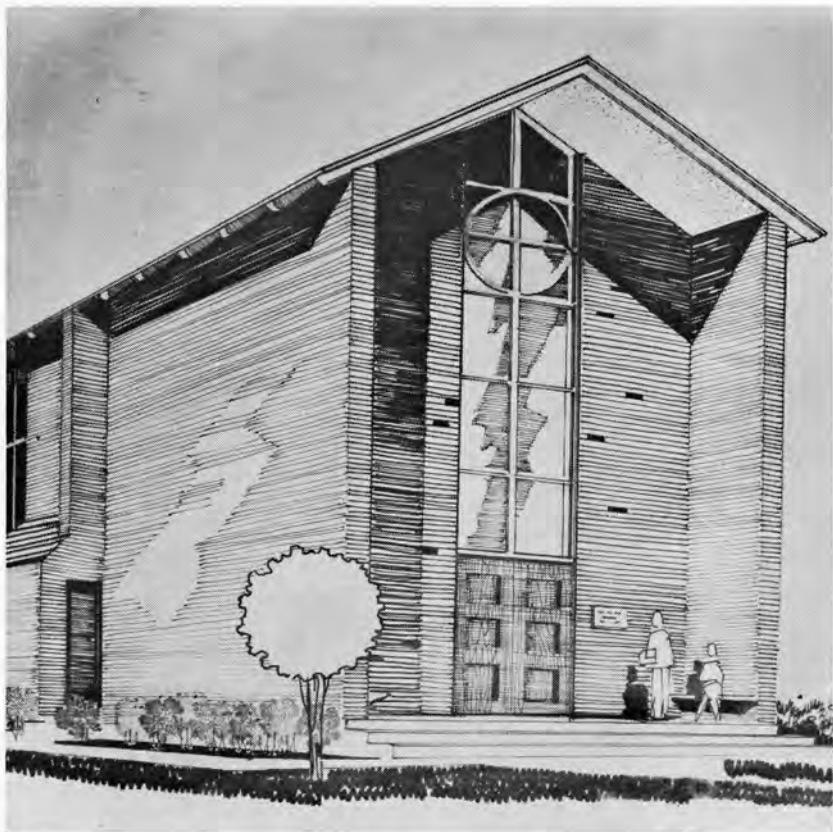
A study of crime, its causes, and its social treatment.

**Soc. 3323 (323). RURAL SOCIOLOGY.**

A study of rural society, its people, structure, and processes. Not given each year.

**Soc. 3343 (343). POPULATION PROBLEMS.**

A study of population distribution, composition, growth, migration, and vital processes. Not given each year.



*GIFT TO PAN AM—The Chapel of the Lord's Prayer is the tallest building on the Pan American College campus. Donated by Mr. and Mrs. Joe Crump of Mission and Midland, the memorial chapel will be used for meditation, weddings and small church services. Mr. Crump is now deceased.*



*MODERN ENGINEERING BUILDING— Students are shown leaving the Engineering Building as classes are dismissed. One of the initial buildings on the new West Campus, this structure houses laboratories for physics, photography, mechanical drawing and physical science.*



*FUN IN THE SUN—Tennis teams from Pan American College have won numerous national tennis titles. Orville I. Cox Tennis Stadium is the home of these fabulous teams which have featured outstanding players from the United States, Mexico, Australia and Europe. The stadium is named after a friend of the college, Orville I. Cox of Houston and McAllen.*

**BUSINESS ADMINISTRATION  
DIVISION**

# DIVISION OF BUSINESS ADMINISTRATION

**Professor R. N. McMichael, Director**

The Division of Business Administration awards the degree of Bachelor of Business Administration with specialization in the fields of Accounting, General Business, Management, Marketing, or Secretarial Studies. The Division Director should be consulted for programs in business education. Prior to 1965, the Bachelor of Arts degree in Business Administration had been awarded by the School of Technology. Reorganization in 1965 established the Division of Business Administration as a degree recommending unit of the college. In addition, the Division offers a minor in Economics and includes lower level offerings in the field of Agriculture.

## Degree Requirements

The requirements for the degree are set forth under the various areas of specialization. The courses established cover the areas of general education, professional core courses, and professional specialization. The general education courses listed in another section of the catalog are arranged in an order that allows for their completion along with the required professional courses.

Note: All business students must demonstrate ability to use the typewriter. This may be done by presenting one credit in high school typing, or satisfactorily completing B.A. 1201. The minimum number of hours of Business Administration courses for a major is 48. The maximum number of hours in Business Administration which may be counted toward a degree is 60.

## ACCOUNTING

### B.B.A. IN ACCOUNTING—RECOMMENDED PROGRAM

#### Freshman Year

Eng. 1301, 1302.  
B.A. 1331.  
Math. 1304.  
Science, six hours (lab.)  
Spee. 1302.  
Foreign Language, six hours.  
P.E., two hours.

#### Junior Year

Mus. 2307.  
Govt. 2313, 2314.  
B.A. 3321, 3322, 3323, 3324, 3337,  
3441, and 3361.

#### Sophomore Year

Art 1301.  
Eng. 2309 and Sophomore Literature, three hours.  
Eco. 2351, 2352.  
B.A. 2321, 2322.  
Hist. 2313 or 2333, 2314.  
Math. 2303.  
P.E., two hours.

#### Senior Year

B.A. 3335, 3381, 4321, 4324, 4332,  
4369.  
B.A. Electives, nine hours.  
Electives, outside business, five hours.

**B.A. 2321 (214). PRINCIPLES OF ACCOUNTING I.**

The fundamentals of accounting relationships, accounting cycles, recording, basic financial statements, merchandising accounting including accruals, receivables, inventories, plant assets, payroll taxes and sales taxes, and accounting concepts and principles. Primary emphasis on single proprietorship operations. Prerequisites: three hours of math and sophomore standing.

**B.A. 2322 (224). PRINCIPLES OF ACCOUNTING II.**

A continuation of B.A. 2321, but independent of it. A course covering partnerships, corporations, and specialized subjects of manufacturing. Job order and process costs. Introduction of federal income taxes and their effect on business decisions. Prerequisite: B.A. 2321 (214).

**B.A. 3321, 3322 (313a, 323a). INTERMEDIATE ACCOUNTING.**

Review of the recording and reporting process; study of principles underlying balance sheet, income statements, inventories, depreciation, intangible assets, insurance, receivables, and investments. Prerequisite: B.A. 2322 (224).

**B.A. 3323 (323). INCOME TAX PROCEDURE.**

Analysis of Federal Tax Laws, emphasis being placed on the determination of net taxable income and the preparation of income tax returns for individuals. Prerequisite: B.A. 2321 (214).

**B.A. 3324 (333). COST ACCOUNTING.**

A study of the techniques employed in accounting for and interpreting cost. Primary emphasis is given to the accounting for material, labor and burden under job cost, continuous process and assembly systems. Both commercial and distribution cost are studied. Prerequisite: B.A. 2322 (224).

**B.A. 3325 (353). GOVERNMENTAL AND MUNICIPAL ACCOUNTING.**

The purpose of this course is to acquaint the student with the special features of budgetary and fund accounting as applied to municipalities and other governmental units. Prerequisites: B.A. 2322 (224), and six hours of Finance or Government. Not offered every year.

**B.A. 4321 (413). ADVANCED ACCOUNTING.**

A study of special accounting problems with emphasis on business budgets, principles and techniques of consolidated statements, branch accounting, sales contracts, and fiduciary accounting statements. Prerequisite: B.A. 2322 (224).

**B.A. 4324 (423). AUDITING.**

A survey of auditing principles and procedures applied by public accountants and internal auditors in examining financial statements and verifying underlying data. Prerequisite: B.A. 3321 (313a).

**B.A. 4325 (432). ACCOUNTING SYSTEMS.**

Design and installation of accounting systems. Manual and machine accounting procedures. Prerequisites: B.A. 2322 (224).

**B.A. 4328 (433). C.P.A. REVIEW.**

A course preparing the student for the theory and practice section of C.P.A. examinations. The problems are selected to develop the ability to solve rapidly the multipoint C.P.A. problems under examination conditions. Stress is given to accounting for assets and liabilities and to interpreting the financial statements of individual corporations. Prerequisite: twenty hours of accounting. Offered on demand.

**B.A. 4329 (453). ADVANCED INCOME TAX PROCEDURE.**

Particular attention is given to tax regulations applicable to partnerships and corporations together with the preparation of federal tax returns for such businesses. Federal gift, estate, and inheritance taxes are considered. Prerequisite: B.A. 3323 (323).

## ECONOMICS AND FINANCE

**Eco. 2351 (213). PRINCIPLES OF ECONOMICS I.**

An introduction to fundamental economic concepts and principles. Covers a study of capitalism, elements of supply and demand, business organization, determination of national income, monetary and fiscal policy.

**Eco. 2352 (223). PRINCIPLES OF ECONOMICS II.**

A continuation of Eco. 2351 (213). Study of supply and demand factors affecting determination of output and prices; distribution of income; and international trade.

**Eco. 3353 (333). INTERNATIONAL TRADE.**

The mechanism of international trade and a study of its effects on a national economy. A discussion of foreign investment, cartels, international output and price controls. Prerequisite: Eco. 2352 (223). Offered on demand.

**Eco. 3354. INTERMEDIATE ECONOMIC THEORY.**

A course with primary interest on economics of the firm. Concerns economic analysis and methodology, distribution theory, price theory, imperfect competition and monopoly. Prerequisite: Eco. 2352 (223).

**Eco. 3381. MONEY AND BANKING.**

(See B.A. 3381 for description.)

**Eco. 3441. BUSINESS STATISTICS.**

(See B.A. 3441 for description.)



**Eco. 4354. LABOR ECONOMICS.**

A study of labor economics, manpower management, and collective bargaining; a study of the objectives of labor unions and employer associations; and an appraisal of public policy and labor legislation as it affects producers and consumers. Prerequisite: Eco. 2352 (223).

**Eco. 4355. MACRO ECONOMIC THEORY.**

A descriptive-analytical approach to the changing forces that influence the over-all level of economic activity. Income and employment factors, stabilization theory, investment and income relationships, monetary and fiscal policies. Prerequisite: Eco. 2351 (213).

**B.A. 3381 (313f). MONEY AND BANKING.**

A study of the principles of money and banking, including types of credit granting institutions, services of commercial banks and other short-term credit institutions, and the place of the Federal Reserve System in our economic system. Prerequisites: six semester hours each of accounting and economics. May also be counted as economics.

**B.A. 3382 (313i). INVESTMENT PRINCIPLES.**

A study of analysis and valuation of investment securities of corporations and governmental agencies. The purchase and sale of securities through brokerage houses and investment banking firms will be studied. Prerequisite: junior standing.

**B.A. 3383 (363f). FINANCIAL ACCOUNTING FOR MANAGEMENT.**

A study of the principles of business finance. The financing of the long-term and short-term capital needs of small, medium, and large-size firms. The corporate form of business organization; its financial requirements and sources of funds. Prerequisites: six semester hours of accounting.

**B.B.A. IN GENERAL BUSINESS—RECOMMENDED PROGRAM**

| <b>Freshman Year</b>                         | <b>Sophomore Year</b>  |
|--|--|
| Eng. 1301, 1302.                             | Hist. 2313 or 2333, 2314.                                      |
| B.A. 1331.                                   | Eng. 2309 and Sophomore Literature, three hours.               |
| Science, six hours (lab.).                   | Eco. 2351, 2352.   |
| Spee. 1302.                                  | Math. 2303.  |
| Math. 1304.                                  | B.A. 2321, 2322.   |
| Foreign Language, six hours.                 | Art 1301.  |
| P.E., two hours.                             | P.E., two hours.   |
| <b>Junior Year</b>                           | <b>Senior Year</b>   |
| Govt. 2313, 2314.                            | Eco. 3354.   |
| Mus. 2307.                                   | B.A. 3383, 4332, 4369, 4378                                    |
| B.A. 3335, 3337, 3361, 3371, 3381, and 3441. | B.A. advanced electives, six hours, and elective, three hours. |
| Elective, three hours.                       | Electives, eight hours.  |

## GENERAL BUSINESS

### B.A. 1331 (113). INTRODUCTION TO BUSINESS.

A survey of the field of business and industry in our economic system. Basic principles of business organization and the formation and operation of the several divisions of a business concern; finance, production, marketing, and personnel. Designed to acquaint the student with the problems, procedures, and practices of modern business. Open to freshmen and sophomores only.

### B.A. 2311 (213). FUNDAMENTALS OF DATA PROCESSING.

A course designed to provide students with a broad, general understanding of the principles and modern techniques involved in the processing of data; a basic competence in the application of systems and procedures in the use of data processing equipment. Class meets four hours per week. \$2.00 laboratory fee. Prerequisite: sophomore standing.

### B.A. 3335 (313c). BUSINESS COMMUNICATIONS.

Practice in the use of correct, forceful English, practical psychology, and good business judgement in handling many types of business situations by letter. Prerequisites: nine semester hours of English and ability to use the typewriter.

### B.A. 3337 (313L). BUSINESS LAW.

Historical background and rule of law in business and society; legal reasoning; particular emphasis on contracts, agency, property, and the Commercial Code. Prerequisites: junior standing and six semester hours of business administration.

### B. A. 3441 (424). BUSINESS STATISTICS.

Collection, classification, and description of numerical data. Introduction to the theory of sampling; frequency distributions; analysis of time series; index numbers; and correlation are all studied from the standpoint of business management. Prerequisites: six hours of mathematics and junior standing. May be counted as economics, class meets five hours per week.

### B.B.A. IN MANAGEMENT—RECOMMENDED PROGRAM

| Freshman Year                | Sophomore Year                      |
|------------------------------|-------------------------------------|
| Eng. 1301, 1302.             | Hist. 2313 or 2333, 2314.           |
| B.A. 1331.                   | Eng. 2309 and Sophomore Literature, |
| Science, six hours (lab.).   | three hours.                        |
| Spee. 1302.                  | Eco. 2351, 2352.                    |
| Math. 1304.                  | Math. 2303.                         |
| Foreign Language, six hours. | B.A. 2321, 2322.                    |
| P.E., two hours.             | Art 1301.                           |
|                              | P.E., two hours.                    |

| Junior Year                              | Senior Year                        |
|--|------------------------------------|
| Govt. 2313, 2314.                        | Eco. 3354, 4354.                   |
| Mus. 2307.                               | B.A. 3362, 3363, 3383, 4332, 4369. |
| B.A. 3335, 3337, 3441, 3361, 3371, 3381. | B.A. Electives, six hours.         |
| Elective, three hours                    | Elective, five hours.              |

## MANAGEMENT

### B.A. 3361. PRINCIPLES OF MANAGEMENT.

A study of management functions and processes which have general applicability to all types of enterprises. Introduction to basic management philosophy and decision-making processes; study of the principles involved in carrying out managerial functions. Prerequisite: junior standing.

### B.A. 3362. PERSONNEL MANAGEMENT.

A study of current developments within the field of personnel administration; a study of concepts, principles, policies, and organizational procedures utilized by business institutions in the management of personnel: selection, placement, compensation, morale, labor turnover, collective bargaining, employee service, and supervisory activities. Prerequisite: junior standing.

### B.A. 3363. PRODUCTION MANAGEMENT

A study of the concept of the production function and its applicability to all types of business firms: problems which provide background for the integration of scientific decision processes relative to an analysis of production activities. Prerequisite: junior standing.

### B.A. 4303 (463). JOB ANALYSIS OF INDUSTRIAL OCCUPATIONS.

(See I.E. 4303 for course description.)

### B.A. 4332. HUMAN RELATIONS.

The application of behavioral sciences to human relations problems in business and industry: making decisions among business alternatives with due regard for the human element, individual and small-group interactions, relations of workers with employers. Prerequisite: senior standing.

### B.A. 4369. BUSINESS POLICY DECISIONS.

Business management in a broad sense; a course designed to integrate earlier studies in business; a study of comprehensive case problems, with student participation in the application of principles, practices, and techniques to complex business problems at the top, middle, and operating management levels; decision-making in relation to business operations and economic conditions. Prerequisite: senior standing.

**B.B.A. IN MARKETING—RECOMMENDED PROGRAM**

|  |   |
|--|---|
| <b>Freshman Year</b>                     | <b>Sophomore Year</b>                               |
| Eng. 1301, 1302.                         | Hist. 2313 or 2333, 2314.                           |
| B.A. 1331.                               | Eng. 2309 and Sophomore Literature,<br>three hours. |
| Science, six hours (lab.).               | Eco. 2351, 2352.                                    |
| Spee. 1302.                              | Math. 2303.   |
| Math. 1304.                              | B.A. 2321, 2322.                                    |
| Foreign Language, six hours.             | Art 1301.   |
| P.E., two hours.                         | P.E., two hours.                                    |
| <b>Junior Year</b>                       | <b>Senior Year</b>                                  |
| Govt. 2313, 2314,                        | Eco. 3353 or 3354.                                  |
| Mus. 2307.                               | B.A. 3375, 3377, 3383, 4332,<br>4369, 4378.         |
| B.A. 3335, 3337, 3441, 3361, 3371, 3381. | B.A., Elective, three hours.                        |
| Electives, three hours.                  | Electives, eight hours.                             |

**MARKETING****B.A. 3339 (323s). PRINCIPLES OF SALESMANSHIP.**

Modern salesmanship, the product, the buyer, planning the presentation, meeting the prospect, the interview, overcoming resistance, closing the sale, building good will. Practical applications of selling in the form of class participation and individual demonstration of modern sales methods. Prerequisite: junior standing.

**B.A. 3371 (333m). PRINCIPLES OF MARKETING.**

An analysis of the marketing structure as it operates in our economic system with special reference to the distribution of raw materials and finished products. Prerequisite: junior standing.

**B.A. 3375. RETAILING.**

Principles and methods of modern retailing. Emphasis will be placed upon problems of store location and layout, buying, pricing, credit, stock control, personnel and sales promotion. The course is designed for students who wish to gain a general knowledge of the retail field as well as those specializing in marketing. Prerequisite: junior standing.

**B.A. 3377 (373a). PROMOTIONAL DECISIONS AND STRATEGY.**

Emphasis will be placed upon the promotional decision-making aspects of marketing management. The integrating nature of the factors of location of the firm, location and income of the consumer, and the general state of the economy, as they pertain to demand creation, are acknowledged and related to the promotional processes of advertising, personal selling, and sales promotion. Prerequisite: junior standing.

**B.A. 4378. MARKETING RESEARCH.**

A study of quantitative and qualitative research procedures and techniques applied to decision-making relative to such problems as quota setting, sales potential, and trade-area boundary determination; a study of sources of research data; a study of purchasing power indexes; trends in marketing strategy and policy determination; a study of the measurement of demand for industrial and consumer goods. Prerequisites: Eco. 2352 (223), B.A. 3371 (333m), and B.A. 3441 (424).

**B.B.A. IN SECRETARIAL STUDIES—RECOMMENDED PROGRAM****Freshman Year**

Eng. 1301, 1302.

Math. six hours

Art 1301.

Spee. 1302.

B.A. 1202, 1203, 1306, 1307, and 1331.

P.E., two hours.

**Junior Year**

Foreign Language, six hours.

Science, six hours (lab.).

Govt. 2313, 2314.

Mus. 2307.

B.A. 2312, 3335, and 3337.

**Sophomore Year**

Eng. 2309 and Sophomore Literature, three hours.

Eco. 2351, 2352.

Hist. 2313 or 2333, 2314.

B.A. 2308, 2311, 2321 and 2322.

P.E., two hours.

**Senior Year**

B.A. 3361, 3362, 3371, 3381, 4332, and Advanced Electives, six hours.

Advanced Electives, three hours.

Advanced Electives, outside business, six hours.

**SECRETARIAL STUDIES****B.A. 1201 (112t). ELEMENTARY TYPING.**

A course designed for those who have not had previous training in typing. The correct use of the typewriter, development of skill, proficiency in the use of numbers and symbols, and the study of letters and tabulation are stressed. Class meets three hours per week. \$2.00 laboratory fee. May not be counted for degree credit in business administration.

**B.A. 1202 (122t). INTERMEDIATE TYPING.**

A course designed for those who have had one year of high school typewriting and wish to become more proficient in the use of the typewriter. Emphasis is placed upon speed development, business letters, tabulation and office forms. Class meets three hours per week. \$2.00 laboratory fee.

**B.A. 1203 (222t). ADVANCED TYPING.**

A course designed for those who want to gain speed and a knowledge of business forms. A great deal of remedial work is done for those who have developed incorrect habits at the machine. Letter forms, manuscript work, footnotes, legal documents, payrolls, telegrams, carbon copies, and related office problems. Prerequisite: B.A. 1202 (122t) or equivalent. Class meets three hours per week. \$2.00 laboratory fee.

**B.A. 1305 (113s). ELEMENTARY SHORTHAND.**

A course for students who desire a mastery of the principles of Gregg Shorthand. A study of the writing of shorthand, intensive vocabulary building, elementary dictation, and transcription. Class meets three hours a week. May not be counted for degree credit in business administration.

**B.A. 1306 (123s). INTERMEDIATE SHORTHAND.**

A continuation of 1305 (113s), review of the principles of Gregg Shorthand, vocabulary building, dictation, and transcription. A student should be able to acquire a dictation speed of 80-100 words per minute at the end of this semester. Class meets three hours a week. Prerequisite: B.A. 1305 (113s) or equivalent.

**B.A. 1307 (213s). ADVANCED SHORTHAND.**

A course designed to enable the student to acquire speed in dictation and transcription and to acquaint him with acceptable forms of business letters. A student should be able to acquire a dictation speed of approximately 120 words per minute at the close of the semester. Prerequisite: B.A. 1306 (123s) or equivalent. Class meets three hours a week.

**B.A. 2308 (233s). SECRETARIAL TRAINING.**

A study of secretarial procedures performed in business offices. This includes personal relations, business etiquette, handling of mail and telegrams, using the telephone, filing, banking procedures, using directories, interviewing callers, office equipment, keeping office records, and minutes of meetings. Prerequisites: B.A. 1202 (122t) and sophomore standing.

**B.A. 2312 (233). OFFICE ADMINISTRATION.**

Principles and problems of modern office practices with emphasis on records management, utilization of automated office equipment; practical application to principles of accounting, statistics, and operations research. Prerequisite: sophomore standing.

## AGRICULTURE

### BASIC CURRICULUM FOR AGRICULTURE MAJORS IN FRESHMAN AND SOPHOMORE YEARS

#### Freshman Year

Ag. 1101, 1302, 1303, and 1304.  
 Biol. 1401, 1402.  
 Eng. 1301, 1302.  
 Hist. 2313, 2314.  
 P.E., two hours.  
 Spee. 1302.

#### Sophomore Year

Ag. 2302, 2303, 2401, and 2404.  
 Chem. 1401, 1402.  
 Eng. 2301, 2302.  
 Eco. 2351.  
 Math. 1304.  
 P.E., two hours.

#### Ag. 1101 (111). AGRICULTURE ORIENTATION.

Lectures, discussions and conferences introducing students to the various phases and opportunities in agriculture. To be taken during the freshman year. One hour of lecture per week.

#### Ag. 1302 (113). GENERAL HORTICULTURE.

A study of the fundamental principles and practices of propagating fruits, flowers, and ornamental plants with emphasis on plants adapted to South Texas. Two hours lecture and two hours laboratory per week. \$2.00 laboratory fee.

#### Ag. 1303 (123). CROP PRODUCTION.

A study of common field and forage crops, their classification, identification, production, harvesting, and insect and disease control measures. Two hours lecture and two hours laboratory per week. \$2.00 laboratory fee.

#### Ag. 1304 (153). INTRODUCTION TO ANIMAL HUSBANDRY.

A survey of the sources of the world's supply of animal products, the distribution of domestic animals in the United States and factors influencing this; the origin, characteristics, and adaptation of the more important breeds and the influence of environment upon their development. Two hours lecture and three hours laboratory per week. \$2.00 laboratory fee.

#### Ag. 2302 (243). FEEDS AND FEEDING.

The practical aspects of feeding all classes of farm animals; application of principles of nutrition; computing rations; feed control laws, etc. Prerequisite: Agriculture 1304 (153).

#### Ag. 2303 (253). INTRODUCTION TO SOILS.

A study of the physical, chemical, and biological properties of soils and of the methods of soil management. Field study of soil texture classification, mapping, and soil fertility. Field trip to South Central Texas, approximate cost \$7.00. Prerequisite: Chemistry 1401 (114). Two hours lecture and two hours laboratory per week. \$3.00 laboratory fee.

**Ag. 2401 (214). VEGETABLE CROPS.**

A study of the basic principles of vegetable production with particular reference to South Texas conditions. Stress is placed on climatic adaptation, cultural practices, and varieties. Field trip to the San Antonio market and vegetable area. Approximate cost \$7.00. Prerequisite: Agriculture 1302 (113). Three hours lecture and two hours laboratory per week. \$2.00 laboratory fee.

**Ag. 2404 (254). GENERAL ENTOMOLOGY.**

The classification, anatomy, and physiology of insects as related to control measures, and the principal insecticides and their uses. Prerequisite: six hours of biology. Three hours lecture and three hours laboratory. \$3.00 laboratory fee.



*ASTRO-SCIENCE CENTER—Pan American College is the only college or university in the United States offering an undergraduate degree in Astro-Science. Director Paul Engle is in charge of this center which includes a planetarium and observatory. Large and small telescopes are put into service here.*



# **EDUCATION DIVISION**

# DIVISION OF EDUCATION

**Professor L. D. Gilmore, Director**

This division includes: the Department of Teacher Education which will award Bachelor of Science degrees in Elementary Education and Industrial Education, and the Department of Physical Education which awards a Bachelor of Science degree in Physical Education.

## CERTIFICATE REQUIREMENTS FOR TEACHERS

Teachers in Texas elementary and secondary schools are required by law to hold a valid Texas teacher's certificate for the grade level, specialization area, or position to which they are assigned.

Prospective secondary school teachers are required to have 24 hours of credit in each of two teaching fields. Prospective elementary majors must have a second field with 18 or 24 hours credit. The Head of the Department of specialization or the Head of the Department of teacher education should be consulted for specific course requirements.

## THE TEACHER EDUCATION COMMITTEE

This committee is made up of faculty members from the School of Education and from each department of the other divisions of the College.

To be recommended for certification to teach in the State of Texas, students completing their work at Pan American College will be evaluated and approved by the Teacher Education Committee.

Application for admission to the Teacher Education Program must be filed with the student's department head or the Teacher Education Council, in accordance with the following provisions:

- (1) No student shall make application before having reached junior status. Students planning to complete their teacher certification requirements here should apply as soon as possible after they reach junior status.
- (2) Transfer students must delay application until successful completion of one regular semester at Pan American College.
- (3) Applications must be filed at the time of any regular registration period subject to provisions 1 and 2 above.
- (4) A student deciding late in his college career to pursue a program of teacher preparation should observe whichever of provisions 1, 2, and 3 above apply to them.

The Teacher Education Council will review the candidate's application, including his transcript of college work completed and the recommendations of the department head of his major and minor fields, and inform him to the effect that (a) he has been admitted conditionally, the conditions being set forth explicitly, or (b) he has been denied admission. **Final approval will be given when the student has been accepted to do his directed teaching.**

It shall be understood that approval of an application does not constitute subsequent recommendation on the part of the College for a certificate to teach. Such recommendation is contingent upon continued demonstration of promise as a prospective teacher and completion of the certification requirements both in professional education and in the major and/or minor teaching fields.

A student admitted on a conditioned basis may proceed with a teacher preparation program but must meet the following requirements before he can receive final approval:

- (1) Must be approved for the directed teaching program.
- (2) Must have an overall 2.00 average in his college work.
- (3) Must have at least a 2.25 average in both major and minor fields.
- (4) Must have approval from the education division and from the department head of his major and/or minor fields. Check the college catalog for directed teaching requirements.

Denial of a request for admission does not necessarily constitute a final judgment. It merely means that the student does not appear to show sufficient promise of success as a teacher to justify his continued efforts in that direction. Should the applicant wish to pursue a course of teacher preparation in spite of such a repudiation, he may, after completion of an additional fifteen semester hours of study at Pan American College, file a second application, at which time he will be obliged to appear personally before the Teacher Education Council.

Students wishing to teach must follow the approved program for their teaching fields. Check with the department head for a degree plan outlining these programs.

Students graduating without following the approved program for their teaching fields must meet all these requirements, in addition to getting the required number of years of teaching experience, before being recommended by Pan American College to receive a Texas certificate.

Students working on a removal of deficiency program toward certification must also have a 2.00 average in all college work and a 2.25 average in the major and minor fields before being recommended by Pan American College for a Texas certificate.

### THE TEACHER EDUCATION COUNCIL

This council is made up of college personnel and members of the faculties of the public schools in the area. The purpose of the council is to formulate policies for the admission of students to the teacher education program, and to approve the course offerings in the various teaching fields and the professional preparation for provisional certification of elementary and secondary teachers.

## DEPARTMENT OF TEACHER EDUCATION

Professor L. D. Gilmore, Head

The fact that a degree in education from the College may lead to a certificate to teach in the public schools of the state imposes a singular obligation on the part of the College to determine the suitability of the candidate for such degree for the profession of teaching. A great deal more than mere scholastic ability is involved. Physical and mental health, moral ideals, and professional attitudes are paramount among these additional considerations. The right is reserved, therefore, to restrict the teacher education curriculum to those who measure up to these criteria.

### Degree Requirements

#### Major in Elementary Education:

To qualify for the provisional (life) certificate.

#### General Education

48-55 semester hours

(Science requirement for Elementary Education majors must include Physical Science 1301, 1302 and Biology 1305, 1306 or appropriate approved substitutes.)

#### Academic Specialization

Areas of academic specialization for elementary education may be selected from the following:

|                               |                      |
|-------------------------------|----------------------|
| Art                           | Industrial Education |
| Biology                       | Mathematics          |
| Chemistry                     | Music                |
| English                       | Physics              |
| French                        | Spanish              |
| Health and Physical Education | Speech               |
| History                       |                      |

**Plan I:** 18 semester hours in one subject, including nine semester hours of advanced work. These may include courses in general education.

18 semester hours in a combination of subjects. These may include Art 3381; Speech 3303; P.E. 2351; Music 3311 or 3312; Geography 2313; 2301; or appropriate substitutes approved by the Division Director.

**Plan II:** 24 semester hours in one subject, including 12 semester hours of advanced work. These may include courses in general education.

12 semester hours in a combination of subjects. These may include Art 3381; Speech 3303; P.E. 2351; Music 3311 or 3312; or appropriate substitutes approved by the Division Director.

### Professional Development and Elementary Content Courses

30 semester hours.

**Required:** Education 4611; 3323; 3326; 3328; plus choice of 3321 or 3327; 3301; 3302; 3303; plus choice of 3311 or 3312.

Electives will vary depending on teaching area.

**Teaching Certificate for Junior and Senior High School:**

To qualify for the provisional (life) certificate.

**General Education** 48-55 semester hours

**Major Field:** Consult with the Department Head or Division Director for the requirements in area of specialization.

**Second Teaching Field (minor):** 24 hours

Consult with the Department Head or Division Director for the requirements in the area of specialization.

Both major and minor fields may include courses in general education.

**Professional Education**

18 semester hours, junior standing or above.

**Required:** Education 4641; 4352; 3302; 3303; plus choice of 3341 or 3342. Electives will vary depending on the teaching areas.

Education courses required for all-level certificates in Health and Physical Education, Music, or Art:

18 hours of professional courses, must include Education 3302; 3311 or 3312; 3341 or 3342; 4352; 4641.

**Certificate for Teaching Mentally Retarded:**

For the provisional certificate for teaching mentally retarded, a student must have completed the elementary education program, or have a valid secondary certificate. Twelve additional hours are required: Education 4371; 4372; 4373; and 4374.

**Directed Teaching**

Directed teaching is required in partial fulfillment of the requirements for a provisional (life) certificate in Texas. This experience is provided by assigning senior student teachers to work in classroom situations with regular teachers for one full semester in a convenient public school. The Department of Teacher Education requires that students entering Directed Teaching must:

1. Have senior standing.
2. Have completed all required courses for freshmen and sophomores.
3. Have at least a 2.00 average in all college courses.
4. Have at least a 2.25 average in both major and minor fields.
4. Have at least a C average in all required English courses.
6. If an elementary school major, have completed at least three courses in elementary school methods.
7. If a secondary school candidate, have completed at least 24 hours in a major or first teaching field; have completed at least 15 hours in a minor or second teaching field; and six hours of professional secondary education.
8. Have satisfactorily passed or been exempted from all required proficiency examinations.

## EDUCATION

### Ed. 1301 (133). INTRODUCTION TO TEACHING.

An orientation course in general education in a democratic society. It presents a survey of the school system in the United States, its growth, its structure, its problems, and its trends as they affect and are affected by the schools. May be taken as an elective in General Education. Does not count toward certification.

### Ed. 2101 (201c). TEACHING HANDWRITING.

A course designed for elementary school teachers who wish not only to develop a more acceptable standard of handwriting with a minimum expenditure of time, but who wish to attain proficiency in the teaching of both manuscript and cursive penmanship. Legibility and logic of execution are stressed. One hour per week.

### Ed. 2301. CHILD DEVELOPMENT FOR NURSES.

A study of the interrelationship of biological and environmental factors in the growth of the child from conception through the pubertal cycle and the application of this knowledge in directing wholesome personality development. Students who have taken Ed. 3311 Child Growth and Development may not take this course for credit. It is desirable, though not mandatory, that students shall already have taken Psy. 2313, Introduction to Psychology.

### Ed. 3301 (363). AUDIO-VISUAL AIDS.

This course deals with the best modern methods and the proper use of instructional materials and aids suited for classroom instruction. Sources of materials, methods of presentation, evaluation of results, and proper use and care of various types of projection and production equipment will be stressed.

### Ed. 3302 (373). EDUCATIONAL PSYCHOLOGY.

A detailed approach to the application of modern psychological principles to teaching-learning situations. Satisfies advanced professional requirements for both elementary and secondary school majors. Should be taken before Education 3311 (443) and 3341 (463).

### Ed. 3303 (423). HISTORY AND PHILOSOPHY OF EDUCATION.

A chronological survey of the place of education in various civilizations; the historical development of educational objectives, methods, curricula, organizations and deliberations, presented with a view toward better understanding of modern educational problems and practices.

### Ed. 3311 (443). CHILD GROWTH AND DEVELOPMENT.

This course presents a general view of the physical, emotional, social, and mental development of children from prenatal life to the adolescent period. Special emphasis is given to the interrelatedness of these four

aspects of development with a view toward helping parents and teachers to understand better and to guide the growth and development of the child through the pre-elementary and elementary school years.

**Ed. 3312 (493E). TESTING, MEASUREMENT, AND GUIDANCE.**

This course emphasizes the role of the teacher in the evaluation and guidance of children in the modern elementary school. Construction, administration, interpretation, and application of results of evaluation devices will be studied as they apply to directing learning and behavior in classroom situations.

**Ed. 3313 (303L). CHILDREN'S LITERATURE.**

This course familiarizes the student with poems and stories for children and includes a study of the principles which should govern the selection of literature for children, the manner in which it should be taught, and the problem of building a library suitable for children of the elementary grades.

**Ed. 3321 (303). TEACHING LANGUAGE ARTS.**

Methods of teaching the language arts in the elementary school with special reference to the building of communication skills in the curriculum.

**Ed. 3322 (313B). TEACHING THE BILINGUAL CHILD.**

A course designed to aid the teacher of beginning students who do not speak English. The assembling of teaching materials will form a large part of the class work.

**Ed. 3323 (323). TEACHING READING.**

The importance, scope, reading readiness, beginning instruction, and evaluation of progress will be taught.

**Ed. 3324 (313S). TEACHING FOREIGN LANGUAGE.**

A course dealing with the audio-lingual approach to second language teaching in the elementary school. Students will practice teaching techniques which require the use of tape recordings, discs, filmstrips, motion pictures, and printed materials. While the principles covered are applicable to instruction in any language, only English and Spanish teaching will be considered.

**Ed. 3325 (323I). INTERMEDIATE GRADES.**

The purpose of this course is to orient the student to the work of an intermediate grades teacher. It involves (1) learning what to teach, (2) becoming familiar with needed materials, and (3) using principles of learning that will promote the effective teaching of children in grades four, five, and six.

**Ed. 3326 (333). TEACHING ELEMENTARY SCIENCE.**

A study of those phases of science which are usually dealt with in teaching at the elementary level. Pertinent demonstrations and skills will be taught to help teachers become more proficient in helping children better understand and appreciate the natural forces which shape their physical environment. Prerequisite: must have completed a laboratory science.

**Ed. 3327 (393). TEACHING SOCIAL SCIENCE.**

Teaching social sciences in the elementary schools. The role of social sciences in the elementary schools with special reference to building units of work in the curriculum.

**Ed. 3328 (403). TEACHING ARITHMETIC.**

A treatment of the methods of teaching arithmetic at the elementary school level. It includes basic number concepts, fractions, decimals, percentage, thought problems, and such arithmetical skills as are deemed necessary for the teaching of arithmetic and the sciences.

**Ed. 3329 (473). REMEDIAL READING.**

This course will show the ways and means of giving remedial assistance to students needing such aid in the various subject matter fields in the elementary school with special emphasis on diagnostic and corrective measures.

**Ed. 3341 (463). ADOLESCENT GROWTH AND DEVELOPMENT.**

A study of the characteristics, development, and psychological problems of teen-age youth relative to their successful adaptation to secondary school situations.

**Ed. 3342 (493S). TESTING, MEASUREMENT, AND GUIDANCE.**

This course emphasizes the role of the teacher in the evaluation and guidance of students in the modern secondary school. Construction, administration, interpretation, and application of results of evaluation devices will be studied as they apply to directing learning and behavior in classroom situations.

**Ed. 4351 (343). READING IMPROVEMENT.**

The reading difficulties of secondary pupils, the relation of reading ability to academic achievement, procedures for facilitating better reading instruction, and improving reading in the content fields are all included in this course.

**Ed. 4352 (413). TECHNIQUES AND OBSERVATION.**

A course designed to prepare students for their student teaching experiences. Activities include the application of modern methods to the major problems of teaching and the observation of classroom teaching in the



student's major and minor fields. Required for certification in the area of secondary education.

**Ed. 4371 (353X). TESTS AND MEASUREMENTS.**

The administration and interpretation of various standard and teacher-constructed tests. Generally, a rather wide range of tests will be used to show their usefulness in aiding the instructor to determine (1) mental ability, (2) achievement, (3) interest, (4) aptitudes, and (5) personality. So far as possible, practical application will be made and actual administration and subsequent interpretation will be employed. This course is designed especially for teachers of exceptional children.

**Ed. 4372 (403X). EXCEPTIONAL CHILDREN.**

A survey course which includes consideration of the history and the philosophy of individual differences and the many classes of exceptional children problems, the diagnostic techniques, equipment and buildings, methods of teaching and therapy, and administrative procedures. Emphasis is given to the Texas plan of special education along with the study of further needs.

**Ed. 4373 (403M). TEACHING MENTALLY RETARDED CHILDREN.**

Problems and methods in teaching mentally retarded children. The course is designed for those interested in teaching mentally retarded children. Classroom experiences will be emphasized with some consideration of related problems.

**Ed. 4374 (433X). PSYCHOLOGY OF MENTAL RETARDATION.**

This course is designed for those who are especially interested in the problems of mental retardation. Emphasis will be placed on psychological problems including diagnostics and the social growth and development of the mentally retarded person.

**Ed. 4611 (466D). DIRECTED TEACHING-ELEMENTARY.**

The first part of the course will consist of the preparation of teaching materials, lesson planning, keeping teacher records and making reports, study and observation of class and group work, and limited participation in teaching at the elementary level. The remainder of the course will be devoted to observation and responsible teaching at this level under the guidance of a cooperating teacher. Periodic observations of the student teacher at work will be made by the college supervisor. The student teacher will be assigned to a teacher in a public school for one-half day for a semester, Monday through Friday. A weekly seminar and individual conferences are a required part of the course. Prerequisites: Speech 1302 (113) or 1303 (143) and 3303 (353); the required PAC Speech Proficiency Test passed; and approval by the Division Director. Students will be required to start their student teaching program at the beginning of the public school term for the fall semester. Those taking student teaching during the spring term will be required to remain until the end of the public school term. (See requirements for student teaching.)

**Ed. 4641 (456D). DIRECTED TEACHING-SECONDARY.**

A course designed to give students experience in responsible teaching at the secondary school level under the guidance of cooperating teachers. Periodic observation of the student teacher at work will be made by the college supervisor. The student teacher will be expected to report to his cooperating teachers each day Monday through Friday for the equivalent of three college periods per day. A weekly seminar and individual conferences are a required part of the course. Required for certification in the area of secondary education, Prerequisites: Speech 1302 (113) or satisfactory completion of the Speech Proficiency Test; six hours Secondary Education; approval by the student's major advisor; and senior level standing. Students will be required to start their student teaching program at the beginning of the public school term for the fall semester. Those taking student teaching during the spring term will be required to remain until the end of the public school term.

**Courses given for teachers by other Divisions will be found listed under the offerings for those Divisions.**

**INDUSTRIAL EDUCATION**

Industrial Education courses are designed to serve four major purposes: Preparation of teachers in the Industrial Education disciplines; assist the student in selecting a career in our industrial world; assist the student majoring in another department in acquiring the means to supplement and bolster his chosen field; and provide basic instruction and preparation in several phases of industry.

**Degree Requirements****Bachelor of Science:**

(The student who majors or chooses a concentration of work in the Industrial Education area, integrated with Education for the purpose of obtaining a teaching certificate will follow Plan I, II, or III as approved by the Texas Education Agency.)

**Elementary Certificate — Plan I:**

Industrial Education 1301; 1302; 2372; 3302; 3303; and 4301. Students should consult with faculty advisers in both Education and in Industrial Education.

**Elementary Certificate — Plan II:**

Industrial Education 1301; 1302; 2302; 2372; 3302; 3303 or 4301; 4302; and 4304. Students should consult with faculty advisers in both Education and in Industrial Education.

**Secondary Certificate — Plan III:**

Industrial Education 1302 or 1301; 1303; 1304; 1305; 2301; 2302; 2372; 3301; 3302; 3303; 3304; 3305; 3306; 4301; 4302; 4303. Students should consult with faculty advisers in both Education and Industrial Education.

In the 36 hour major, the student will take Industrial Education 1301; 1303; 1304; 3303; and 4303. This will allow him to concentrate a greater amount of time and energy in a more limited area within the remaining 21 hours, 12 of which must be of advanced level courses.

The non-teaching Bachelor degree candidate who is majoring in another discipline may minor in Industrial Education by taking 18 semester hours, six of which must be advanced, and which must include Industrial Education 1301, and three semester hours of drafting.

Courses taken in Industrial Education by pre-engineering students should be planned and selected with the help of the faculty adviser for pre-engineers and with the faculty adviser for Industrial Education.

#### **I.E. 1302. APPLIED DRAWING AND SKETCHING.**

This course provides the fundamentals of mechanical drawing, sketching, and blue-print reading as they apply to woods, metals, electricity, etc. Included are introductions to layout, sketching, dimensioning, lettering, pictorial drawings, and tracings. This is a basic drafting course, meeting the requirement for the pre-engineering architectural student. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

#### **I.E. 1303 (173). GRAPHIC SCIENCE.**

This course provides the fundamentals of primary information and laboratory experiences for the Industrial Education, pre-engineering, and other students interested in the foundations of our present-day industrial society. Assignments include: lettering, geometric constructions, sketching lines and symbols; orthographic, isometric, oblique, and perspective drawing; dimensioning and shop processes. Prerequisites: High School drafting or I.E. 1302. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

#### **I.E. 1304 (183). GRAPHIC SCIENCE.**

This second course in Graphic Science is based upon the principles of orthographic projection. Descriptive geometry is involved with problems of: space relations of points, lines and surfaces; true length of lines in space; intersection and development of surfaces—plane and curved, regular, warped and double-curved. Prerequisite: three semester hours of drawing. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

#### **I.E. 1305 (123). PHOTOGRAPHY.**

This course introduces the student to the world of photography—through the use of cameras, meters, films, filters, auxiliary lenses, and lighting. Also, the student is introduced to the techniques and processes of: developing, printing, enlarging, toning, choice of papers and dodging. Certain legal aspects of photography are introduced. May be counted as Journalism 1305 or I.E. 1305, but not as both. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

**I.E. 1306 (193). GENERAL INDUSTRIES LABORATORY.**

General Industrial Education is a unit type course covering several areas of Industrial Education and involves a study of the tools, materials, processes, and products of industry with particular emphasis on such industrial areas as: drawing, wood, or metal. May be taken as Art 2373 or I.E. 1301, and but not as both. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

**I.E. 2301. POWER MECHANICS.**

A study of the sources and transmission of power with emphasis on small internal combustion engines; the principles of operation of the two and four-stroke cycle engines; carburetion systems, and governor controls. Instruction concerning the electric motor, its care and operation. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

**I.E. 2302 (213). METALS, INTRODUCTORY.**

This is an introductory course in metals. The student may get information and laboratory experiences pertaining to: kinds of metals, hot and cold working, an introduction to welding and machining, and forming wrought iron ornaments. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

**I.E. 2372 (273). CRAFTS, GENERAL.**

(See Art 2372 (273) for course description. \$4.00 laboratory fee.)

**I.E. 3301 (303). POWER TECHNOLOGY.**

This course provides for study and laboratory experiences dealing with power sources and applications. Emphasis is placed upon the design and operating principles of internal combustion engines and external combustion engines; hydraulic, pneumatic, water and electrical units will be given consideration. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

**I.E. 3302. INDUSTRIAL ARTS IN THE ELEMENTARY GRADES.**

This course is designed to afford elementary teachers an opportunity to gain experience in the use of tools, materials, and projects adapted to the manual skills of the elementary child, and thus to qualify them to make practical and inexpensive additions to the activity centers of the elementary schoolroom. Three hours lecture.

**I.E. 3303 (333). INDUSTRIAL MATERIALS AND PROCESSES.**

This course provides for study and laboratory experiences dealing with sources of materials, problems in transportation, methods of processing and finishing employed in such industries as: metals, woods, rubber, plastics, paper, and ceramics. Two hours lecture and two hours laboratory. \$2.00 laboratory fee.

**I.E. 3304 (353). WOODS, GENERAL.**

In this course the student becomes involved in design, construction, and finishing of furniture and woods products; the identification and classification of woods; geographical sources, structure and usage of woods and wood products. Both hand and machine tools are introduced. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

**I.E. 3305 (363). WOODS, ADVANCED.**

This course is concerned with Wood Materials technology, industrial methods, techniques and processes. Information and laboratory experience are provided in the more common production areas such as: cabinet making, furniture manufacture, and carpentry. Maintenance, use and care of tools, and machines are stressed. Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

**I.E. 3306 (373). METALS, ADVANCED.**

This course is designed to give comprehensive coverage to the hot metal working and to the machining of metals. Prerequisite: I.E. 2302 (213). Two hours lecture and four hours laboratory. \$2.00 laboratory fee.

**I.E. 4301 (453). INDUSTRIAL EDUCATION IN EDUCATION.**

This course provides the student with the insight into the evolution of Industrial Education in its various forms: Technical Education, Vocational Education, and Industrial Arts. The placement of each on the most effective level in our present day education is discussed at length. Three hours lecture.

**I.E. 4302 (423). OPERATION OF INDUSTRIAL EDUCATION LABORATORIES.**

This course is especially designed to give prospective teachers practice and methods in selecting equipment, setting up, organizing the equipment and personnel, and maintenance of the equipment, furnishings, and supplies. Three hours lecture and three hours laboratory. Prerequisite: 12 semester hours of Industrial Education. \$2.00 laboratory fee.

**I.E. 4303 (463). JOB ANALYSIS OF INDUSTRIAL OCCUPATIONS.**

This course presents comparison of the requirements, working conditions, compensation, other benefits and hazards in the varied occupations in industry. The student may get credit in Business Administration for this course. Not given each year. Three hours lecture. Prerequisite: junior or senior standing.

**I.E. 4304 (413). SAFETY EDUCATION.**

Safety Education provides coverage of the factors involved in: safety in the home, in the schools, on playgrounds, in industry, on the farm, the highway, adult recreation and play. Liability and responsibility are discussed in each area, when applicable. Three hours lecture.

**I.E. 4305 (403). DRIVER EDUCATION.**

This course provides information and laboratory experiences in order to help students: become aware of traffic problems, determine limitations of drivers, develop positive attitudes, learn traffic laws and regulations, develop and improve driving skills, and to meet the requirements of the Texas Education Agency for certification as a teacher of Driver Education. Prerequisite: driver's license and credit or concurrent enrollment in Industrial Education 4304 (413).

**DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION**

**Associate Professor Harry E. Larche, Head**

**College Requirements in Health and Physical Education:**

Four semester hours of credit in health and physical education activity courses are required for graduation. Students majoring in health and physical education must present a minimum of six semester hours. For the general college student, this requirement is met during both semesters of the freshman and sophomore years. A health examination is required of all students registering for physical education activity courses.

Students unable to participate in activity courses must present either a physician's certificate to this effect or a waiver executed by the appropriate Division Director. Students, presenting a physician's certificate or a Division Director's waiver, may satisfy their four semester hour requirement by taking specially designated Fundamental Skills sections. Students enrolled in physical education are expected to furnish regulation costumes for activity classes; students are expected to provide equipment such as: golf balls, tennis racquets, tennis balls, badminton shuttlecocks, and arrows. A fee is charged students for classes in bowling and swimming.

No more than four semester hours of activity courses may be counted toward graduation except by physical education majors.

**Activity Courses for the General College Student**

Men students are required to take Physical Education 1101, 1102. Two additional hours are to be selected by each student.

Women students are required to take Physical Education 1121, 1122. Two additional hours are to be selected by each student.

**Degree Requirements for Men:****General Education**

Must include Biology 1401, 1402.

**Minor Field**

18 semester hours (six advanced).

**Health & Physical Education Major**

30 semester hours (18 advanced).

1. Biology 2403 is required of all Physical Education majors.
2. Must include Physical Education: 1351, 1352, 2354, 2352 or 2355, 3301, 3302, 3351, 4301, 4352 and 4354.
3. Must include a minimum of six semester hours of activity courses in addition to the above listed 30 semester hours. After completing this requirement, the student will be expected to possess both knowledge and skills in individual sports, team sports and ARC Standard First Aid.

#### Teacher Certification in Health and Physical Education (Men)

Requires Biology 1401, 1402.

#### Elementary Level:

##### Plan I

Must include Physical Education: 1351, 2351, 2352, 3301, 3302 and 4301.

##### Plan II

Must include Physical Education: 1351, 1352, 2351, 2352, 3301, 3302, 4301 and select three hours from: 3351, 4351, 4352, or 4353.

#### Secondary Level:

1. Must meet degree requirements.
2. Must include Physical Education: 1351, 1352, 2355, 3301, 3302, 4301, 4354 and select three hours from: 3351, 4351, 4352, or 4353.
3. Must include Education: 3302, 3303, 4352, 4641, and 3341 or 3342.
4. Must include an approved second teaching field of 24 semester hours (12 advanced).

#### All Levels:

1. Must meet degree requirements.
2. Must include Physical Education: 1351, 1352, 2351, 2352, 2355, 3301, 3302, 4301 and 4354.
3. Must include Biology: 2403.
4. Must include Education: 3302; 3341 or 3342; 3311 or 3312; 4352; and 4641.
5. Must include an approved second teaching field of 24 semester hours (12 advanced).

### OUTLINE OF CURRICULA FOR MEN

#### TEACHER CERTIFICATION FOR PHYSICAL EDUCATION MAJOR— SECONDARY LEVEL

##### Freshman Year

Eng. 1301, 1302.  
Math., six hours.  
Biol. 1401, 1402.  
Art 1301.  
P.E. 1101, 1102, 1351 and 1352.

##### Sophomore Year

Eng., six hours (literature).  
Hist. 2313 or 2333, 2314.  
Biol. 2403.  
Foreign Language, six hours.  
P.E., four hours activity courses;  
2354; 2355.

| <b>Junior Year</b>  | <b>Senior Year</b>   |
|---|--|
| Govt. 2313, 2314.   | P.E. 4301, 4354, and three advanced hours.                           |
| Mus. 2307.  | Ed., twelve hours.*  |
| P.E. 3301, 3302, and three advanced hours.                            | Electives, nine hours advanced (minor and/or second teaching field). |
| Electives, four hours.  |  |
| Ed., six hours.*  |  |
| Electives, three hours advanced (minor and/or second teaching field). |  |

\*See Teacher Certification Level on preceding page for required courses.

#### **Degree Requirements for Women:**

##### **General Education**

Must include Biology 1401, 1402.

##### **Minor Field**

18 semester hours (six advanced).

##### **Health & Physical Education Major**

30 semester hours (18 advanced).

1. Biology 2403 is required of all Physical Education majors.
2. Must include Physical Education: 1351, 1352, 2354, 2352 or 2355, 3321, 3322, 4321, 4354, and select six hours from: 2353, 3351, 4351, 4352, or 4353.
3. Must include a minimum of six semester hours of activity courses in addition to the above listed 30 semester hours. After completing this requirement, the student will be expected to possess both knowledge and skills in individual sports, team sports, rhythmic activities and ARC Standard First Aid.

##### **Teacher Certification in Health and Physical Education (Women)**

Requires Biology 1401, 1402.

##### **Elementary Level:**

###### **Plan I**

Must include Physical Education: 1351, 2351, 2352, 3321, 3322, and 4321.

###### **Plan II**

Must include Physical Education: 1351, 1352, 2351, 2352, 3321, 3322, 4321 and select three hours from: 3351, 4351, 4352 or 4353.

##### **Secondary Level:**

1. Must meet degree requirements.
2. Must include Physical Education: 1351, 1352, 2355, 3321, 3322, 4321, 4354, and select three hours from: 3351, 4351, 4352 or 4353.
3. Must include Education: 3302, 3303, 4352, 4641 and 3341 or 3342.
4. Must include an approved second teaching field of 24 semester hours (12 advanced).



**All Levels:**

1. Must meet degree requirements.
2. Must include Physical Education: 1351, 1352, 2351, 2352, 2355, 3321, 3322, 4321 and 4354.
3. Must include Biology: 2403.
4. Must include Education: 3302; 3341 or 3342; 3311 or 3312; 4352; and 4641.
5. Must include an approved second teaching field of 24 semester hours (12 advanced).

**OUTLINE OF CURRICULA FOR WOMEN  
TEACHER CERTIFICATION FOR PHYSICAL EDUCATION MAJOR—  
SECONDARY LEVEL**

**Freshman Year**

Eng. 1301, 1302.  
Math., six hours.  
Biol. 1401, 1402.  
Art. 1301.  
P.E. 1121, 1122, 1351, 1352.

**Junior Year**

Govt. 2313, 2314.  
Mus. 2307.  
P.E. 3321, 3322, and three advanced hours.  
Ed., six hours.\*  
Electives, four hours.  
Electives, three hours advanced (minor and/or second teaching field).

\*See Teacher Certification Level on preceding page for required courses.

**Sophomore Year**

Eng., six hours (literature).  
Hist. 2313 or 2333, 2314.  
Biol. 2403.  
Foreign Language, six hours.  
P.E., four hours activity courses; 2354; 2355.

**Senior Year**

P.E. 4321, 4354, and three advanced hours.  
Ed., 12 hours.\*  
Electives, nine hours advanced (minor and/or second teaching field).

**Activity Courses for Men**

- 1101 (101M), 1102 (121M). Fundamental Skills.  
Required of all Freshman men. \$4.00 fee for aquatic activities.
- 2101 (201M). Basketball — Football.  
2102 (201M). Volleyball — Softball.  
2103 (201M). Badminton.  
2104 (201M). Tennis.  
2105 (201M). Wrestling.  
2106 (201M). Weight Training.  
2107 (201M). Track and Field.  
2108 (201M). Self-Testing Activities.  
2111 (201M). Exercise.

### Activity Courses for Women

- 1121 (101W), 1122 (121W). Fundamental Skills.  
Required of all Freshman women.
- 2121 (201W). Basketball — Volleyball.
- 2122 (201W). Tennis.
- 2123 (201W). Badminton.
- 2124 (201W). Self-Testing Activities.
- 2125 (201W). Folk Dance.
- 2126 (201W). Beginning Modern Dance.
- 2127 (201W). Tap Dance.
- 2128 (201W). Intermediate Modern Dance.
- 2129 (201W). Exercise.

### Activity Courses for Both Men and Women

- 2151 (201). Beginning Swimming. (\$6.25 Pool Fee.)
- 2152 (201). Intermediate and Advanced Swimming. (\$6.25 Pool Fee.)
- 2153 (201). Social and Square Dance.
- 2154 (201). Archery — Bowling. (\$6.25 Bowling Fee.)
- 2156 (201). Intermediate and Advanced Tennis.

## PHYSICAL EDUCATION

### P.E. 1351 (113). INTRODUCTION TO HEALTH, PHYSICAL EDUCATION, AND RECREATION.

This course is designed to orient the student in the field of health, physical education, and recreation through presentation of the scope and organization of professional activities, vocational opportunities, and essential professional qualifications.

### P.E. 1352 (123). PERSONAL AND COMMUNITY HEALTH.

This course includes basic concepts of personal and community health from the standpoint of the individual and his responsibilities.

### P.E. 2155 (131). FIRST AID.

This course is designed to develop skills, knowledge, and attitudes concerning first aid and accident prevention. Students who meet the course requirements are eligible for American Red Cross Standard and Advanced First Aid Certification. Lecture and laboratory, three hours each week.

### P.E. 2351 (213). PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL.

This course, designed for the elementary school teacher presents the activities of a physical education program for the elementary school,

with emphasis on curriculum construction, progressive selection of materials for different grade levels, methods of presentation and sources of materials.

**P.E. 2352 (223). THE HEALTH EDUCATION PROGRAM IN THE ELEMENTARY SCHOOL.**

This course presents the basic principles of school health education, methods of teaching health, and the administration of the health program in the elementary school. Lecture, three hours each week. Prerequisites: P.E. 1352 (123).

**P.E. 2353 (233). LIFE SAVING AND WATER SAFETY.**

This course is designed to develop skills and knowledges concerning life saving and water safety. Students who meet special requirements may be certified for American Red Cross Senior Life Saving and/or Water Safety Instructor Rating. Prerequisite: advanced level of skill in swimming. Pool fee: \$6.25.

**P.E. 2354 (243). KINESIOLOGY.**

This course provides a scientific study of basic movement with relation to physical activities. Lecture, three hours each week. Prerequisites: Biology 1401 (114) and 2403 (274).

**P.E. 2355 (233). THE HEALTH EDUCATION PROGRAM FOR SECONDARY SCHOOLS.**

This course represents the basic principles of school health education, methods of teaching health, and the administration of the health program in the secondary schools. Prerequisites: P.E. 1352 (123).

**P.E. 3101. OFFICIATING TEAM SPORTS FOR MEN.**

Rules, rules interpretation, and mechanics of officiating boys' basketball and football.

**P.E. 3121. OFFICIATING TEAM SPORTS FOR WOMEN.**

Rules, rules interpretation and mechanics of officiating basketball, volleyball, and speedball according to the standards of the Division of Girls' and Women's Sports (AAHPER).

**P.E. 3301 (313). TEACHING TEAM SPORTS (MEN).**

This course includes current theories and practices in teaching basketball, volleyball, and football. Lecture, three hours each week.

**P.E. 3302 (323). TEACHING INDIVIDUAL SPORTS (MEN).**

This course includes current theories and practices in teaching tennis, gymnastics, track, and field events.

**P.E. 3321 (353). TEACHING TEAM SPORTS (WOMEN).**

This course is designed to develop game skills, knowledge of rules, and techniques of teaching girls' basketball, speedball, and volleyball.

**P.E. 3322 (363). TEACHING INDIVIDUAL SPORTS (WOMEN).**

This course is designed to develop game skills, a knowledge of rules and techniques of teaching girls' tennis, gymnastics, track, and field events.

**P.E. 3351 (333). PRINCIPLES OF PHYSICAL EDUCATION.**

This course includes a study of the basic principles and philosophy of physical education. Prerequisites: P.E. 1351 (113).

**P.E. 4301 (423). ATHLETIC TRAINING (MEN).**

This course includes the current theories and practices of body conditioning for specific sports and of prevention and rehabilitation of athletic injuries.

**P.E. 4321 (463). TEACHING DANCE ACTIVITIES.**

This course is designed to provide skills, knowledges and techniques in teaching creative rhythms, fundamental rhythmic movement, and folk dance.

**P.E. 4351 (413). CORRECTIVE PHYSICAL EDUCATION.**

This course is designed to develop knowledge and skills in the recognition of common postural defects and physical irregularities—their correction, prevention, and alleviation.

**P.E. 4352 (433 and 443). THE INTRAMURAL PROGRAM.**

This course includes the organization and administration of intramural programs for both boys and girls.

**P.E. 4353 (453). RECREATION LEADERSHIP.**

This course includes the organization and administration of recreation leadership, in public and private agencies.

**P.E. 4354. PHYSICAL EDUCATION FOR THE SECONDARY SCHOOLS.**

A survey of activities for program planning in junior and senior high schools: unit construction, lesson planning, class organization, special programs, and sources of materials. Prerequisite: 12 hours of physical education.

# **INSTRUCTIONAL STAFF**

# INSTRUCTIONAL STAFF

## 1966-1967

- ANDERSON, JOHN D. ..... Music  
B.P.S.M., M.M., Southern Methodist; Ph.D., George Peabody
- \*BARKER, JIM L. .... Physical Education  
B.A., Pan American College
- BARRERA, EDUARDO ..... Spanish  
B.S., M.S., Texas College of Arts and Industries; graduate study,  
University of Texas; University of Puerto Rico
- BATES, NEAL ..... Geology, Physical Science  
B.A., M.A., Baylor University; graduate study, University of Okla-  
homa, University of Indiana, Florida State
- BEACHUM, WILLIAM B. .... Government, History  
B.A., M.A., Southern Methodist University; graduate study, Univer-  
sity of Texas, Texas College of Arts and Industries
- BEAUDRY, CHARLES E. .... French, German, Spanish  
Ph.B., M.A., Marquette University; Ph.D., Laval University; graduate  
study, Wisconsin State, Middlebury College, St. Louis University,  
Université de Montréal, Université de Paris.
- BEAUDRY, EILLEN ..... French  
Ph.B., Marquette University; M.A., Laval University; additional study,  
Wisconsin State, Middlebury College
- BLACKBURN, HELEN J. .... Mathematics  
B.A., M.S., Southern Illinois University; graduate study, Columbia  
University
- BOUNOUS, LYLE G. .... Education  
B.S., Southwest Missouri State College; M.Ed., Ed.D., University of  
Missouri
- BRADWAY, WINNEFRED E. .... Biology  
B.A., M.A., Ph.D., University of Oregon; graduate study, University  
of Washington, New York University, Oregon State College, Stanford  
University, Wood's Hole Marine and Zoological Station
- BROOKS, JAMES A. .... Physical Education  
B.S., Middle Tennessee State College; M.A., University of Kentucky;  
graduate study, University of Indiana
- BROUGH, ROYCE D. .... Business Administration  
B.S., Stephen F. Austin State College; M.S., Texas Agricultural and  
Mechanical College; C.P.A.

- BUITENBOS, CLARA ..... Business Administration  
B.S., Southern State, Springfield, South Dakota; M.Ed., University of South Dakota
- BURANDT, NORMAN A. .... Physics  
B.A., Southern Methodist University; graduate study, Texas College of Arts and Industries
- CALDERON, CARLOS I. .... Spanish  
B.A., Sul Ross; M.A., University of Texas; graduate study, University of Texas, Texas College of Arts and Industries
- CAMERON, LEONA ..... Mathematics  
B.A., Texas State College for Women; M.A., Boston College
- CLARK, THEODORE R. .... English, Philosophy  
B.A., Mississippi College; B.D., Th.M., Th.D., New Orleans Baptist Theological Seminary; post-doctoral study, University of Southern California, Princeton Theological Seminary, Harvard University
- CORNS, J. B. .... Agriculture  
B.S., Agricultural and Mechanical College of Texas; M.S., University of California; Ph.D., Cornell University
- \*COURTNEY, JANICE RAY ..... Speech  
B.F.A., M.F.A., University of Texas; graduate study, University of Texas
- CRAIG, JENNIE E. .... Art  
B.S., N.E. Missouri State Teachers College; M.A., Columbia University; graduate study, University of Iowa, St. Louis School of Fine Arts, Penland School of Handicrafts, California College of Arts and Crafts, Cross School of Art
- DAVIS, VIRGINIA L. .... Education  
B.S., Drake University; M.A., State University of Iowa; graduate study, State University of Iowa
- †DOMINGUEZ, SYLVIA M. .... Spanish  
B.A., M.Ed., Our Lady of the Lake; graduate study, National University of Mexico
- DRAEGER, SIDNEY S. .... Mathematics  
B.A., M.A., University of Texas; graduate study, University of Texas
- DRAKELEY, RAY K. .... Music  
A.B., B.M., Roosevelt University; M.A., Columbia University; graduate study, Columbia University
- DREYER, FERNE ..... English  
B.A., Pan American College; M.S., Texas College of Arts and Industries; graduate study, Texas College of Arts and Industries

†On leave.

\*Spring Semester, 1966-67.

- DUGAN, EVELYN C. .... English  
B.A., Park College; M.A., Texas College of Arts and Industries; graduate study, University of Colorado, Texas Woman's University
- EAGER, SHERMAN W. .... Physics  
B.A., Indiana University; M.S., Agricultural and Mechanical College of Oklahoma; Ph.D., Indiana University
- ELLIOTT, J. LELL ..... Chemistry  
B.A., M.A., Ph.D., University of Colorado
- ELLIS, FRED E. .... Astrophysics  
B.S., M.S., East Texas State College; Ph.D., Louisiana State University.
- ENGLER, PAUL R. .... Astronomy, Astronautics  
B.A., Pan American College; advanced study at Yale University, Georgetown University, University of Arizona
- ENSMINGER, LARRY G. .... Physical Education  
B.S., M.S., Kansas State Teachers College
- ESTRADA, ANDRES ..... Chemistry  
B.S., M.S., Texas College of Arts and Industries; graduate study, Ohio University, Oklahoma State, University of Minnesota
- \*EVANS, D. WAYNE ..... English  
B.A., M.A., Mississippi College; B.D., New Orleans Baptist Theological Seminary; graduate study, University of Southern Mississippi
- FAGERSTROM, WILLIAM H. .... Mathematics  
A.B., Tulane University; M.A., Ph.D., Columbia University
- FERGUSON, WILLIAM C. .... Education  
B.A., M.A., University of Mississippi; Ed.D., University of Houston; graduate study, George Peabody College, University of Texas
- FLACCUS, ELMER ..... Government, History  
A.B., M.A., Washington and Jefferson College; Ph.D., University of Texas; post-doctoral study, University of London
- FLOYD, ANNE H. .... Assistant Librarian  
A.B., Western College; Certificate of Library Science, St. Louis Library School
- FULTON, JAMES R. .... English  
B.A., M.A., University of Alabama; graduate study, University of Alabama
- \*GARCIA, LINO ..... Spanish  
B.A., St. Mary's University; M.A., North Texas State University
- GARRETT, SIDNEY R. .... Art  
B.A., M.A., Louisiana State University



- GAUDING, HARRY H. .... History  
B.A., Maryville College; M.A., University of Tennessee
- GEENENS, RONALD B. .... Economics  
B.A., Baker University; M.A., University of Kansas City; M.B.A.,  
University of Arkansas; graduate study, University of Arkansas.
- GIFFORD, GALE T. .... English  
B.A., M.A., University of Texas; graduate study, University of Texas
- GILMORE, L. D. .... Education  
B.S., M.S., Oklahoma A. & M.; Ed.D., University of Oklahoma
- GODFREY, ESTELLA H. .... Biology  
B.A., George Washington University; M.A., Wellesley College; grad-  
uate study, Texas College of Arts and Industries, University of Texas
- GOWER, LESLIE M. .... Librarian  
B.S., Austin Peay State College; M.A.L.S., George Peabody College;  
M.A., Vanderbilt University
- GRAHAM, RUTH .... Assistant Librarian  
A.B., Mississippi State College for Women; M.A., in Library Science,  
George Peabody College for Teachers
- HALL, HARRY H. .... Government, History  
A.B., California State; M.A., American University of Beirut
- HARDY, LLOYD L., JR. .... Business Administration  
B.S., M.S., Texas College of Arts and Industries
- \*HARTMAN, MARTHA D. .... English  
B.A., Pan American College; M.A., University of Illinois; graduate  
study, University of Iowa
- HAWKINS, JEANETTE .... Physical Education  
B.S., M.Ed., West Texas State University; graduate study, Texas  
Technological College
- HAYES, ARTHUR R. .... Speech  
B.S., Sam Houston State Teachers College; M.Ed., Ed.D., University  
of Texas; graduate study, University of Southern California
- HELLMAN, DOUGLAS .... Psychology  
B.S., M.S., North Texas State University
- HODGES, H. A. .... Dean of the College  
B.A., M.A., University of Texas; Honorary LL.D., Howard Payne;  
graduate study, University of Texas, University of Wisconsin, Uni-  
versity of Chicago
- HOOK, JOHN W. .... Mathematics  
B.S., Illinois Institute of Technology; M.A., Louisiana State University

- HORD, LARRY D. ..... English  
B.S., M.A., Agricultural and Mechanical College of Texas
- HUNTER, W. ALEXANDER ..... Education  
B.S., Ohio University; M.Ed., Duke University; Ed.D., Columbia University
- †IRBY, JAMES A. ..... History  
B.A., Southern Methodist University; M.A., University of Texas; graduate study, University of Georgia
- JAMES, PAULINE ..... Biology  
B.S., Memphis State; M.S., Ph.D., Cornell University
- LACKEY, ALLEN D. ..... English  
B.A., Texas Technological College; M.A., West Texas State University
- LARCHE, HARRY E. ..... Physical Education  
B.S., Arkansas State College; M.S., University of Mississippi; Ph.D., University of Indiana
- LEONARD, REX L. ..... Mathematics  
B.S., United States Naval Academy; M.S., Texas College of Arts and Industries
- LUND, HARRY ..... Spanish  
B.A., University of Minnesota; Ph.D., University of Madrid
- LYLES, DONALD J. .... Biology  
B.S., Louisiana College; M.S., Louisiana Polytechnic Institute
- ‡MAGUREAN, CHARLES V. .... Music  
B.A., Western Kentucky State College; M.M., Vandercook College of Music; M.A., George Peabody College; graduate study, University of Houston, Colorado State College
- MARTINEZ, ARNULFO ..... Spanish, History  
B.A., M.A., Ph.D., University of Texas
- MAYER, VERA W. ..... English  
B.A., Iowa State Teachers College; M.A., Columbia University; graduate study, Central State College, University of Oklahoma
- McBRIDE, BENNETT ..... English  
B.A., University of Texas; M.A., Texas College of Arts and Industries
- McLAIN, THELMA LOUISE ..... Assistant Librarian  
B.A., Texas State College for Women; M.L.S., University of Texas
- McMICHAEL, ROBERT N. .... Business Administration  
B.S., Louisiana Polytechnic Institution; M.B.A., Ph.D., Louisiana State University

†On leave.

‡Deceased.

- MILLER, RAYMOND H. .... Sociology, History  
B.A., Rollins; M.A., University of Kentucky; Ph.D., Louisiana State University
- MOORE, PHELMA N. .... Business Administration  
B.A., M.B.A., North Texas State Teachers College; Ed.D., University of Houston
- MORGAN, GLYNN R. .... Government  
B.A., M.A., University of Mississippi; graduate study, University of Texas
- MORGAN, RALPH ..... Education  
B.A., Iowa State Teachers College; M.S., Colorado State College of Education
- MORRIS, RUTH DEAN ..... Music  
B.M., Baylor University; M.M., Eastman School of Music; graduate study, University of Colorado, University of Texas
- MOUTON, ROBERT B. .... Government  
A.B., Suffolk University; M.A., University of Denver
- MURRELL, JOE C. .... Business Administration  
B.B.A., M.B.A., North Texas State University
- NELMS, BOBBY W. .... Speech  
B.A., Texas Technological College; graduate study, Texas Technological College
- NICHOLS, EDWARD E. .... Art  
B.F.A., M.F.A., University of Kansas
- NIELSEN, KARL B. .... Music  
B.A., Iowa State Teachers' College; M.A., Columbia University; graduate study, State University of Iowa; Royal Danish Conservatory of Music, Copenhagen, Denmark; Conservatory of Music, Geneva, Switzerland; University of Kansas
- OTKEN, CHARLES C. .... Chemistry  
B.S., Texas Agricultural and Mechanical College; Ph.D., Cornell University
- OTWELL, H. GENE ..... Government, History  
B.A., M.A., University of Mississippi
- OWINGS, RUTH M. .... Speech  
B.A., B.E., Nebraska Wesleyan University; M.A., Northwestern University; graduate study, University of Iowa, University of Nebraska, University of Chicago, Alviene School of the Theatre
- PENA, HOMER J. .... Mathematics  
B.A., Pan American College; M.Ed., University of Virginia; graduate study, University of Kansas

- PETERSON, RAYMOND H. ....Physical Education  
B.S., M.S., Baylor University
- PHARIS, RUDOLPH V. ....Art  
B.S., M.A., Louisiana State University
- PHILLIPS, PHYLLIS ..... Education  
B.A., Southeastern State Teachers College; M.A., George Peabody  
College; Ed.D., Colorado State College of Education
- PONTIUS, PAUL E. .... Mathematics  
B.B.A., University of Texas; A.M., University of Illinois
- POWELL, MARSHALL L. .... Industrial Education  
B.S., Austin Peay State College; M.A., George Peabody College; grad-  
uate study, Michigan State University, George Peabody College
- POWERS, BONNIE ..... Dean of Women, History  
B.S., M.Ed., Sam Houston State Teachers College; graduate study,  
University of Texas
- QUIN, HARRY ..... Journalism  
B.J., University of Texas; graduate study, University of Texas
- RAIMO, JOHN ..... Music  
B.M., M.M., The Conservatory of Music of Kansas City; M.A., Columbia  
University; D.M.A., Eastman School of Music
- †RODGERS, ROBERT W. .... Geology, Physical Science  
B.A., M.A., Baylor University
- \*ROSS, ROBERT L. .... English  
B.A., University of Oregon; M.A., Texas Christian University
- RUSSELL, DONALD E. .... Mathematics  
B.A., Pan American College; graduate study, Oklahoma University
- SAUVAGEAU, JEAN-JACQUES ..... French  
B.A., Ottawa University; Ph.D., Tulane University
- SAWEY, ORLAN L. .... English  
B.A., Texas College of Arts and Industries; M.A., Ph.D., University  
of Texas
- SCHILLING, RALPH ..... President  
B.A., Oklahoma City University; M.Ed., Oklahoma University; Ed.D.,  
Texas Technological College
- SIDES, SAMMIE L. .... Biology  
B.S., Tarleton State; M.S., Texas Technological College
- SIMMEN, EDWARD ..... English  
B.A., M.A., University of Texas; Ph.D., Texas Christian University

\*Resigned, January, 1967.

†On leave.

- SKINNER, B. R. .... English  
B.A., M.A., East Texas State
- SORENSEN, LAZERN O. .... Biology  
B.S., Nebraska State, Kearney, Nebraska; M.S., Ph.D., University of Nebraska
- STOWE, WILMER C. .... Biology  
B.S., M.S., Louisiana Polytechnic Institute
- STRATTON, PORTER A. .... History  
B.A., University of New Mexico; M.A., Eastern New Mexico University; graduate study, Texas Technological College
- STURDIVANT, DIANE ..... Physical Education  
B.A., University of Tulsa; M.S., Kansas State Teachers' College
- TALLANT, JOSEPH S. .... Business Administration, Government  
B.A., M.A., LL.B., University of Texas; graduate study, University of Texas
- THOMAS, AMILDA ..... Physical Education  
B.S., M.A., Texas State College for Women; graduate study, Texas State College for Women
- TIPTON, ROBERT ..... English  
B.A., Abilene Christian College; M.A., Texas College of Arts and Industries
- VINCENT, VERN C. .... Mathematics  
B.S., West Texas State; M.S., Washington State
- WADE, SETH ..... English  
A.B., University of Kentucky; M.A., Louisiana State University; graduate study, University of Florida, Ohio State University
- WARE, WILLIAM S. .... Agriculture, Biology  
B.S., Ph.D., University of California
- WHITE, T. LAWRENCE ..... History  
B.A., M.A., Ph.D., University of Texas
- WILLIAMS, SAM ..... Physical Education  
B.S., Texas Christian University; M.S., North Texas State College
- WILSON, JOE ..... Government, History  
B.A., Florida Southern College; M.A., Ph.D., University of Georgia
- WRIGHT, CARL C. .... English  
B.A., Southwest Texas State College; M.A., University of Texas; graduate study, University of Texas
- YOUNGMAN, L. A. .... Physics, Mathematics  
B.A., M.Ed., Phillips University; graduate study, University of Texas, University of Virginia, University of Colorado, Michigan State University, University of California, University of Tennessee

ZEIDLER, FRANZ J. .... Music  
 B.A., M.A., San Fernando Valley State; graduate study, University  
 of California

### PART-TIME FACULTY

\*DAVIS, VERNON L. .... Journalism  
 B.A., Baylor University

\*FOUCHEK, STEPHEN J. .... Business Administration  
 B.A., University of Iowa; B.S., University of Oregon Law School;  
 B.F.T., American Institute for Foreign Trade; LLL.B., Willamette  
 University Law School

GARRETT, CHARLOTTE ..... English  
 B.A., Dickinson College; graduate study, The New School of Social  
 Research

†GORISHEK, WILLIAM H. .... English  
 B.A., University of Colorado

LEVINE, BERT ..... Education  
 B.A., Long Island University; M.A., Ph.D., University of Texas

\*MOSIER, CECILE M. .... Business Administration  
 B.A., Howard Payne College

SOUTHWICK RUTH ..... Biology  
 B.A., Pan American College; B.B.A., Texas Christian University;  
 graduate study, Texas College of Arts and Industries

### BIBLE CHAIRS

BUTLER, CHARLES A. .... Bible  
 B.A., George Pepperdine College; graduate study, Harding College

MOSIER, GEORGE A. .... Bible  
 B.A., Howard Payne College; B.D., Southwestern Baptist Theolog-  
 ical Seminary

\*Spring Semester, 1966-67.

†Fall Semester, 1966-67.

**PAN AMERICAN COLLEGE**  
**Student Personal Health Record**

NAME \_\_\_\_\_ Social Security Number \_\_\_\_\_  
Last First Middle Birth Date \_\_\_\_\_

ADDRESS \_\_\_\_\_  
**THE STUDENT SHOULD COMPLETE ALL BLANKS ABOVE THIS LINE BEFORE PRESENTING TO HIS PHYSICIAN.**

Weight (lbs.) \_\_\_\_\_ Height (inches) \_\_\_\_\_ Posture (good, fair, poor) \_\_\_\_\_  
General appearance (good, fair, poor) \_\_\_\_\_  
Muscular development (good, fair, poor) \_\_\_\_\_  
Are there any physical deformities? \_\_\_\_\_

Is there positive evidence of a successful vaccination for smallpox? \_\_\_\_\_

Scalp \_\_\_\_\_ Skin \_\_\_\_\_  
Bones and joints \_\_\_\_\_ Feet \_\_\_\_\_  
Lymph glands \_\_\_\_\_  
Eyes: Lids \_\_\_\_\_ Conjunctive \_\_\_\_\_ Vision: r. \_\_\_\_\_ l. \_\_\_\_\_

Are glasses worn? \_\_\_\_\_  
Ears: Hearing r. \_\_\_\_\_ l. \_\_\_\_\_ Are there any signs of disease? \_\_\_\_\_

Nose: r. \_\_\_\_\_ l. \_\_\_\_\_ Is breathing through nose normal? \_\_\_\_\_

Tongue \_\_\_\_\_ Tonsils \_\_\_\_\_ Pharynx \_\_\_\_\_  
Teeth: Hygiene (clean or unclean) \_\_\_\_\_  
Pathology (number needing filling) \_\_\_\_\_

Thyroid Gland \_\_\_\_\_

Heart \_\_\_\_\_ Blood pressure \_\_\_\_\_

Lungs \_\_\_\_\_ Abdomen \_\_\_\_\_

Genitals \_\_\_\_\_ Are there any signs of hernia? \_\_\_\_\_

Menstrual History: When established \_\_\_\_\_

Regular \_\_\_\_\_ Irregular \_\_\_\_\_

Flow: Moderate \_\_\_\_\_ Excessive \_\_\_\_\_ Scanty \_\_\_\_\_

Prolonged \_\_\_\_\_ Pain \_\_\_\_\_ Mild \_\_\_\_\_ Severe \_\_\_\_\_

Out of School \_\_\_\_\_ Cramps \_\_\_\_\_ Backache \_\_\_\_\_

When \_\_\_\_\_ Duration \_\_\_\_\_

Urinalysis: Reaction \_\_\_\_\_ Sp. gr. \_\_\_\_\_  
 Alb. \_\_\_\_\_ Sugar \_\_\_\_\_ Cast \_\_\_\_\_ Cells \_\_\_\_\_

Does the applicant show any tendencies toward physical, nervous, mental, or emotional disability? \_\_\_\_\_

The general health and vigor of the applicant is (good, fair, poor) \_\_\_\_\_

Do you consider the applicant in a state of physical, nervous, and mental health to stand the test of college work including the requirement in physical education? \_\_\_\_\_

In your opinion should there be any restrictions put on the social and extra classroom activities of the applicant? yes \_\_\_\_\_ no \_\_\_\_\_

(make suggestions under remarks.)

Do you have any suggestion that would help the college in assisting him or her to develop and maintain a high standard of efficiency? yes \_\_\_\_\_

no \_\_\_\_\_ (make suggestions under remarks.)

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
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 \_\_\_\_\_  
 \_\_\_\_\_

Date \_\_\_\_\_ Signed \_\_\_\_\_ M.D.

Address \_\_\_\_\_  
 \_\_\_\_\_

**This report is not to be given to the student. The physician is requested to return it as soon as possible to the Registrar's Office, Pan American College, Edinburg, Texas.**



PLEASE PRINT ALL INFORMATION

PAN AMERICAN COLLEGE  
APPLICATION FOR RE-ENTRY

SOCIAL SECURITY NO. \_\_\_\_\_

FULL LEGAL NAME (No Nicknames) \_\_\_\_\_

ADDRESS WHILE ATTENDING \_\_\_\_\_

Mr. \_\_\_\_\_  
Miss \_\_\_\_\_  
Mrs. Last First Middle

No. & Street  
MAILING ADDRESS

If Mrs., give Maiden Name \_\_\_\_\_

Street or Box  
LEGAL RESIDENCE ADDRESS \_\_\_\_\_

Your Birth Date \_\_\_\_\_  
Month Day Year

No. & Street \_\_\_\_\_

SEX (Check One)  
1. \_\_\_\_\_ Male  
2. \_\_\_\_\_ Female

MODE OF ENTRY (For All Students)  
1. \_\_\_\_\_ High School Graduate  
2. \_\_\_\_\_ GED Tests

Name \_\_\_\_\_  
Location \_\_\_\_\_

Have you attended PAC before? \_\_\_\_\_

ANSWER ALL OF THE QUESTIONS BELOW

Are you currently enrolled? \_\_\_\_\_

List other colleges attended and dates of attendance

If not, date of last attendance: \_\_\_\_\_, 19\_\_\_\_

APPLICATION FOR:  
FALL SEMESTER \_\_\_\_\_ SPRING SEMESTER \_\_\_\_\_

CLASSES ENROLLING FOR:  
Day \_\_\_\_\_ Evening \_\_\_\_\_ Saturday Only \_\_\_\_\_

SUMMER SESSION  
FIRST TERM \_\_\_\_\_ SECOND TERM \_\_\_\_\_  
Courses desired: \_\_\_\_\_

DATE OF APPLICATION \_\_\_\_\_

Or \_\_\_\_\_

**AMERICAN COLLEGE**  
**FOR REGISTRATION**

FILE ATTENDING PAC Selective Ser. No.

ADDRESS Town State Your Major \_\_\_\_\_  
Total Semester Hours Earned \_\_\_\_\_  
(Include Hrs. in Progress)

OR  
DEGREE ADDRESS Town State Degree Held \_\_\_\_\_  
&  
From Where \_\_\_\_\_

Town State County

(s) Name of High School \_\_\_\_\_  
Location \_\_\_\_\_  
Town County State Yr. Grad.

**OF THE QUESTIONS BELOW**

s attended attendance:  
\_\_\_\_\_  
Date  
\_\_\_\_\_  
Date  
\_\_\_\_\_  
Date

Are you on:  
Scholastic Probation? \_\_\_\_\_ Yes \_\_\_\_\_ No  
Scholastic Suspension? \_\_\_\_\_ Yes \_\_\_\_\_ No  
If yes, where?  
\_\_\_\_\_  
Are you eligible to return? \_\_\_\_\_ Yes  
\_\_\_\_\_ No

**DO NOT WRITE IN THIS SPACE**

- \_\_\_\_\_ Social Security Number
- \_\_\_\_\_ Health Record
- \_\_\_\_\_ Transcript
- \_\_\_\_\_ ACT or CEEB
- \_\_\_\_\_ Previous financial record at PAC not clear
- \_\_\_\_\_ Ineligible at PAC
- \_\_\_\_\_ Appointment Made
- Original Mode of Entry \_\_\_\_\_ Current Mode of Entry \_\_\_\_\_

