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# Dordt College 2010-2011 Catalog 

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## 压 <br> DORDT COLLEGE 2010-2011 Catalog

This catalog is published for the faculty and students of Dordt College. We have made every effort to ensure the accuracy of the information in this catalog, but it is not to be considered a binding contract. The college reserves the right to make changes and to apply those revisions to registered and accepted students.

## Academic Calendar

|  | (Tentative) |  |  |
| :--- | :--- | :--- | :--- |
| 2010-11 | 2011-12 | Day | Activity |
|  |  |  |  |
| Aug 19-21 | Aug 18-20 | Thurs-Sat | International/ESL student orientation |
| Aug 21-23 | Aug 20-22 | Sat-Mon | Freshman orientation |
| Aug 24 | Aug 23 | Tuesday | Transfer/returning orientation |
| Aug 24 | Aug 23 | Tuesday | Orientation/Registration |
| Aug 25 | Aug 24 | Wednesday | Classes begin - 8 a.m. |
| Aug 27 | Aug 26 | Friday | Convocation - 11 a.m. |
| Oct 7, 8 | Oct 6, 7 | Thurs, Fri | Reading Days - Heartland Teacher's Conference, no classes |
| Oct 15 | Oct 14 | Friday | End of first set of half-courses |
| Oct 18 | Oct 17 | Monday | Beginning of second set of half-courses |
| Nov 8-22 | Nov 7-21 |  | Pre-registration for spring semester |
| Nov 24 | Nov 23 | Wednesday | Thanksgiving recess - 8 a.m. |
| Nov 30 | Nov 29 | Tuesday | Classes resume - 8 a.m. |
| Dec 10 | Dec 9 | Friday | Review day |
| Dec 13-16 | Dec 12-15 | Mon-Thurs | Testing |
|  |  |  |  |
| Jan 10 | Jan 9 | Monday | New and transfer/returning student orientation |
| Jan 11 | Jan 10 | Tuesday | Spring semester registration - 8:30 a.m. to 4 p.m. |
| Jan 11 | Jan 10 | Tuesday | Spring semester begins - 8 a.m. |
| Jan 14 | Jan 13 | Friday | Convocation - 11 a.m. |
| Feb 28 | Feb 27 | Monday | End of first set of half-courses |
| Mar 1 | Feb 28 | Tuesday | Beginning of second set of half-courses |
| Mar 10 | Mar 8 | Thursday | Spring vacation - 12:15 p.m. |
|  |  |  | [first three periods meet on Thursday] |
| Mar 22 | Mar 20 | Tuesday | Classes resume - 8 a.m. |
| Mar 29 | April 3 | Tuesday | Assessment day |
| Apr 4-20 | Apr 4-20 |  | Pre-registration for fall semester |
| May 2 | April 30 | Monday | Review day - a.m. |
| May 2 | April 30 | Monday | Testing - p.m. |
| May 3-5 | May 1-3 | Tues-Thurs | Testing - a.m. \& p.m. |
| May 6 | May 4 | Friday | Commencement - 10 a.m. |
| July 11 | July 9 | Monday | Graduate school summer session begins |
| July 29 | July 27 | Friday | Graduate school summer session ends |

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## Dordt College - An Overview

## Principles and Purposes

Dordt College owes its existence to a community whose faith commitment demands obedience to biblical principles in all of life. This religious commitment, historically known as the Reformed faith, has always been the basis of education at Dordt College.

The Dordt College community confesses that the Scriptures are the Word of God. As God's infallibly and authoritatively inspired revelation, the Bible reveals the way of salvation in Jesus Christ, requires a life of obedience to the Lord, and provides the key to understanding, interpreting, and finding purpose in life.

In various documents over its half-century of existence Dordt has articulated its mission as an institution in the Reformed theological tradition, committed to promoting student learning for life-long Christian service. From the early statements of Dordt's founders to the comprehensive "The Educational Task of Dordt College," the college's current statement of purpose, (www.dordt.edu/publications/ faculty_handbook/faculty_handbook.pdf) those documents have consistently sounded the same theme. That theme was described most concisely in our mission statement which guides the work of the institutional planning committee:

Dordt College is an institution of higher education committed to the Reformed Christian perspective. It's mission is to equip students, alumni and the broader community to work effectively toward Christ-centered renewal in all aspects of contemporary life. We carry out our educational task by:

- Developing a biblical understanding of creation and culture
- Discerning the pervasive effects of sin throughout our world
- Celebrating and proclaiming the redemptive rule of Christ over all of life and all of creation
- Nurturing a commitment for challenging the forces that distort God's good creation and all of human activity
- Offering academic programs, maintaining institutional practices, and conducting social activities in a visionary, integrated, biblically-informed manner
- Fostering a climate in which discipleship becomes a practiced way of life both on and off campus

A Kingdom Perspective Scripture and creation reveal to us a sovereign God. Nothing exists without him; all things are under his control and find their goal and purpose in his glory. The creation is God's kingdom.

The Bible also tells us that God created humankind in his image. People are covenantally bound to their creator by his law, that calls for loving obedience.

After Adam's fall into sin, humankind, though called to develop and care for God's world, began to treat it as an object of exploitation. Rather than serving the King, people abandoned themselves and the rest of creation to division and strife, misery and death.

But God came to us with his Word of grace. Through the death and resurrection of Jesus Christ, God has reclaimed what had been deformed and distorted by sin. Even though the effects of the fall continue, Christ has rescued the creation from the curse of sin and reigns as King over all. He summons those he has redeemed to work for the expression of his kingdom everywhere.

Serviceable Insight Our mandate to be busy in Christ's kingdom requires that we study, examine, and understand his world. Christian educational institutions must work to gain and transmit insights into the created order.

The Christian's understanding of God's handiwork is distorted by centuries of secularization. Dordt College is faced with the challenge of developing genuine Christian insight - an understanding of the creation illumined by the liberating light of the Scriptures.

Christians in a technological and secular civilization need the ability to distinguish sharply, to think critically, and to judge wisely. Dordt College must provide the kind of insight that enables Christians to carry out their tasks effectively in a complicated world.

Such insight is not merely theoretical. While Christian insight reflects an understanding of the structure and workings of God's created order, it includes other dimensions as well: the practical ability to carry out one's task in loving obedience and service, and the desire to function effectively as a kingdom citizen.

A Christian Curriculum Central to the implementation of the educational task of Dordt College is the curriculum, a basic means for encouraging student learning and transmitting serviceable insight. Those fields of investigation that focus on the structure of the created order form the backbone of education at Dordt College. A curriculum of various academic disciplines, such as language, natural science, and social science, make up the foundation of every student's education at Dordt.

Students at Dordt are also required to study history, philosophy, and contemporary problems in order to gain insight into how mankind has responded to God's call to service within his creation. Through this requirement, students are challenged to discern the spirits of the age and to work for genuine reformation in culture and society.

Dordt seeks to provide insight into the nature and demands of the various vocations and professions. Majors and pre-professional programs form another essential part of the curriculum.

Throughout the curriculum, students are helped to develop the analytic, communicative, artistic, and physical skills that are essential for effective Christian service.

Education for the Whole Person The co-curricular aspects of the college also play a vital role in the implementation of the educational task of Dordt College. Dordt, therefore, seeks to provide a wide range of opportunities that develop and enhance serviceable insight.

Dordt College cannot count itself truly successful if its graduates possess knowledge and skill, yet lack the desire to carry out their tasks in service and loving obedience. The college works to foster this attitude by promoting social and devotional activities. Such activities are not considered mere additions to the academic task; Dordt College attempts to integrate them into a total pattern of curricular and cocurricular activity, all of which provide the student with serviceable insight.

## The History

Dordt College had its beginning in 1937 with the circulation among midwestern Christian Reformed Churches of proposals and recommendations regarding the establishment of a Christian college. World War II put an end to these discussions; however, after the war, the movement gained new impetus due to the critical shortage of qualified teachers for Christian schools in the area.

The college was organized in 1953 as the Midwest Christian Junior College. Under this name, instruction began in September 1955 with 35 students and five faculty members. In 1956 the name of the college was changed to Dordt College.

In 1961 the decision was made to expand to a four-year college. In September 1963 the junior class was added, and in 1965 the first class of students received the B.A. degree.

Dordt College grew rapidly in the '60s and '70s. By 1965 enrollment had topped 500 and continued growing steadily to an enrollment of 1218 by 1978. In the same period the campus grew from one to more than a dozen buildings. Today Dordt enrolls more than 1300 students and occupies a wellequipped, 115 -acre campus.

Dordt also has expanded its offerings over the years. Founded primarily to train teachers, Dordt was graduating students in a number of the liberal arts by the late 1960s. In 1969, the first courses in business administration were offered, marking a move toward combining a "liberal" education with "practical" instruction. Others that followed this precedent were agriculture, engineering, nursing, and social work. In 1993 Dordt College added a master of education degree to its associate's and bachelor's degree offerings. The current curriculum includes more than 90 programs, taught by more than 70 faculty members.

## Accreditation

Dordt College is accredited by The Higher Learning Commission as a four-year, bachelor degree granting institution. Dordt's HLC accreditation dates from 1971, with the most recent renewal in 2001. The college also gained HLC approval in 1994 to offer a graduate program leading to the master of education degree.

The Iowa Department of Education has approved Dordt's program of teacher education. Graduates of the teacher education program are recommended for the first level of licensure granted by the state of Iowa. Approval has also been granted to offer a master of education degree.

The Dordt College social work program has been accredited since 1986 by the Council on Social Work Education.

The Dordt College engineering major has been accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET) since 1991. The engineering science major and engineering technology major have not been examined or accredited by ABET.

The Dordt College nursing major has been accredited since 2007 by the Commission on Col-

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Ph. (515) 281-3245
Council on Social Work Education
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Alexandria, VA 22314
Ph. (703) 683-8080
Fax (703) 683-8099
Accreditation Board for Engineering and Technology, Inc. 111 Market Pl., Suite 1050
Baltimore, MD 21202
Ph. (410) 347-7700
Fax (410) 625-2238
Commission on Collegiate Nursing Education
One Dupont Circle NW, Suite 530
Washington, D.C. 20036-1120
Ph. (202) 887-6791
Fax (202) 887-8476
www.aacn.nche.edu
lege Nursing Education (CCNE).
The college is also approved to train veterans under Public Law 550, war orphans under Public Law 634, and students from foreign countries.

## Policy of Nondiscrimination

The commitment of Dordt College to nondiscrimination on the basis of age, color, disability, gender, national or ethnic origin, or race in the administration of its admissions, education, and employment policies is consistent with the requirements of the Age Discrimination in Employment Act of 1967, Title VI of the Civil Rights Act of 1964, Title IX of the 1972 Education Amendments, Section 504 of the Vocational Rehabilitation Act of 1973 and the Iowa Civil Rights Act of 1965. Inquiries concerning compliance should be directed to the vice president for business affairs at the business office, 712-722-6010.

## Accessibility for Students with Disabilities

Dordt College is committed to offering equal access to people with disabilities. The college has established the position of Coordinator of Services for Students with Disabilities (CSSD) in order to assist students with disabilities desiring to enroll at the college. A student with a disability should contact the coordinator approximately six months before the start of the semester of admission or as early as possible to ensure the accessibility of classrooms and housing and the availability of auxiliary aids. The student will be asked to provide appropriate documentation of the disability that is no more than three years old so that the current impact of the disability is addressed. The coordinator uses the documentation to develop an individual plan with each student, implementing necessary services and accommodations. Accommodations may not lower course standards or alter degree requirements, but provide students with disabilities an equal opportunity to learn and demonstrate their abilities.

Certain facilities on campus are not fully accessible to people with disabilities, but Dordt College does adhere to the accessibility standards of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 by ensuring the student's program and learning environment, when viewed in their entirety, are accessible to people with physical disabilities.

## Campus Life

As a Christian institution, Dordt College aspires to be a community of faculty and students committed to the study and evaluation of the various branches of learning in the light of the Bible, God's infallible Word. The life of this community has both its academic and social aspects, and in both of these all members of the Dordt College community seek to glorify the triune God.

In accordance with the Christian aim of Dordt College, students are expected to express the Christian faith positively in their general conduct and life style. It is not the purpose or intention of Dordt College to lay down minute regulations for the daily conduct of its students. By their applications for admission and their decision to attend Dordt College, students certify that they intend to live according to the Christian aims and policies of the college. Though admission to Dordt College is the rightful privilege of its constituency, that privilege may be readily withdrawn should the student fail to maintain proper standards of conduct or scholarship.

Students are expected to attend church services each Sunday. Students who are not able to attend their home church are asked to select one of the local churches as their church home.

Chapel is held once a week to provide opportunity for students, faculty, and staff to join in meditation upon the Word of God. All students are expected to attend chapel regularly, not out of compulsion, but out of recognition of the need for spiritual nourishment and refreshment.

Each school year begins with the college retreat at Lake Okoboji. This is followed throughout the year by Bible study groups, lecture series, mid-week praise and worship, residence hall devotions, etc. Recognizing the importance of the spiritual aspect of student life, the college also provides pastoral counseling for students. Members of the Student Services staff meet with and help students with questions and problems that may be troubling them. Thus, the college seeks to maintain and develop a vibrant spiritual climate on campus in the context of which the work of Christian scholarship may be effectively carried on.

## Student Activities

Student Government Student Symposium is the student government organization on the Dordt College campus. It represents the student body and helps all students fulfill their office. Student Symposium consists of 18 students. These students represent the academic divisions, major campus groups, and come from all areas of the residential campus. Each of these students serves on a college committee and participates in the major decision-making processes of Dordt College. Student Symposium meets regularly to discuss issues of concern to the Dordt College community.

Athletics Dordt College is a member of the National Association of Inter-collegiate Athletics (NAIA) and the Great Plains Athletic Conference. As a member of the NAIA, Dordt College teams are eligible for post-season tournament play. Dordt plays a full schedule of games with colleges in Iowa, Nebraska, Minnesota, and South Dakota. Intercollegiate competition for men is scheduled in baseball, basketball, cross-country, football, golf, soccer, and track. Competition for women is scheduled in basketball, crosscountry, soccer, softball, track, and volleyball.

Intramurals A year-round program of intramural sports gives all students an opportunity to take part in recreational activities, both competitive and non-competitive. The intramural program is planned and supervised by the student intramural council. Recreation is provided through such activities as badminton, basketball, bowling, softball, volleyball, racquetball, soccer, golf, floor hockey, sand volleyball, and pool.

Club Sports Students have organized a number of sports clubs that supplement the regular program; some allow for intercollegiate competition. Soccer, hockey, volleyball, men's and women's lacrosse, and wrestling are examples of the types of club sports that have been organized in previous years. Additional clubs may be organized as student interest demands. The club sports program is supervised by the Health/PE/Recreation department.

Clubs A number of clubs are organized to provide outlets for students with special interests. Student groups apply for club status and club funding by submitting applications to the Student Symposium.

\author{
List of Active Clubs and Organizations <br> Agriculture Club <br> American Society of Mechanical Engineers <br> A Mission OutReach (AMOR) <br> Astronomy Club <br> Book Club <br> Comedy League <br> Computer Club <br> Creation Care Club <br> Criminal Justice Club <br> Dance Team <br> Defender Capital Management Club <br> Dordt Crossings Club <br> Faith and Film Club <br> Future Business Executives (FBE) <br> Future Physician's Club (Pre-Med Club) <br> Hands Lifted Up - Outreach and Signing <br> Institute of Electronic and Electrical Engineers (IEEE) <br> ```
Justice Matters Club <br> Life Club <br> Monday Morning Coffee Club <br> Noir Club <br> Non-Partisan Politics Club <br> Nursing Club <br> Philosophy Club <br> Positive Airwaves <br> Pre-Law Club <br> Presbyterian Student Fellowship <br> Psychology Club <br> Putting Love Into Action (PLIA) <br> Sioux Falls Prison Ministry Club <br> Social Work Club <br> Students Without Borders-Cross-Cultural Club <br> The Treblemakers (Women's Vocal) <br> WISE Club

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Social/Cultural Activities The college schedules a variety of activities throughout the year. Students are encouraged to participate in campus events as an important part of college life.

In addition to club activities, athletics, and musical activities, various groups plan a number of social events. Students are encouraged to attend the fine arts festivals, the college-sponsored travelogue series, the annual music festival, the Christmas banquet, the Talent Extravaganza, the Spring Fling Festival, or many of the other school activities organized by student representatives.

Drama Several dramatic productions are given each year. All students who wish to participate are encouraged to audition. Opportunity is also given to participate in other forensic activities.

Musical Activities Vocal and instrumental groups contribute to the social and cultural life of individual students and offer opportunity for professional training and credit toward graduation. Current groups include the following:

Campus Community Band-All new students, as well as upperclassmen may audition for membership in the Campus Community Band, an organization that studies representative symphonic band literature and performs several local concerts each year.

Chamber Orchestra-The Chamber Orchestra consists of string players who study chamber music literature, perform several local concerts each year, and tour extensively. Membership is by audition.

Chorale-All new students, as well as upperclassmen, may audition for membership in the Chorale, a group that studies representative choral literature and performs several local concerts each year.

Concert Band-Band members, chosen by audition, study representative symphonic band literature, perform several local concerts each year, and tour extensively.

Concert Choir-Each year the Concert Choir presents a number of local concerts and tours extensively. Membership in the choir is open by audition.

Ensembles-Various small ensembles are organized each year to perform small ensemble literature. A variety of performance opportunities is available.

Jazz Band-Membership is by audition. Unless other arrangements are made, all players must also be members of the Campus-Community Band or Concert Band.

Northwest Iowa Symphony Orchestra-Chamber Orchestra members have automatic membership in this large full symphony orchestra;. membership is open to wind and percussion students by audition. NISO performs three concerts each year.

Women's Chorus-Membership is open by audition. The Chorus presents several local concerts each year.

\section*{Student Publications}

Dordt College Diamond, the school newspaper, published biweekly by the students.
The Signet, an annual student publication-issued in the summer.
The Canon, the creative literary publication in the arts.

\section*{Student Services}

Counseling Counseling services are offered to the Dordt community as a program of the Office of Student Services. These services are designed to promote and enhance responsible academic activity and to meet the individual counseling needs of the community. Trained counseling personnel are available to assist students with their social, emotional, spiritual, and vocational needs. Referral services to offcampus agencies are also available through the counseling staff.

Career Services The career services office provides help for students seeking vocational direction for their lives. Several computerbased tests are administered, and results are immediate. A resource library offers a wide variety of career information. The career services office sponsors the Peer Counseling program, that orients students to college and gives them academic and career advice specific to Dordt College.

Job Placement Assistance The Career Services office also offers formal placement services for all students graduating with either a fouryear or two-year degree. Placement services include arranging on- and offcampus interviews and maintaining student placement records. The services available to the student include resumé writing, job application procedures, interviewing skills information, job vacancy listings, and services for students interested in graduate school programs.

\section*{Housing}

All unmarried students who are not 22 years of age by September 1, 2010, are required to live in Dordt College housing unless they live at home with a parent or guardian. Those students who wish to live with other relatives must receive approval from the Associate Provost for Co-Curricular Programs prior to making other arrangements for housing. The student life committee may grant exceptions to this general policy where circumstances make it advisable. All requests for exceptions must be presented in writing to the Associate Provost for Co-Curricular Programs prior to the academic year. Mid-year requests will not be considered unless extenuating circumstances exist. Dordt/St. Luke's students in their first and second years in the St. Luke's program are considered full-time students with regard to the residency policy.

Rooms for incoming freshmen and transfer students are reserved in advance upon receipt of the \(\$ 100\) enrollment deposit that all first-time students must pay. Rooms for returning upperclassmen are reserved in advance upon receipt of a \(\$ 150\) security/damage deposit. These deposits are non-refundable and nontransferable. The enrollment deposit becomes the student's security deposit when enrolled. The security deposit will be refunded in June, 2011, if no fines have been levied, such as parking, overdue library books, room damage, and there are no outstanding bills such as tuition due the college.

While the college is responsible for housing all unmarried students, such students do have a measure of choice in regard to roommates. However, the college reserves the right to make housing adjustments when necessary. Married students are expected to make their own housing arrangements. Information about available apartments for married students can be obtained from student services.

Housing Regulations Rooms are furnished with necessary articles of furniture, such as beds, mattresses, desks, chairs, and dressers. Students provide their own blankets, linens, bedspread, pillows, towels, and wash cloths. Every room is furnished with a telephone connection. All residence halls are equipped with network connections in individual rooms. Individual rooms are not furnished with computers or telephones. Students must register their computer in order to gain access to the campus computer network. Each student, by applying for a room and paying a security/damage deposit, obligates himself or herself to college housing for the entire year or for such portion of the year as he or she may attend Dordt College. Room contracts terminate at 8:00 a.m. on Friday, December 17, 2010, at the end of the fall semester and at 1:00 p.m. on Friday, May 6, 2011, at the end of the spring semester. Students must be out of their residence by that time. Graduating seniors must be out of their residence by 7:00 p.m. on Saturday, May 7, 2011.

The charges set by the college do not include Christmas and spring vacation periods, when the dining hall and the residence halls are closed. The college encourages students to either go home or to a friend's home during these vacation periods. Students who do not live in or near Sioux Center may make arrangements to pay an extra fee to stay in college housing over break.

Rooms of students in any college owned residence are open for college inspection at any time. The student is held responsible for any damage to his or her room, residence complex, or furnishings. Each residence hall is under the supervision of an area coordinator and resident assistants. Students are responsible to the residence life staff, and they are expected to abide by all college-determined housing regulations in addition to those listed in this catalog. For a more complete statement of policies regarding student housing and student conduct, see the student handbook.

Meals All students living on campus, except third- and fourth-year students assigned to apartment style residences, are required to take their meals through college food service unless exempted by the college. Regular cooking is not permitted in the college residence halls.

\section*{Admissions}

\section*{Freshman Admission}

Dordt College seeks applicants who want to attend a Christian college and who have demonstrated the desire to learn. All students exhibiting these characteristics will be considered for admission. Previous academic experience is a large, but not the only, factor in evaluating applications.

The executive director of admissions determines admission for all freshmen students after the following items have been received:
1. A completed Dordt College application for admission
2. A final high school transcript
3. ACT or SAT test results.

Regular Admission Applicants are normally granted regular admission status if their academic record demonstrates the following:
1. A minimum of 17 units of high school credit. A subject pursued for one school year of 36 weeks with five class periods per week is considered one unit. At least ten units must be from the subjects listed under the "recommended high school program" below.
2. A college-preparatory course of study with:
-3 years (minimum) of English
-2 years (minimum) of mathematics (must be in algebra and/or geometry)
-2 years of foreign language in a single language with grades no lower than ' C ' in the second year. International and ESL students meet this requirement if they receive a passing score on the Entrance Interview.
3. A cumulative high school GPA of 2.25
4. ACT or SAT I test score as follows:

ACT: English-18 Math - 18 Composite-19
SAT I: Critical Reading - 460 Math - 460 Writing-460 Composite-1380
Admission with Special Provision Applicants with incomplete admissions records or applicants with high school records or test scores that do not meet all regular admission standards may be granted admission with special provision. In the case of incomplete records, receipt of the complete record may result in a change of admission status. Students who were unable to take the ACT or SAT I prior to enrollment will be required to take the ACT after arrival on campus. The results of this test may affect the student's status.

All students admitted who have not had at least two years of high school foreign language will be required to study foreign language at the 100 -level at Dordt. Students pursuing a bachelor's degree must complete the foreign language requirement prior to fulfilling the cross-cultural requirement.

Students admitted who do not meet the specified score on the ACT or SAT I test will be required to take additional preparatory courses either during the summer prior to the freshman year or during the freshman year. These courses give the necessary background in English and mathematics to do college-level work. For details see the descriptions of English 100 and Mathematics 100 in the Academic

\section*{Offerings section of the Catalog.}

Students who are admitted with a high school GPA below 2.25 or a composite ACT score below 19 (SAT I combined score below 1380) will be admitted to Dordt through the Aspire Program. This program includes diagnostic testing, study skill seminars, academic and career counseling, and other services designed to help students adjust to college life. See page 17 for details on the Aspire Program.

Applicants being considered for admission with a composite ACT score below 17 (SAT I combined score below 1215) will be required to take part in a personal admissions interview.

Other background deficiencies not specifically listed here will be handled on a case-by-case basis.

\section*{Recommended High School Program}

The type of courses and programs that students select in high school will affect how well they adjust to college work. Ideally they should take the following:

English/Language Arts . . . . . . . 4 years
Mathematics . . . . . . . . . . . . . . . 3 years
One year of algebra, one year of geometry, one year of advanced algebra or advanced mathematics; four years of mathematics is recommended for students considering majors in mathematics, computer science, engineering, physics or other science programs.
Science . . . . . . . . . . . . . . . . . . 2 years
Including biology, chemistry, or physics; nursing and agriculture students should take chemistry; three years of science is recommended for students considering majors or programs in science.
Social Science . . . . . . . . . . . . . . 2 years
Foreign Language . . . . . . . . . . . 2 years
Three or more years of foreign language in one language, with grades no lower than ' C ' in the final year of study, may satisfy Dordt's cross-cultural requirement provided the student can show evidence of an appropriate cross-cultural experience. (See Core Program Course Requirements, page 35)
Electives
4 years
College preparatory courses from areas listed above.

\section*{Nondiscrimination Policy}

Dordt College's commitment to nondiscrimination on the basis of age, color, disability, gender, national or ethnic origin, or race includes nondiscriminatory access to college programs and activities and treatment therein. Inquiries should be directed to the provost's office.

\section*{Making Application}

Application for admission should be made well in advance of the semester a student wishes to enter Dordt College. To make a formal application for admission, candidates are requested to go to www. dordt.edu and fill out the on-line application or write to the Executive Director of Admissions requesting application forms.

Students will be considered for admission after they have submitted the following official forms:
1. Application for admission
2. Transcript of high school record
3. ACT or SAT results

Accepted students are to pay a \(\$ 100.00\) enrollment deposit within 21 days of the acceptance date. The enrollment deposit serves as a declaration of intent to enroll and reserves housing. If requested in writing, it is refundable until May 1. This enrollment deposit becomes the student's security deposit when fully enrolled. This deposit will be refunded when the student terminates attendance at Dordt if no fines have been levied, such as overdue library books, room damage, and there are no outstanding bills such as tuition due the college.

\section*{Entrance Test}

Applicants for admission are also required to submit the results of the ACT or SAT. Applicants who are not able to take the ACT or SAT may be considered for admission but will be required to take the ACT after enrollment.

\section*{Notification of Admission}

As soon as the required forms have been received the office of admissions will evaluate them. Admission will be granted as follows:

General Admission- Students whose records indicate that they are able to pursue college work are granted general admission.
Admission with Special Provision- Students whose records indicate that they might have serious difficulty pursuing college work or who have not met all admission requirements, are granted special admission.

\section*{Readmission}

Former students who seek readmission must initially contact the office of admission. Students who have been away from college for more than one semester must meet the requirements stated in the current catalog.

\section*{Transfer Admission}

Students who have attended another accredited institution of collegiate rank may be considered for admission with advanced standing. College credits presented by transfer students will be evaluated in terms of the quality of the student's work and the relationship of the subject matter to the Dordt curriculum. A minimum grade of C - is required in each course to receive credit.

Students who plan to transfer to Dordt College are encouraged to contact the registrar as soon as possible so that course planning may take place and optimal use of courses and credits will occur. A maxi-
mum of 30 semester hours of credit (two semesters) may be granted for CLEP, AP, or other college level courses earned prior to receiving a high school diploma. A maximum of 61 semester hours of academic credit (four semesters) is granted to graduates of community colleges. (See also the Residence Requirement section of the catalog.) The registrar evaluates transfer credits. Admission to advanced standing does not exempt a student from meeting the specified requirements for graduation from Dordt College.

After the application materials have been evaluated, students will receive notification of credits accepted, student classification, and academic status. Student classification and academic status are assigned following the policies governing all students at Dordt College.

Regular General Admission The executive director of admissions determines regular general admission for transfer students after the following items have been received:
1. A completed Dordt College application for admission and a non-refundable \(\$ 25.00\) (U.S. funds) application fee
2. An official high school transcript
3. An official college transcript. Transfer candidates must request that the registrar at each collegiate institution attended forward an official transcript; transcripts submitted by the candidate are not acceptable. The college transcript must show a cumulative GPA of 2.0 or above for regular general admission.
4. ACT or SAT results

Admission with Special Provision Students who do not meet the minimum academic requirements for admission may be granted admission with special provisions, if warranted by the total academic record of the student. Special admission may require the following:
1. A contract approved by the Academic Skills Center director, that may include developmental courses or workshops
2. A limit of 15 credits for the first semester of attendance

Approval for and status of admission is decided by the executive director of admissions in consultation with the academic standing committee.

\section*{Special Students}

Students who do not plan to follow a prescribed course of study leading to a degree may register as special students for courses they wish to pursue on the basis of their qualifications.

Permission to register as a special student must be obtained from the registrar.

\section*{Admission of International and ESL Students}

An official score of at least 500 on the paper-based TOEFL (PBT), 173 on the computer-based TOEFL (CBT), or 61 on the internet-based TOEFL (iBT); or a 5.0 on the IELTS is required for admission for all non-native English-speaking students. Non-native English speakers who have lived and have been schooled in English speaking countries for seven years or more or who have taken either the ACT or SAT may be exempt from this requirement. With the exception of Canadians, all international and

ESL students are required to take the Entrance Interview for International/ESL Students administered during International/ESL Student Orientation (ISO). This interview serves to evaluate students' previous educational experience and to ensure their successful introduction to Dordt's educational program. The results of this interview also will determine whether or not an international/ESL student will be required to take English for Academic Purposes (EAP) courses. For native speakers of a language other than English, a passing score on the Entrance Interview will meet the general admissions foreign language requirement (see Regular Admission) and the cross-cultural requirement (see page 35). Students who do not receive a passing score on the Entrance Interview for International/ESL Students must successfully complete the English for Academic Purposes courses, EAP 101 and EAP 102, during the first semester of attendance at Dordt to satisfy these requirements.

In addition to participating in the freshman orientation days at the beginning of the fall semester (see page 18), international/ESL students participate in the International/ESL Student Orientation (ISO), which takes place Thursday, August 19 through Saturday, August 21, 2010, preceding the freshman orientation days. ISO creates an opportunity for international/ESL students to experience fellowship, establish community, and gain successful entrance to the Dordt College community. International/ESL students should plan to arrive on campus Wednesday, August 18, to move into residences and be ready to participate in ISO the next day.

\section*{Academic Support Services}

Aspire Program The Aspire Program provides an opportunity for motivated students who have the potential to be successful at Dordt but who do not meet the regular admission standards to benefit from a Dordt education. Inclusion in the program is determined by the executive director of admissions in consultation with the director of the ASK Center and is based on high school grades and courses, ACT/ SAT scores, and a personal interview.

Students admitted to the Aspire Program are offered the following aids to academic success:
- A limit of 15 credits in their first semester of attendance
- Assessments in reading and learning skills during orientation
- Placement in one or more college competency courses if ACT/SAT scores in English/Writing and/or Mathematics are below the 18/460 required for general admission
- A contract outlining strategies designed to assist them in achieving academic success
- Tutorial assistance
- Academic and career counseling
- Weekly conferences with an academic coach, either with an ASK Center professional or each student's Learning Community Assistant

Students with Special Needs Dordt College makes available academic support for students with special learning needs such as sensory impairments, physical and health problems, and learning disabilities. For more information contact the Coordinator of Services for Students with Disabilities (CSSD).

Students who believe that they need academic support should notify the CSSD as soon as possible. Ideally, this should occur during the application process. Accepted applicants will be asked to provide relevant assessment information so that appropriate academic support can be planned. If prior assessment information is not available or is more than three years old, the applicant will be encouraged to
have such an assessment done. This type of assessment can usually be obtained in the student's school district, at no cost, if the student is currently enrolled in a K-12 school.

Students who request academic accommodations after they have enrolled as students at Dordt College will also be asked to provide assessment information that confirms the existence of the special need such as a learning disability. Where such assessment information is not available, the student will be encouraged to have appropriate assessment performed.

\section*{Freshman Orientation}

The freshman orientation program introduces beginning college students to the task and calling of the Dordt College student through learning experiences in goal-setting, self-assessment, advising, campus life, learning skills and abilities, institutional expectations, available resources, and building community. In addition to freshman orientation days at the beginning of the fall semester, this program includes peer counseling and targeted academic skills support during the first semester of college. Freshman students must plan to arrive on campus on Saturday, August 21, 2010, for the freshman orientation program.

\section*{Registration}

Registration takes place at the beginning of each semester. Students will be sent instructions and appointments several weeks prior to the registration dates.

Registration is not completed until tuition and fees have been partially paid. A late registration fee is charged if registration is not completed on the designated registration day each semester.

\section*{Finances}

\section*{Expenses}

The cost of attending Dordt College is kept as reasonable as possible. Tuition covers only a part of the cost of education. Each student receives the benefit of finances obtained from individual gifts, church offerings, and denominational ministry shares.
Tuition. Per Semester Per Year
Full-Time \$11,400 ..... \$22,800
Part-Time, per credit* ..... 950
Overload Fee per credit over 18.5 credits per semester ..... 235
Summer tuition rate, per credit (1-6) ..... 235
Auditing, per credit ..... 235
Visitor, per credit ..... 75
*Students taking 8 credits or less will receive a part-time student grant of \(\$ 380\) per credit hour.
Room and Board
Residence hall room (semi-private) (includes \(\$ 100\) in Defender Dollars**)... 1,665 ..... 3,330
Apartment style residence (includes \(\$ 200\) in Defender Dollars**) ..... 2,300. ..... 4,600
Board-college 21-meal plan ..... 1,595 ..... 3,190
Board-college 15-meal plan 1,470. ..... 2,940
**The Defender Dollars program is a flexible spending account that can be used at any on-campus dining service location.
Fees
Student Activity Fee***. ..... 190 ..... 380
Late registration ..... 25
Enrollment deposit*** ..... 100
Application fee ..... 25
Off-campus program administrative fee. ..... 190
Music lessons, individual*** ..... 235
group*** ..... 120
Medical insurance***
student \({ }^{+}\). ..... 585
student/spouse \({ }^{+}\) ..... 2,340
student/child \({ }^{+}\). ..... 1,755
student/spouse/child \({ }^{+}\) ..... 3,510
Service charge for returned checksU.S. checks20
Canadian checks ..... 30
***See pages 20 and 21 \({ }^{+}\)subject to change when final rates are negotiated

Activity Fee Items included: athletic events, co-curricular activities, game room, graduation fee, intramurals, access to student health services, movies, music rentals (tux, formals, instruments), placement fee, yearbook, student teaching, technology fee, transcripts, vehicle registration, recreation complex use, and access to the All-Seasons Center. Items excluded: ACT testing, banquets, club-sponsored events, dances, financial aid fees, matriculation fee, music lessons, occupational testing, retreat, Talent Extravaganza, theatre arts activities, travelogues.

Enrollment Deposit All students who register for the first time at Dordt must pay a \(\$ 100\) enrollment deposit. This deposit serves as a declaration of intent to enroll and reserves housing. If requested in writing, it is refundable until May 1 . This enrollment deposit becomes the student's security deposit when enrolled. The security deposit will be refunded when the student terminates attendance at Dordt College if no fines have been levied, such as parking, overdue library books, room damage, and there are no outstanding bills such as tuition due the college.

Music Lessons The following students qualify for individual lessons priced at half the normal fee: - music majors who have successfully completed 54 college academic credits and passed Music 203
- music minors whose program requires more than four semesters of lessons and who have completed four discrete semesters of lessons.
Half fees do not apply to group lessons or piano proficiency lessons.

Payment of Accounts Charges for tuition, room and board, and fees are due and payable at the beginning of each semester. A finance charge of .75 percent per month ( 9 percent annual percentage rate, accrued monthly) is charged on all unpaid accounts. For the convenience of students and parents wishing to pay their college expenses in installments, a deferred payment plan is offered.

Accounts must be paid in full by November 1 for fall semester and April 1 for spring semester. Students may not validate their registration for a new academic term if their account balance is not paid in full. The college will withhold diplomas, transcripts and grade reports until accounts are paid in full.

Related Expenses When determining the amount of financial assistance necessary, Dordt College includes the average cost of books, travel, and personal expenses. Depending on the student's grade level and chosen major, the cost of books ranges from \(\$ 400\) to \(\$ 1,010\) per year. Travel expenses vary from \(\$ 1,300\) to \(\$ 2,210\), depending on the number of times the student goes home, the distance of the student's home from the college, and the mode of transportation used. Personal expenses range from \(\$ 700\) to \(\$ 2,100\), depending on the student's lifestyle.

Part-Time Adult Learner Program Dordt College has established a special financial aid program for the adult learner. To be eligible for the program, students must be 25 years of age prior to the first day of classes and classified as a part-time student. This program is not available to persons who have attained a bachelor's degree. The adult learner must not have taken a college course in the last 10 years. The Financial Aid for Part-Time Students/Adult Learner Students Form must be completed.

Students eligible to participate in the Adult Learner Program receive their first course at no cost. Per credit charges for subsequent classes are at the regular part-time student rate with the applicable parttime learner grant if taking 8 credits or less per semester. Adult learners may also be eligible for state or
federal loans and financial aid.
Students should consult admissions to determine their eligibility for the program and the registrar for evaluation of transfer credit.

Student Medical Insurance A hospital/medical insurance policy is available to all full-time students. Premiums, listed above, cover the 12 -month period from August 20 to August 19. Plans are also available for married couples and families. If a student does not wish to participate in the plan, proof of alternate insurance coverage is required. All international students, except those from Canada, are required to purchase medical insurance. Additional information is available from the student services office.

Refund/Repayment Policy If a student completely terminates enrollment (i.e., cancels his/her registration, withdraws, or is dismissed) during the semester, the student's refundable charges and financial aid will be prorated if he/she has been enrolled for less than or equal to 60 percent of the semester. If a student has been enrolled for more than 60 percent of the semester, he/she is not eligible for a reduction in charges. The following costs are refundable by the terms of this policy: tuition, room, board, and student activity fee. Credits provided for the Defender Dollar program and all other charges are nonrefundable.

The withdrawal date is the later of (1) the date the student begins the withdrawal process by providing official notification (oral or written) of the intent to withdraw; or (2) the student's last date of attendance at an academically related activity. A student who wishes to withdraw must contact the office of student services to initiate and complete the appropriate paperwork.

The percentage of the semester completed is calculated by dividing the number of days enrolled by the number of calendar days in the semester, including weekends and holidays, but excluding breaks of five or more consecutive days. For example, if there are 107 calendar days in a semester and a student's withdrawal date is on the 50th day, his/her refundable charges and financial aid will be prorated to reflect that he/she has been enrolled for 46.7 percent of the semester ( 50 days divided by 107 days).

Recipients of Federal Title IV Financial Aid If the withdrawing student is a recipient of Federal Title IV financial aid, the amount of Title IV assistance the student earned must be compared with the amount disbursed.

The amount of Title IV assistance earned is calculated as follows: Percentage of Title IV financial aid earned (percentage of semester completed) times amount of Title IV aid disbursed (or that could have been disbursed) as of the withdrawal date equals amount of Title IV funds earned.

If the withdrawing student received less Title IV financial aid than the amount earned, the college will make a post-withdrawal disbursement as specified by the Department of Education.

If the withdrawing student received more Title IV financial aid than the amount earned, the college, or the student, or both, must return the unearned funds, as required, in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, Perkins Loan, PLUS Loan, Pell Grant, SEOG Grant, and LEAP funds.

If the student is required to return federal grant funds, he/she will have 45 days from the date of notification to pay the amount in full or to make satisfactory arrangements for repayment with the college or the Department of Education. Failure to repay or make arrangements within this time will result in a loss of eligibility for all federal aid for attendance at any college until amount is paid in full.

A copy of worksheets showing details of the required treatment of Title IV funds when a student withdraws and examples of the application of this withdrawal refund/repayment policy are available upon request.

\section*{Financial Aid}

In addition to the extensive scholarship program that is based on superior academic potential and performance, Dordt College has a complete program of financial assistance for students demonstrating financial need. Types of financial assistance available include grants, loans, work, and other special programs outlined below.

At Dordt, 98 percent of the student body receives some type of financial aid. Regardless of your income, the only way to know if you qualify is to apply. Financial aid applications may be obtained by writing or calling the financial aid office.

All United States citizens who wish to apply for financial aid must submit the Free Application for Federal Student Aid (FAFSA) as well as the Dordt College Supplemental Data Form. Other supplementary information may be requested of the student through additional forms. All Canadian citizens who wish to apply for financial aid must submit the Canadian Financial Aid Form from Dordt College. All necessary forms may be obtained by writing or calling the financial aid office at Dordt College.

Dordt College Grants Dordt College makes grants available to students in the following groups. In most cases, no financial aid application is necessary.

Alumni Grant This grant is available to students attending full time whose mother and/or father are alumni (attended Dordt the equivalent of at least two semesters full time).

Canadian Grant Dordt College provides a grant to Canadian students in an effort to make Dordt more affordable. For all other expenses (books, personal spending, etc.) students may exchange money through the business office at the current bank exchange rate.

Distance Grant All full-time students who are not from Iowa are eligible for this grant that is based on the student's state of permanent residence. Two semesters of continuous local residence will change the distance grant status unless the student regularly returns to his or her former residence for summer employment or continues to be legally dependent on his or her parents.

Institutional Grant All full-time students who are members of supporting churches and denominations or who are graduates of Christian high schools receive this annual grant.

International Tuition Grant Students from countries other than the United States and Canada may be eligible to receive this grant from Dordt College to help defray costs. Students whose parents are foreign missionaries also may be eligible. The "Foreign Student Financial Aid Application" must be completed in order to determine need and be considered for this grant.

\section*{Grants}

Federal Pell Grant The Federal Pell Grant Program makes funds available to the most needy students. Grants range from \(\$ 555\) to \(\$ 5,550\) and application is made by completing the FAFSA. This program is available to United States citizens.

Academic Competitiveness Grant Students who are Pell eligible and have taken a rigorous program of high school preparation may qualify for an AC grant for their freshman and/or sophomore year.

Smart Grant Students who are Pell eligible and have certain mathematics/science majors may be eligible for a SMART grant in their junior and/or senior year if they have a 3.00 GPA or better.

Federal Supplemental Educational Opportunity Grant The purpose of this program is to provide non-repayable grants to students who, because of exceptional financial need on the part of their family, would be unable to attend college without such assistance. Students who are citizens of the United States are eligible. Grants will range from \(\$ 200\) to \(\$ 4,000\) per year.

Heritage 21 Grant This grant is provided by the college to all students, regardless of citizenship, who have financial need that cannot be met with other grant programs. Grants range from \(\$ 200\) to \(\$ 6,000\) per year.

Century Need-Based Scholarship This aid is a combination grant/scholarship program. Two criteria must be met: good grades and financial need. This scholarship ranges from \(\$ 200\) to \(\$ 2,000\). Because of limited funds under this program the money will be disbursed very selectively. Not every good student with high need will receive these funds.

\section*{Loans}

Perkins Loan This program provides long-term loans to students who are citizens of the United States. Applicants must show financial need to be eligible. No interest is charged on the loan while the student is in college. The loan may be repaid over a period of ten years with a minimum repayment of \(\$ 40\) per month required. Interest is at the rate of 5 percent per year. Repayment may be deferred for as long as a borrower is serving in the Armed Forces, with the Peace Corps, or VISTA. Repayment is also deferred for as long as a borrower is enrolled at an institution of higher education and is carrying at least a half-time course load.

Heritage 21 Loan This loan is provided by the college to all students with need, regardless of citizenship. No interest is charged while the student is enrolled as a full-time student at Dordt College or at another recognized college or university. Interest and principal payments will begin four months after the last month of attendance at Dordt or at another recognized college or university, with a maximum deferment of five years allowed for attendance at another institution. Interest rates on funds borrowed will vary according to the number of years of study completed at Dordt. For a student who has completed four years of study the interest will be three percent; three years, four percent; two
years, five percent; and one year, seven percent. All loans must be repaid within ten years from the time of the last month of attendance as described above. Minimum payments will be \(\$ 50\) per month and will be payable to the business office at Dordt College.

Federal Direct Stafford Loan (Subsidized) Allows students who demonstrate federal financial need and who are enrolled for at least six credits each term to borrow up to \(\$ 3,500\) for the first year of undergraduate study, \(\$ 4,500\) for the second year, and \(\$ 5,500\) per year for subsequent undergraduate study. The interest rate is currently fixed at \(4.5 \%\). Interest does not accrue nor does repayment begin on subsidized Direct Loans until termination of college enrollment on at least a half-time basis. Interest accrued during in-school and the grace period is paid by the federal government. The standard repayment period is up to ten years. Subsidized Direct Loans carry a \(1.5 \%\) federal origination fee and an up-front interest rebate equal to \(1.0 \%\) of the loan amount. New borrowers must complete a Federal Direct Loan electronic master promissory note and complete an online Entrance Counseling Session to borrow funds through this program.

Federal Direct Stafford Loan (Unsubsidized) Allows all students regardless of federal financial need and who are enrolled for at least six credits per term to borrow up to \(\$ 5,500\) for the first year of undergraduate study, \(\$ 6,500\) for the second year, and \(\$ 7,500\) per year for subsequent undergraduate study less the amount of any subsidized Direct Loan received by the student. New borrowers must complete a Federal Direct Loan electronic master promissory note to borrow funds through this program. The interest rate is fixed at \(6.8 \%\) and the origination fee is the same as specified above under the description of the subsidized Direct Student Loan, however, interest accrual begins immediately during in-school and deferment periods. Interest accruing during these periods may be paid or capitalized. Independent students may borrow up to an additional \(\$ 6,000\) per year for the first and second years of undergraduate study and up to an additional \(\$ 7,000\) per year for subsequent undergraduate study through the unsubsidized Direct Loan Program. Dependent students may borrow up to the same additional amounts through this program but only if the student's parent is denied eligibility to borrow funds through the Federal PLUS Loan Program.

Federal Direct PLUS Loan Allows parents of dependent students to apply for as much as the difference between the cost of attendance and the student's financial aid. This loan is not need based, but the parent's credit history may be reviewed to determine eligibility. The interest rate on a Federal Direct PLUS Loan disbursed on or after July 1, 2010 will be fixed at \(7.9 \%\). The PLUS loan should be used only after all other resources have been considered since interest begins 60 days after the first disbursement. Repayment normally begins 60 days after disbursement of the full amount borrowed for an academic year.

Private/Alternative Loans Students who find they still need additional financial aid after other aid has been applied, or students whose families do not demonstrate need, may find an alternative loan a viable option. There are many private loans available with terms and conditions varying. Most do require proof of credit worthiness. You may wish to contact your local lender to see if they participate in a private or alternative loan program.

Canada Student Loan The provincial governments have loan programs that may be used by Dordt students. Information and application forms may be secured through your high school or local bank or by writing to the department of education of your home province. (See below)

ALBERTA
Students Finance
P.O. Box 28000 , Station Main

Edmonton, Alberta T5J 4R4
Telephone: (780) 427-3722 or (800) 222-6485
Fax: (780) 422-4516
http://www.alis.gov.ab.ca

BRITISH COLUMBIA
Ministry of Advanced Education
And Labour Market Developement
P.O. Box 9180, Stn Prov. Gov't

Victoria, British Columbia V8W 9H9
Telephone: (250) 387-6100 or (800) 561-1818
Fax: (250) 356-9455
http://www.aved.gov.bc.ca/studentaidbc/welcome.htm

MANITOBA
School's Finance Branch
401-1181 Portage Ave.
Winnipeg, Manitoba R3G 0T3
Telephone: (204) 945-6321 or (800) 204-1685
Fax: (204) 948-3421
http://www.edu.gov.mb.ca

\section*{NEWFOUNDLAND}

Student Financial Services Division
Department of Education
P.O. Box 8700

St. John's, Newfoundland A1B 4J6
Telephone: (709) 729-5849 or (888) 657-0800
Fax: (709) 729-2298
http://www.edu.gov.nf.ca/studentaid

NOVA SCOTIA
Department of Education
Student Assistance Office
P.O. Box 2290, Halifax Central

Halifax, Nova Scotia B3J 3C8
Telephone: (902) 424-8420 or (800) 565-8420 (only in N.S.)

Fax: (902) 424-0540
http://studentloans.ednet.ns.ca

ONTARIO
Student Support Branch
Ministry of Training, Colleges and Universities P.O. Box 4500, 189 Red River Road, 4th Floor Thunder Bay, Ontario P7B 6G9
Telephone: (807) 343-7260
Fax: (807) 343-7278
http://osap.gov.on.ca

PRINCE EDWARD ISLAND
Ministry of Education Skills and Training
2nd Floor, Sullivan Building,
P.O. Box 2000, 16 Fitzroy St.

Charlottetown, Prince Edward Island C1A 7N8
Telephone: (902) 368-4600
Fax: (902) 368-4663
http://www.gov.pe.ca/ial

SASKATCHEWAN
Student Financial Assistance Branch
Saskatchewan Adv. Education \& Employment Box 650, 4635 Wascana Parkway
Regina, Saskatchewan S4P 3A3
Telephone: (800) 597-8278 or (306) 787-5620
Fax: (306) 787-1608
http://www.aee.gov.sk.ca/student-loans

\section*{Student Employment}

College Work-Study Program Dordt College participates in the Work-Study Program that creates part-time job opportunities for students with financial need. These jobs average seven hours per week. Students qualify for participation in the Work-Study Program if they are: 1) United States citizens 2) Able to meet job qualifications 3) In need of financial aid 4) Capable of doing good academic work in college 5) Accepted for admission as full-time students in good standing. Students with required skills and experiences may qualify for jobs in the following fields: clerical assistant, library assistant, typist, custodial work, instructional assistant, kitchen help, agricultural help, and miscellaneous other campus positions. Applications are due July 1.

Work for Institution Program The college provides employment for students who may not qualify for the federal Work-Study Program and yet need employment to assist them to pay for college expenses. Application forms must be completed by July 1.

\section*{Special Programs}

Veterans' Education Benefits Dordt College is approved to offer education to students who are eligible for benefits under the terms of the Veterans' Post 9/11 GI Bill. Eligible students should write to their regional Veterans' Administration Office to obtain the application information. Dordt College also participates in the Yellow Ribbon Program.

Vocational Rehabilitation Benefits Students who, by reason of physical disabilities, are eligible for benefits under vocational rehabilitation programs should write to the Division of Rehabilitation Education and Service in their state.

State of Iowa Tuition Grant Program The Iowa Legislature has established a state tuition grant program for the benefit of Iowa residents attending private colleges within the state. These grants are based on financial need and may be used only for educational expenses. (Application is made by filing the FAFSA.)

Scholarship and Loan Programs-Other States Several states have scholarships or loan programs that may be used at Dordt College. Information on such programs may be obtained from high school counselors.

\section*{Eligibility for Financial Aid}

All freshmen and transfer students who are admitted to Dordt College in good academic standing are eligible for financial aid. Continued eligibility for financial aid is dependent upon both good academic standing and satisfactory progress toward graduation. Eligibility is monitored at the end of each semester. If either good academic standing or satisfactory progress toward graduation is not attained, a student will be limited to one more semester of financial aid. However, a student who receives less than
a 1.00 GPA in any given semester is subject to suspension and will not necessarily be eligible for one more semester of financial aid.

Likewise, students who are admitted on academic probation, including students readmitted after a period of academic suspension, will be limited to one semester of financial aid. Students so limited may receive additional semesters of financial aid if they make satisfactory progress toward graduation and meet a minimum semester grade point average specified by the financial aid office.

Academic Standing A student is expected to maintain a minimum cumulative GPA of 2.00 to graduate. Students needing extra assistance in the form of individual tutors, study skills, time management, etc. should contact the staff of the Academic Skills Center, located in the lower level of the library. Students will be notified when they are not meeting the graduation minimum and will be expected to seek the necessary assistance. Academic standing is determined by the following:
\begin{tabular}{llll} 
& \begin{tabular}{l} 
ACADEMIC \\
ALERT
\end{tabular} & \begin{tabular}{l} 
ACADEMIC \\
PROBATION
\end{tabular} & \begin{tabular}{l} 
ACADEMIC \\
SUSPENSION
\end{tabular} \\
Total Credits & Cumulative GPA & Cumulative GPA & Cumulative GPA \\
Earned & is below & \(\underline{\text { is below }}\) & \(\underline{\text { is below }}\) \\
0 to 24 & 2.0 & 1.6 & 1.0 \\
24 to 54 & 2.0 & 1.8 & 1.4 \\
54 to 84 & - & 2.0 & 1.6 \\
84 or more & - & 2.0 & 1.8
\end{tabular}

For a description of the various academic standings shown above, see the Academic Policies section of the catalog (pages 54-55).

Satisfactory Progress Federal regulations require that students maintain satisfactory progress in order to continue to receive financial aid. Dordt College also requires satisfactory progress for all institutionally controlled financial aid. Poor grades can impinge on a student's financial resources.

Satisfactory progress toward graduation is defined in terms of successfully completing 12 credits (excluding repeated courses) or 70 percent of the credits for which a student is enrolled in a given semester. The minimum percentage of successful completion is calculated by dividing the number of successfully completed hours (i.e., those with a grade of \(\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}\), or P ) by the sum of cumulative hours enrolled (including those courses with WP, WF, or F grades and late grades) and multiplying that number by 100.

Students receiving financial aid must complete their program within the equivalent of six years of full-time enrollment. If a student transfers to Dordt and has transfer hours applied to a program he or she plans to complete at Dordt, progress will be monitored from the point he or she begins at Dordt. For example, assume a student has 62 hours transferred to Dordt. He or she must still earn 70 percent of each semester's earned hours to continue to be eligible for federal and state aid. If the student were enrolling full-time (at least 12 hours), this would indicate that the student must complete his or her degree within \(21 / 2\) years.

If a student loses financial aid eligibility due to consecutive semesters of not making satisfactory progress, the financial aid office will notify the student in writing of the specific procedures and minimum requirements necessary for reinstatement of his or her financial aid for the next semester. In some
instances a student (if allowed to remain in school by the academic standing committee) will receive no financial aid for a semester until grades can prove that once again the student is making satisfactory academic progress. There may also be a situation where a student is in good academic standing or on academic probation, but will not meet the criteria for financial aid (e.g., a student who received three As and two Fs will not meet the 70 percent completion requirement even with a cumulative GPA of 2.40 and being considered in good academic standing).

Students may appeal the loss of financial aid to the director of financial aid when there are special circumstances such as illness or death in the family. The director may grant the appeal after consultation with at least two other staff members from the admissions, student services, or academic offices. Students should be aware that only truly extraordinary circumstances would be considered. Appeal requests must be in writing and must include a statement from a member of the admissions, student services or academic office or a faculty advisor. The written appeal documents will be kept in the student's financial aid file. Should an appeal be granted, the student will be allowed to continue with financial aid for the semester, but will remain in a probation category.

\section*{Scholarships}

Dordt College provides scholarship programs to encourage and recognize students for merit based abilities and talents. Donor funded endowed and annually funded scholarships are also available and growing in number every year. These scholarships financially support students who have specific career goals, are involved in leadership roles, are from specific geographical areas, or have significant financial need. Scholarships are awarded to full time students only. One half of the scholarship monies are applied to the recipients' tuition account each semester. Incoming freshman scholarship applications are due January 15, unless otherwise noted. Continuing students have a February 15 deadline for scholarship application, unless otherwise noted.

\section*{Dordt College Scholarships}

Distinguished Scholar Awards Distinguished Scholar Awards are the most prestigious scholarships offered by Dordt College. Each year twelve students are selected to receive this honor. These \(\$ 11,000\) academic scholarships replace a previously awarded \(\$ 7,500\) Presidential Scholarship. Students accepted by the Dordt College Office of Admissions who have a 3.75 cumulative GPA and a 30 ACT (or 1980 SAT) composite score will be invited to a Dordt College Distinguished Scholar Day in February during which a variety of activities related to academic interests will be presented. A written response to an essay question will be a required activity that day. Students who find it difficult to schedule this visit may write the essay under the supervision of their high school guidance counselor. Distinguished Scholar Awards are renewable for an additional three consecutive years, provided the recipient maintains a minimum 3.50 cumulative GPA.

Dordt College Honors and Presidential Scholarships Dordt College Honors and Presidential Scholarships are academic scholarships awarded on the basis of a student's cumulative GPA and ACT or SAT composite scores. There is no application process and the January 15 deadline date does not apply to these scholarships. Eligibility requirements are a 3.00 cumulative GPA and a 21 ACT (or 1450 SAT) composite score. Dollar amounts range from \(\$ 1,500\) to \(\$ 7,500\) and will be named Honors Scholarships or Presidential Scholarships based on the dollar amount awarded.

Students who received Honors or Presidential Scholarships as incoming freshmen will have their scholarship automatically renewed if they maintain a cumulative 3.00 GPA in their Dordt College courses. Students who lose a Presidential or Honors Scholarship because they were not able to maintain the minimum 3.00 GPA requirement may have their scholarship reinstated at the end of any following academic year, upon regaining the required GPA. Students who did not meet the minimum GPA or ACT/SAT requirements for an Honors Scholarship when they enrolled at Dordt College will be eligible for a first time Honors Scholarship at the end of any academic year, provided they have a Dordt College minimum cumulative 3.00 GPA. The student's Dordt College GPA will determine the scholarship dollar amount.

Dordt College Athletic Scholarships Athletic scholarships for various sports are available to students who contributed significantly to a high school athletic program and intend to actively participate in a Dordt College athletic program. Athletes can be awarded \(\$ 1,000\) to \(\$ 7,500\) for one sport and up to \(\$ 10,000\) total for two sports. Students interested in athletic scholarships should contact a sports coach through the Office of Admissions. Athletic scholarships are renewable provided the student maintains the minimum cumulative GPA required by the NAIA and continues to successfully contribute to the athletic program as determined by the athletic department coaches.

Dordt College Music Scholarships Music scholarships of \(\$ 1,000\) to \(\$ 5,000\) are available for students who have contributed significantly to their high school or community music programs and intend to actively participate in one or more of the following Dordt College music areas: vocal, instrumental, or keyboard. Applicants need not be music majors; however, they must submit an application form and a music instructor's recommendation. Applicants must also audition in their chosen music area(s), following the criteria listed on the Music Scholarship Application. The audition can be accomplished in one of three ways: attending the annual on-campus Music Audition Days, scheduled Friday and Saturday, October 15 and 16, to audition in person (contact the Admissions Office for details); scheduling an appointment with the Admissions Office to audition in person on a Dordt College Campus Visit Day; or by submitting a recorded audition. The selected option must be completed by January 15. Music scholarships are renewable for an additional three consecutive years provide the recipient maintains a minimum 2.00 cumulative GPA and successfully contributes to the music program as determined by the music department directors.

Dordt College Theatre Arts Scholarships Theatre arts scholarships of \(\$ 1,000\) to \(\$ 4,000\) are available for students who have contributed significantly to their high school or community theatre arts programs and intend to actively participate in the Dordt College Theatre Arts program through acting and/or technical work. Applicants must submit an application form, audition materials, and a recommendation letter from a person familiar with their talents and skills in theatre arts. Scholarships are available for theatre majors, minors, and non-majors and are renewable for an additional three consecutive years provided the recipient maintains a minimum cumulative GPA of 2.0 and completes the theatre scholarship requirements. Requirements include taking one theatre course each year and completing required hours in two of the following areas: backstage crew, acting, costume crew, makeup crew, box office crew, set construction or design.

Dordt College Student Publications Scholarships Student publications scholarships of \(\$ 1,000\) to \(\$ 2,500\) are available for students who contributed significantly to the publication of their high school newspaper or to any other publication project. Recipients need not be communication majors; however, they will be asked to enroll in Communication 241, Introduction to Journalism, in the fall of their first semester at Dordt. An application form and a recommendation from a person who can attest to the applicant's abilities in the area of student publications are required. Recipients are expected to participate in the publication of the Dordt College Diamond, a biweekly college student newspaper. These scholarships are renewable for an additional three consecutive years
provided the recipient maintains a 2.00 cumulative GPA and is an active staff member of the Dordt College Diamond, as determined by the newspaper's faculty advisors.

Kuyper Scholarships Dordt College Kuyper Scholars are automatically awarded a \(\$ 2,000\) scholarship. Acceptance into the Kuyper Scholars Program requires a 3.50 cumulative GPA, a 28 ACT (or 1860 SAT) composite score, a completed application form with an entrance essay, and letters of recommendation. Application materials are available from the Dordt College Admissions Office or the Dordt College website. Kuyper Scholarships are renewed if recipients maintain a 3.25 cumulative GPA and successfully participate in the Kuyper Scholar Program as defined by the program advisors.

Transfer Student Scholarships Admitted transfer students are eligible for the following scholarships as previously described for incoming freshmen students.
- Dordt College Honors and Presidential Scholarships
- Dordt College Athletic Scholarships
- Dordt College Music Scholarships
- Dordt College Theater Arts Scholarships
- Dordt College Student Publication Scholarships
- Kuyper Scholarships

\section*{Dordt College Donor-Funded Endowed and Annual Scholarships}

Individual donors, corporations, or foundations with an interest in supporting Dordt College have established over 160 scholarship programs benefiting more than 300 students each year. These scholarships are a vital part of making Dordt College an affordable Christian higher education institution for incoming freshmen as well as continuing students. Donor funded scholarships vary in dollar amounts and in recipient selection criteria. Typically, there is an application process which includes an application form and recommendation, and a scholarship committee that selects the recipients. Sometimes the donors request simply that the Office of Financial Aid and the Office of Scholarships select the most worthy recipient.

Scholarship descriptions and application instructions can be found on line at www.dordt.edu/admissions/financial_aid/. Scholarships are conveniently categorized in the Scholarships for Freshmen section or the Scholarships for Upperclassmen section. Incoming freshman scholarships requiring an application are due January 15, unless otherwise noted. Continuing students have until February 15 for scholarship application, unless otherwise noted.

\section*{The Academic Program}

Dordt College offers a wide variety of programs and majors for students wishing to earn a bachelor's degree. Dordt College also awards associate of arts (A.A.) degrees. These two-year programs offer a wide range of educational options through professionally and occupationally designed programs, or through a flexibly designed two-year sequence of relevant courses and educational experiences. Also available is a master of education degree.

\section*{Advising}

An academic advisor is assigned to each student. Because of the variety of educational opportunities available at Dordt College and alternative ways of achieving graduation requirements, students must confer with their advisor regularly to plan their academic program. The Academic Coordinator for International and Minority Students will make contact with international, ESL, and minority students so that these students can benefit from ongoing advising concerning their academic progress and so that the Dordt community can benefit from these students' unique experiences and insights. Career planning assistance from qualified personnel is available to help students select courses that will prepare them for service, vocations, or further schooling.

\section*{Associate of Arts Degrees}

The formal requirements for graduation with an associate's degree are:
1. A minimum of 60 credits. In meeting this requirement, A.A. students must take core requirements, complete requirements for an area of concentration, and may also take elective courses.
2. A minimum grade point average of \(2.00(4.00\) scale) in courses taken at Dordt College.
3. A minimum of 30 credits earned at Dordt College. A student may not receive both the A.A. and B.A. degrees at the same commencement. However, credits earned in obtaining the A.A. degree may be applied toward the B.A. degree at any time.
4. Participation in the freshman orientation and student assessment programs.

Core Program Requirements for Associate's Degrees The core program for all students pursuing associate's degrees consists of pre-disciplinary foundational studies and selected coursework in contextual and interdisciplinary studies. The core program for associate's degrees is designed to allow students to easily transition to a bachelor's degree program at any point during their program.
1. Pre-disciplinary Foundational ( \(14-26\) credits)

Academic Competencies (3-15 credits) All academic competencies must be satisfied by the end of the freshman year. Options for satisfying the academic competency requirements depend on a student's academic background and include the following:
- Strong high school preparation (demonstrated by high school record)
- ACT scores
- Pre-testing
- Completing a college-level course that meets the goals of each requirement.

Mathematics Competency ( \(0-4\) credits)
- A score of 24 or higher on the mathematics portion of the ACT ( 0 credits)
- Completion of a college-level mathematics course.
- Students with a score below 18 on the mathematics portion of the ACT will be required to successfully complete MATH 100 and 100L - Mathematics for College (4 credits)
English Competency (3-4 credits)
- Completion of CORE 120: English Composition (3 credits)
- Students with a score below 18 on the English portion of the ACT will be required to successfully complete ENG 100: Basic Writing for College Students (4 credits)
Communication Competency ( \(0-3\) credits)
- Completion of two or more communication courses in high school with grades of ' B ' or better (0 credits)
- Completion of one communication course in high school and completion of COMM 100: Fundamentals of Speaking and Listening or CORE 110: Communication and Culture (3 credits)
- Students with no communication courses in high school must complete COMM 100: Fundamentals of Speaking and Listening ( 3 credits)
Foreign Language Competency ( \(0-4\) credits)
- Completion of two years of foreign language in the same language with a grade no lower than a ' \(C\) ' in the second year. ( 0 credits)
- Completion of Foreign Language 101 (4 credits)

Historical-Redemptive Outlook (11 credits)
Kingdom, Identity and Calling: CORE 100 (2 credits)
Roots of Western Culture and Worldview: CORE 140 (3 credits)
Western Culture in Global Context: CORE 145 (3 credits)
Biblical Foundations: CORE 150 (3 credits)

\section*{2. Contextual Inter-disciplinary (5-6 credits)}

Health, Sport, and the Body: CORE 130 ( 1.5 credits)
Introduction to Lifetime Activities: CORE 135 (.5 credits)
Distribution Elective (3-4 credits) - one additional course from outside the student's division of study from the following:
Introduction to the Arts: CORE 160 (3 credits)
Responding to Literature: CORE 180 (3 credits)
Introduction to Christian Philosophy: CORE 200 (3 credits)
Unfolding the Biotic Creation: CORE 210-219 (3-4 credits)
Unfolding the Physical Creation: CORE 220-229 (3-4 credits)
Persons in Community: CORE 250-259 ( 3 credits)
Justice and Stewardship: CORE 260-269 (3 credits)

Cross-Cultural Studies: CORE 270-289 (0-3 credits) - See cross-cultural studies requirement for Bachelor's Degrees.

Area of Concentration (6-12 courses) Each student must choose an approved area of concentration. Course sequences for the various areas of concentration may be found in the "Academic Offerings" section of the catalog:

Administrative Assistant - page 78
Agriculture - page 63
Computer Networking - pages 90-91
General Studies - pages 149-150 (The general studies concentration allows a wide variety of options).
Early Childhood Aide, Special Education Aide, Teacher Aide - page 120
Elective Courses ( \(0-6\) courses) These courses are to be selected by the student to meet individual needs and goals.
- A second area of concentration may be worked out.
- Cognate courses may be selected to support the area of concentration.
- Additional courses in the area of concentration may be selected.
- Courses that explore alternate career options may be selected.
- A wide distribution of courses may be chosen to provide a broad general background.

\section*{Bachelor's Degrees}

Degree Types Bachelor's degree recipients will earn one of the following degrees:
Bachelor of Science in Engineering \(\qquad\) Engineering majors Bachelor of Science, medical technology major........................Awarded by Dordt College following completion of a program of study that includes a final year of study off-campus, typically at a hospitaladministered medical technology program
Bachelor of Science in Nursing \(\qquad\) .Nursing Majors
A four-year program in which students are awarded a B.S.N. from Dordt College and an A.S.N. from St. Luke's College in Sioux City, Iowa via an educational partnership.

\section*{Bachelor of Social Work}
\(\qquad\) .Social Work majors
Bachelor of Arts All other majors

Graduation Requirements The formal requirements for graduation with a bachelor's degree are the following:
1. A minimum grade point average of \(2.00(4.00 \mathrm{scale})\) in courses taken at Dordt College.
2. A minimum of 124 credits. In meeting this requirement, students must fulfill the core program requirements, complete a major, and in many cases, take elective or professional courses.
3. Eight semesters of full-time study or its equivalent. (See residence requirement, page 58.)
4. Participation in freshman orientation and the freshman, junior, and senior assessment program.

Core Program The Core Program is required of all Dordt College students. Its central purpose is to prepare students for faithful Christian discipleship in the areas and responsibilities of life that we all share in common across our various specialized academic majors and vocations. The Core curriculum articulates and helps students to develop a broad and firmly-rooted Christian perspective on life and learning; it helps them to develop their understanding of who we are and how we are called to live in our relationships and in our historical development and context; and it equips them with competencies, critical thinking, understanding, and connections needed for both their specialized programs and for life-long learning and service to God's kingdom in all areas of their lives in the contemporary world.

\section*{Core Program Requirements for Bachelor's Degrees (41-64 credits)}

For all students pursuing a bachelor's degree, the core program consists of pre-disciplinary foundational studies, contextual and interdisciplinary studies, and post-disciplinary integrative studies. Typically students will begin pre-disciplinary coursework their freshman year and most will complete it by the end of their sophomore year. Beginning with their sophomore year, students will move on to contextual and interdisciplinary coursework, and will finish their academic careers with the post-disciplinary integrative course work.
1. Pre-disciplinary Foundational (14-29 credits)

Academic Competencies (3-18 credits) All academic competencies must be satisfied by the end of the freshman year unless otherwise noted. Options for satisfying the academic competency requirements depend on a student's academic background and include the following:
- Strong high school preparation (demonstrated by high school record)
- ACT scores
- Pre-testing
- Completing a college-level course that meets the goals of each requirement.

Mathematics Competency ( \(0-4\) credits)
- A score of 24 or higher on the mathematics portion of the ACT ( 0 credits)
- Completion of a college-level mathematics course. This course must be completed prior to taking CORE 210-229 and CORE 250-269 ( \(3-4\) credits)*
- Students with a score below 18 on the mathematics portion of the ACT will be required to successfully complete Mathematics 100 and 100L - Mathematics for College (4 credits)
English Competency ( \(0-4\) credits)
- A score of 24 or higher on the English portion of the ACT and completion of a writing-intensive college course. Approved courses are designated as writing-intensive in the course description. Students in this category need not complete the writing-intensive course during their freshman year. ( \(3-4\) credits)*
- Completion of CORE 120: English Composition (3 credits)
- Students with a score below 18 on the English portion of the ACT will be required to successfully complete English 100: Basic Writing for College Students (4 credits)
Communication Competency ( \(0-3\) credits)
- Completion of two or more communication courses in high school with grades of ' B ' or better (0 credits)
- Completion of one communication course in high school and completion of Communication 100: Fundamentals of Speaking and Listening or CORE 110: Communication and Culture (3 credits)
- Students with no communication courses in high school must complete Communication 100: Fundamentals of Speaking and Listening (3 credits)
Foreign Language Competency (0-7 credits)
- Completion of two years of foreign language in high school in the same language with a grade no lower than a ' C ' in the second year ( 0 credits)
- Completion of Foreign Language 101 (if required) and 102. Any required foreign language study must be completed prior to completing the Cross-Cultural Studies requirement below, and should be completed by the end of the sophomore year ( \(3-7\) credits)

\section*{Historical-Redemptive Outlook (11 credits)}

Kingdom, Identity and Calling: CORE 100 (2 credits)
Roots of Western Culture and Worldview: CORE 140 (3 credits)
Western Culture in Global Context: CORE 145 (3 credits)
Biblical Foundations: CORE 150 (3 credits)

\section*{2. Contextual Inter-disciplinary (21-29 credits)}

Health, Sport, and the Body: CORE 130 ( 1.5 credits)
Introduction to Lifetime Activities: CORE 135 (.5 credits)
One activity component from the following: ( \(0-5\) credits)
One additional lifetime activity module: Core-135L (0 credits)
Participation in one season of intercollegiate athletics at Dordt College: HPER-011 (. 5 credits)
Participation in two seasons of JV or Varsity athletics in high school with documentation
from the high school (0 credits)
Completion of one activity course: HPER-012-019 (. 5 credits)
Logging 20 hours of fitness activity over the course of the semester ( 0 credits)
Introduction to the Arts: CORE 160 ( 3 credits)
Responding to Literature: CORE 180 (3 credits)
Introduction to Christian Philosophy: CORE 200 (3 credits)
Unfolding the Biotic Creation*: CORE 210-219 (3-4 credits)
Unfolding the Physical Creation*: CORE 220-229 (3-4 credits)
Persons in Community*: CORE 250-259 (3 credits)
Justice and Stewardship*: CORE 260-269 (3 credits)
Cross-Cultural Studies*: (0-4 credits)
For students who have satisfied the foreign language entrance requirement, the cross-cultural requirement may be met in one of the following ways:
A. One course from Core 270-289
B. One course from Spanish 200, Dutch, French or Spanish 201, 204 or 206
C. Education 109 and Education 239 (with an approved placement)
D. Completing an approved, semester-long cross-cultural program (e.g., SPICE, p. 45)
E. Satisfactorily completing three or more years of high school foreign language study with grades no lower than C in the final year, plus one of the following:
- Evidence of having had an appropriate pre-college cross-cultural experience
- Participating in an approved cross-cultural experience sometime during college
- Education 109
F. Participation in an extensive cross-cultural experience evaluated and approved by the Coordinator of Academic Services for Minority and International Students and the Coordinator for Off-Campus and Cross-Cultural Programs prior to college such as:
- International and ESL students required to take the entrance interview (see Admission of International Students): attendance at Dordt College
- Minority Students: significant involvement and schooling in a North American subculture
- Majority Students: significant involvement in a non-English speaking culture or a culture substantially different from a predominately white North American culture (e.g. Foreign Exchange Student Program). Those who have not met the foreign language entrance requirement must take the equivalent of a 102 level foreign language.

\section*{3. Post-Disciplinary Integrative (6 credits)}

Advanced Reformed Thought*: CORE 310-329 (3 credits) - additional options being developed Calling, Task, and Culture: CORE 399 (3 credits)
* Denotes requirements that could be satisfied via courses in a student's major area of study.

Majors To earn a bachelor's degree from Dordt College, a graduate must complete one major, a sequence of at least 10 courses in a subject area. Following are the majors available at Dordt College. Note that \((\mathrm{G})\) indicates majors available in the general B.A. degree [or in the cases of the engineering, nursing, and the social work majors, the B.S.E., B.S.N., and B.S.W. degree]; (S), in the B.A. degree in secondary education; and (E), in the B.A. degree in elementary education.

\section*{Majors}
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Accounting (G)
Agriculture (G)
Agri-Business Emphasis (G)
Agri-Missions Emphasis (G)
Animal Science Emphasis (G)
Biotechnology Emphasis (G)
Plant Science Emphasis (G)
Art
Art (E) (S)
Art History Emphasis (G)
Fine Arts Studio Emphasis (G)
Graphic Design Emphasis (G)
Prearchitectural Design Emphasis (G)
Biology (G) (S)
Biotechnology/Molecular Emphasis (G)

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Computer Science
Biotechnology Emphasis (G)
Hardware Systems Emphasis (G)
Information Systems Emphasis (G)
Systems Administration Emphasis (G)
Computer Science/Mathematics (G)
Criminal Justice (G)
Dutch (G)
Education (E) (S)
Engineering
Biomedical Emphasis (G)
Civil and Environmental Emphasis (G)
Computer Emphasis (G)
Electrical Emphasis (G)
Mechanical Emphasis (G)
Engineering Science (G)
Agriculture Emphasis (G)
Architecture Emphasis (G)
Biology Emphasis (G)
Business Administration Emphasis (G)
Chemistry Emphasis (G)
Computer Emphasis (G)
Physics Emphasis (G)
Engineering Technology
Computerized Manufacturing Emphasis (G)
Electrical Technology Emphasis (G)
Industrial Instrumentation, Control Emphasis (G)
Manufacturing Engineering Emphasis (G)
English
Literature Emphasis (G)
Writing Emphasis (G)
English/Language Arts Emphasis (S)
Environmental Studies
Environmental Science Emphasis G)
Policy and Management Emphasis (G)
General Science (S) [see page 115]
Health, Physical Education, Recreation
Exercise Science Emphasis (G)
Physical Education Emphasis (G)(E)(S)
Recreation Emphasis (G)
Major and Cognate Courses (10-30 courses)

History (G)
Museum Studies Emphasis (G)
United States \& World Emphasis (S)
World Emphasis (S)
Individual Studies (G) [see page 57]
Mathematics (G) (S)
Music (E) (G)
Music Management Emphasis (G)
Performance and Pedagogy Emphasis (G)
Choral Music Education (S)
Instrumental Music Education (S)
Choral/Instrumental Music Education (S)
Nursing (G)
Philosophy (G)
Physical Science (S)
Physics (G) (S)
Political Studies (G)
Psychology (G)
Clinical Emphasis (G)
Social Science (S)
Social Work (G)
Spanish (G) (E) (S)
Theatre Arts
Acting/Directing Emphasis (G)
Design and Scenic Art Emphasis (G)
Drama Ministry Emphasis (G)
Dramaturgy Emphasis (G)
Technical Theatre Emphasis (G)
Theatre Management Emphasis (G)
Theology
Biblical Studies Emphasis (G)
Historical/Systematic Emphasis (G)
Missions and Evangelism Emphasis (G)
Youth Ministry Emphasis (G)
B.A. General.
\[
.10-30
\]

Students pursuing the general B.A. degree can find the sequence of courses for the major of their choice at the beginning of each department-area section in the "Academic Offerings" section of the catalog.

\section*{B.A. Secondary Education}

Requirements for teaching majors, minors, and endorsements may be found in the "Teacher Education Program" section on pages 108-130 of the catalog.

\section*{B.A. Elementary Education} 15
Requirements for the elementary teaching major leading to certification and endorsement may be found in the "Teacher Education Program" section on pages 108-130 of the catalog.

NOTE: Unless otherwise specified in the "Academic Programs" section of this Catalog, students pursuing multiple programs (majors, emphases, minors) will have them transcribed only if there are 12 unique credits among the programs.

Electives, Minors, and Professional Courses Students may choose elective courses that complement their majors or that arise out of a special interest. Students earning a general B.A. degree must take as many elective credits as needed to meet the 124 -credit requirement, after meeting the core program and major requirements. In certain subject areas a minor of fifteen to twenty-one credits may be earned.

Students earning the B.A. degree in elementary or secondary education should consult the "Teacher Education Program" section on pages 108-130 of the catalog for information regarding elective and professional credits.

Following are the minors available at Dordt College. Note that \((G)\) indicates minors available in the general B.A. degree, (S), minors in the B.A. degree in secondary education, and (E), minors in the B.A. degree in elementary education.

\section*{Minors}

American Government (S)
American Studies (G)
Art (E) (S)
Biology (G) (S)
Business Administration (G)
Human Resource Management (G)
Chemistry (G) (S)
Communication (G)
Digital Media Production (G)
Journalism (G)
Speech (E) (S)
Computer Science (G)
Web Software Development (G)
Criminal Justice (G)
Dutch (G)
English (G)
Writing (G)
English/Language Arts (E) (S)

Environmental Studies (G)
Environmental Science (G)
French (G)
General Science (S)
Health, PE, Recreation (G)
Health (E) (S)
Physical Education (E) (S)
Recreation (G)
History (E)
World History (S)
Kuyper Scholars Program (G)
Linguistics (G)
Mathematics (E) (S) (G)
Music (E) (S) (G)
Music Performance (G)
Philosophy (G)
Physical Science (S)
Physics (G) (S)

\author{
Political Studies (G) \\ International Politics (G) \\ Public Policy and Administration (G) \\ Psychology (G) \\ Reading (E) \\ Science - Basic (E) \\ Social Studies (E) \\ Sociology (G) \\ Spanish (G) (E) (S)
}

Special Education (E) (S)
Theatre Arts (G)
Theology
Bible (S)
Bible Education (G)
Biblical Studies (G)
Historical/Systematic (G)
Mission and Evangelism (G)

\section*{Master's Degree}

Dordt College offers a graduate program in education with a concentration in curriculum and instruction that leads to a master of education degree. The program is a ten-course sequence that can be completed on a part-time basis in as few as three summers. Additional information on the master's program is contained in the graduate academic bulletin that can be obtained from the graduate education office.

\section*{Preprofessional Programs}

Preparation for Graduate Study Dordt College, through its major departments, prepares students for graduate-level work. Students who plan to do graduate work should consult faculty members in the major department when selecting courses in the major field of study or in related supporting subjects. Courses should be carefully selected to meet the specific requirements of the graduate school that the student plans to enter. The placement office maintains a file of graduate school catalogs that may be used by faculty members and students.

\section*{B.S. Degree in Medical Technology}

\section*{Dr. Tony Jelsma, Program Advisor}

Dordt College offers a major in medical technology, that includes three years of work at Dordt College, followed by one year of clinical education in an approved school of medical technology. In addition to the core program courses required for the bachelor's degree, medical technology students will take a sequence of courses prescribed by the Committee on Medical Technology Education (COMTE). More information is available on page 166 of this catalog and from the program advisor.

Preprofessional Programs Students wishing to prepare for professional schooling may enter one of the following programs:
\begin{tabular}{lll} 
Prearchitecture & Premedical & Prephysical Therapy \\
Prechiropractic & Preoccupational Therapy & Preseminary \\
Predental & Preoptometry & Preveterinary \\
Prelegal & Prepharmacy &
\end{tabular}

All of these programs lead to the B.A. degree and prepare the student for graduate-level studies. Students in preprofessional programs normally complete one major at Dordt. Preprofessional programs do
not mandate any specific major. Students should work closely with the program advisor to plan a course of study and select a major that will adequately prepare them for the professional school(s) of their choice.

\section*{Prearchitecture Program}

Mr. David Versluis, Program Advisor
Architects work alongside engineers to design buildings and other public structures that meet the needs of individuals and communities. Architects must concern themselves with the aesthetic normativity of a structural design, while working to create structures that are environmentally responsible and culturally appropriate. Along with a team of engineers and construction managers, an architect is responsible for designing a structure that is both safe and ergonomic. Architects serve communities by designing buildings and landscapes that reflect responsible use of spatial, material, environmental, and economic resources.

There are multiple educational paths that lead to a career in architecture. One of the common academic paths into the profession of architecture is to first complete an interdisciplinaryB.A. or B.S. degree in a prearchitectural program at a liberal arts college. To be eligible for professional licensure as an architect, a student will then complete a three to four year Masters of Architecture degree at an institution that offers an accredited architecture graduate program. While the entrance requirements for architectural graduate programs vary, most programs prefer students to have completed an interdisciplinary liberal arts bachelor's degree that includes courses from art, graphic design, physics, mathematics, engineering, economics, history, environmental studies, philosophy, or psychology. Demonstrating proficient writing and communication skills is essential for admission into professional architectural programs.

While a variety of general bachelor degree programs can provide an adequate foundation for further architectural studies, Dordt has two preprofessional major options specifically designed to guide students through an undergraduate program of study that will meet the requirements of many graduate programs in architecture; a B.A. degree in Art with an Architectural Design emphasis, and a B.A. degree in Engineering Science with an Architecture Emphasis.

\section*{Prechiropractic Program}

Dr. Tony Jelsma, Program Advisor
Chiropractic is concerned about the relationship between the nervous system and the rest of the body to maintain optimal health. Chiropractic care is focused on allowing the body to heal itself without the use of drugs or surgery. Maintaining the proper structure of the spine will allow the nervous system to function as it should to regulate the rest of the body.

The prechiropractic program at Dordt College will prepare you for admission to a school of chiropractic. At least three years of study at Dordt are required, which will provide the necessary background in the sciences, including biology, chemistry, and physics courses, as well as courses in the humanities and social sciences. Since course requirements may vary between different schools of chiropractic, students are urged to determine the specific requirements for the school they plan to attend early in their college career.

\section*{Predentistry Program}

\section*{Dr. Edwin J. Geels, Program Advisor}

A career in dentistry involves detection of diseases; diagnosis, treatment, and prevention of problems affecting teeth and mouth tissue; aesthetic improvement; surgical restoration; and public education and prevention. Most dental schools require three or four years of college before admission to the dental school. Prerequisite courses for admission typically include: general chemistry ( 2 semesters),
organic chemistry ( 2 semesters), biochemistry ( 1 semester), physics ( 2 semesters), English ( 2 semesters), biology (2 or 3 semesters in zoology, embryology, comparative anatomy), psychology ( 1 semester).

Since required courses vary from one dental school to another, the student is advised to check requirements of specific schools early in his or her career.

\section*{Prelegal Program}

Mr. Tim Rylaarsdam, Program Advisor
This program is designed as an advisory tool to assist students who are considering or planning to attend law school. Since law schools do not have any specific academic course requirements for admission, a broad liberal arts program, including major and selected electives, provides the most appropriate preparation. Law schools are looking for college graduates who demonstrate leadership, exemplify strong character, and possess well-developed writing and analytical skills.

At Dordt, prelaw students receive a B.A. degree with a major in political studies, history, English, social work, psychology, philosophy, business administration, or criminal justice, depending on their interests. In addition, many students participate in an off-campus program that enables them to serve as an intern and gain experience in legal practice. They are also advised on a range of electives to expand their critical thinking, writing, and analytical perspective, and help prepare them for the Law School Admission Test, required for entrance to an accredited law school.

Although they are not required prelaw courses, Dordt offers courses in American constitutional law, business law, and criminal procedure that provide a beneficial context for the later pursuit of legal studies.

\section*{Premedical Program}

Dr. Carl Fictorie, Program Advisor
Medicine is a very demanding, but rewarding profession that offers many opportunities to serve and care for people. The undergraduate premedical program provides the required background and skills in the basic sciences and communication to succeed in medical school. However, medical schools seek out students with broad interests and abilities, so excellent performance in Dordt College's core program curriculum with additional study in disciplines is also important.

Each medical school has a unique set of admission requirements, but most schools require, at minimum, two semesters of biology (Biology 115 and 122), four semesters of chemistry (Chemistry 103, 104, 221, and 222), two semesters of physics (Physics 115 and 116), and a semester of advanced writing (English 305). Many schools require calculus (Mathematics 111), but some will accept statistics (Mathematics 107.) Additional course work in human anatomy and physiology, biochemistry, genetics, cell biology, and microbiology are strongly recommended. Medical schools seek a diverse cohort, so any academic major may be completed in conjunction with the above requirements. Students should have a cumulative GPA of 3.50 or higher, particularly in the required courses above.

In the spring of the junior year, students are required to take the Medical College Admissions Test (MCAT), the scores of which are used by many medical schools in admission decisions. The MCAT is based on the material covered in the required course work in biology, chemistry, physics, and English.

In addition to academic excellence, students should demonstrate a commitment to and passion for helping people through volunteering, extracurricular activities, and on- and off-campus employment. Good communication skills, leadership abilities, dedication, and self-motivation are all important qualities medical schools seek in applicants. The Future Physicians Club exists to provide a means by which pre-medical students can get to know each other and help each other with planning, MCAT
preparation, medical school applications, volunteering activities, and extracurricular activities.
The premedical program, while designed specifically for students interested in medical school, also serves as a good background for entry in to most postgraduate professional medical programs. Additional information about the premedical program is available at: www.dordt.edu/academics/ under "Pre-Professional Programs."

\section*{Preoccupational Therapy Program}

Dr. Mark Christians, Program Advisor
Occupational therapy is the health profession that uses everyday activities as the means of helping people to achieve independence. A variety of rehabilitative, educational, social and vocational activities are used to treat adults and children with disabilities resulting from physical injury, disease, developmental delays, aging, and psychological dysfunctions. Occupational therapists help individuals to adapt or improve performance in areas of work, school, independent living or play. The goal for all patients is to attain the maximum level of independence and productivity possible.

Although Dordt does not offer a professional degree or major in occupational therapy, an excellent preprofessional program is available that prepares the student for subsequent professional education. A student may complete a B.A. degree at Dordt along with the preoccupational therapy program of study and then apply for admission to an occupational therapy program. Information is available in the career development office relating to specific requirements of graduate schools. Certification as an occupational therapist is based on graduation from an approved occupational therapy program and acceptable performance on the American Occupational Therapy examination.

Appropriate majors for students interested in a career in occupational therapy include psychology, biology, or health, physical education and recreation. A foundation in biology (introduction to biology, anatomy and physiology) and psychology (introductory, psychopathology, developmental, personality) is required. Additional requirements include other introductory science courses, humanities courses (English composition), mathematics, and other courses that vary from program to program.

\section*{Preoptometry Program}

Dr. Edwin J. Geels, Program Advisor
Doctors of optometry are the major providers of vision care. As independent primary health care providers, they examine, diagnose, treat and manage diseases and disorders of not only the eyes, but also the entire visual system. Optometrists work with other health professionals in co-managing a patient's care. Most optometry schools require four years of college before admission to the optometry school. Prerequisite courses for admission include general chemistry ( 2 semesters), organic chemistry, ( 2 semesters) calculus, ( 1 or 2 semesters) physics, ( 2 semesters) biochemistry, ( 1 semester) anatomy, ( 1 semester) microbiology, ( 1 semester) statistics, ( 1 semester) psychology, ( 1 semester).

Since particular course requirements for admission to specific optometry schools can vary, students are urged to contact the schools for these requirements early in their college career.

\section*{Prepharmacy Program}

\section*{Dr. Edwin J. Geels, Program Advisor}

Pharmacy is a profession that cares for patients' drug-related needs in community pharmacies, hospitals, long-term care facilities, and home health care settings. Many pharmacy programs include two years of prepharmacy college courses followed by four more years of a pharmacy program leading to a doctor of pharmacy degree.

Although particular course requirements for admission to specific pharmacy schools vary and
should be determined at an early stage, the following courses are generally required: general chemistry ( 2 semesters), organic chemistry ( 2 semesters), physics ( 2 semesters), general biology ( 1 semester), microbiology ( 1 semester), anatomy ( 1 or 2 semesters), economics ( 1 semester), calculus ( 1 or 2 semesters), communication ( 1 semester), English composition (1 or 2 semesters). Some schools also require the Pharmacy College Admissions Test (PCAT) to be taken.

\section*{Prephysical Therapy Program}

Mr. Craig Stiemsma, Program Advisor
Physical therapy is a health profession, whose primary purpose is the promotion of optimal human health and function through the application of scientific principles to prevent, identify, assess, correct, or alleviate acute or prolonged movement dysfunction.

Although Dordt does not offer a professional degree or major in physical therapy, an excellent preprofessional program is available that prepares the student for subsequent professional education. A student may complete a B.A. degree at Dordt along with the prephysical therapy program of study and then apply for admission to a physical therapy program. Information is available in the career development office on specific requirements for graduate schools. Licensure as a physical therapist is based on graduation from an approved physical therapy program and passing a licensure examination.

A student may select any major but the following preprofessional courses must be completed: biology, (zoology, human anatomy and physiology, biology electives) general chemistry, general physics, general psychology, abnormal psychology, mathematics, (elementary statistics, college algebra or calculus). Additional courses may be required depending on the graduate program to which the student applies.

\section*{Preseminary Program}

\author{
Dr. Wayne A. Kobes, Program Advisor
}

Although Dordt College does not offer a preseminary major, an excellent preprofessional program is available that prepares the student for graduate work in a seminary. As is the case with students planning to enter medical or law school, any major that meets the entrance requirements of the particular graduate school or seminary chosen by the student is suitable. Breadth of interest in the liberal arts is important for one who must constantly deal with the wide spectrum of changes occurring in our lives. Courses in history, philosophy, literature, and social sciences provide this type of base from which to assess the current scene. Courses in the languages of the Bible as well as modern foreign languages equip the prospective minister to handle the biblical text and read current and classical theological works in their original form.

Dordt College not only provides majors in relevant fields for those planning to enter a theological seminary, but also provides a solid program of courses in New Testament Greek. Faculty members stand ready to advise preseminary students regarding the selection of a major and of individual courses in light of the requirements of the seminary the student hopes to attend. There is also an active program of discussions and socials for those in the preseminary program.

\section*{Preveterinary Program}

Dr. Duane Bajema, Program Advisor
Veterinary medicine is an animal health profession that is dedicated to protecting the health and welfare of people and animals. Veterinarians are primarily animal doctors, highly educated and skilled in preventing, diagnosing, and treating animal health problems. Veterinarians work in private practice with both large and small animals, or in research, public health, the military, regulatory
agencies, and zoos.
Dordt College does not offer a degree in veterinary medicine but does offer an excellent preprofessional program that prepares the student for subsequent professional education. A student may complete the requirements for admission to veterinary school at Dordt College. Students may complete a bachelor's degree at Dordt or may select those courses at Dordt that are specified as requirements for admission by the school of veterinary medicine. Students are strongly encouraged to contact the professional school of choice to learn their requirements for admission.

Dordt's agriculture program provides courses that will complement the professional program requirements. The college also works with many local veterinarians, pharmaceutical companies, and professionals involved with animal health to provide students with professional experience that is often required by schools of veterinary medicine.

Students should follow the guidelines suggested by the school of veterinary medicine of their choice, usually in their home state or province. Students can major in biology, animal science, chemistry, or agriculture while at Dordt College.

\section*{Off-Campus Study}

Students should contact the Coordinator of Off-Campus Programs for information and application forms-the Coordinator will also help students identify courses in these programs that meet Core Program requirements.

\section*{Off-Campus Policies}
1. Students must be in good academic, financial, and behavioral standing to participate in offcampus programs and courses. (See Student Handbook for Off-Campus Behavioral Expectations.)
2. The pass-fail option is not available for off-campus programs and courses.
3. Cancellation Policy
- Dordt College may cancel college-run off-campus programs, courses, or service projects when, prior to departure for the program, the U.S. State Department issues a travel warning for the location of the program, course or project. In addition, the college may choose not to participate in or provide student financial assistance for off-campus programs offered by partner colleges or organizations for locations under the U.S. State Department travel warning.
- If a U.S. State Department travel warning is issued once a program is in progress for a country in which Dordt is currently operating an off-campus program, course or project, the coordinator for off-campus programs will notify the crisis management coordinator, who may implement the crisis management plan.
- If a U.S. State Department travel warning is issued once a program is in progress for a country in which Dordt students are participating in an off-campus program offered by a partner college or organization, the coordinator for off-campus programs will consult with the partner organization's designated director and their on-site staff and may implement a crisis plan that carefully follows the State Department's advice.
4. Refund Policy
- If Dordt College cancels the program prior to departure, students will receive a full refund of any tuition or program fees paid. Any portion of a non-refundable deposit not encumbered (e.g. travel arrangements, housing deposits) will also be returned.
- If a student withdraws from a program prior to departure, he/she is responsible for any
expenses incurred on his/her behalf by Dordt College (or the sponsoring organization) in preparation for the program.
- If it becomes necessary to cancel a program in progress, Dordt's refund policies will be followed (see page 21). Additional expenses incurred for an early departure may need to be deducted from any refund provided.
- If a student withdraws from a program after the program has begun, Dordt's refund policies or the policies of the sponsoring organization will be followed. Students are responsible for any other costs incurred by an early departure. (Early withdrawals for medical reasons are covered by a separate policy.)
- Students dismissed from a program for behavioral reasons will be charged the full fee and are responsible for any other costs incurred by an early departure.

\section*{Dordt College Semester Programs: SPICE, SPAN, and SPIN}

Minimum requirements are sophomore status and a 2.5 cumulative grade point average.
* designates programs that satisfy the core cross-cultural requirement

Studies Program In Contemporary Europe* (SPICE) Dordt College, in cooperation with the Gereformeerde Hogeschool in Zwolle, offers students the opportunity to study in the Netherlands every spring semester. Students live with host families and choose to study in one of three tracks: Dutch Language Studies, International Business, and Dutch Area Studies (for students of any major). All tracks include a week-long trip to Rome, where students will gain insights into historical, religious, and cultural developments through presentations and excursions.

Students must choose 13-17 credits. SPCE 270 is required for all participants.
Recommended courses for:
Dutch Area Studies: SPCE 160, 270 271; two electives from SPCE 148, 310, 392-3, CORE 200.
Dutch Language Studies: SPCE 100, 102, 201 or 341; SPCE 160, 270, 271; one or two electives from SPCE 148, 310, 392-3, CORE 200.
International Business Studies: SPCE 270, 271, 371; one or two electives from SPCE 100, 102, 148, 201, 310, 392-3.

\section*{Studies Program In Contemporary Europe (SPICE) Academic Offerings \\ 100 Beginning Dutch (3) Spring \\ This beginner's course on the language and the culture of Dutch-speaking people is designed to develop listening and reading comprehension skills and speaking and writing skills in Dutch through exercises, listening, interviews of native Dutch speakers, and small group conversations.}

102 Elementary Dutch (3)...................................................................................................................Spring This course on the language and the culture of Dutch-speaking people is designed to develop listening and reading comprehension, spoken and written Dutch in a communicative context. The course includes interviews of native Dutch speakers, sessions with native students, and various other language activities. Prerequisite: Dutch 101 or its equivalent.

Intermediate Dutch (3) Spring
An intermediate course that continues the study of the language in a communicative context with emphasis on precision and expansion of linguistic skills. Emphasis is also put on the development of cultural understanding and sensitivity, studying people's values and beliefs as expressed in their economic, political, and religious systems. Prerequisite: Dutch 102 or its equivalent.

History of the Low Countries (3).
Spring
This course will focus on the history of the Netherlands from 1815 until the present, with special attention on the history of religion and the church. The course will be in chronological order generally; some aspects of the Dutch society will be explored in themes.

160 Dutch Art and Architecture (3)
Spring
An introduction to the history of Dutch Art and Architecture from the Middle Ages to the present day. There will be many excursions to view various artworks "live." Students will develop insight into how to understand art and how the Dutch identity is reflected in its art and architecture. They will also develop some understanding of the importance of the works in culture and history. This will be achieved by presentations of classmates, lectures, readings, and field trips.

270 Cross Cultural Explorations: Conversation, Reflection and Travel (Portfolio) (2) \(\qquad\) Spring Living and studying in a different culture brings with it new information, experiences, and perceptions. This course helps students take the time to observe and reflect on the similarities and differences between this culture and the culture of one's home through structured and systematic observation and reflection. Students develop their own portfolio (a reflective journal) in preparation for a presentation at the end of the semester.

271 Dutch Culture and Society (3)
Spring This course focuses on contemporary issues in the Netherlands as an urbanized society. By studying the culture that gets lived out in the heart of the Netherlands, students become part of the "social experiment" that Dutch society is-a society that is in a constant process of evolving and adapting new forms as it enters a new era of economic and political affiliations within a larger European community.

310 Contemporary Theology (3)
Spring
This course will survey several important theologians and theological trends from the 20th century, including liberation theology and other significant schools of thought, and will compare them with Reformed theology.

341 Special Topics in Dutch Literature or Composition (3)
Spring
Offered on the basis of student interest and instructor availability.

371 Cross-Cultural Exploration and Practicum in Dutch Businesses (5) \(\qquad\) Spring
This course is organized as a cross-cultural exploration and practicum in business that helps students to understand the Dutch business context and culture from different perspectives. Special attention will be given to different production concepts and Christian ethics in business. During the course students will carry out real time assignments and deal with real life consultancy cases for Dutch businesses.

Individual Studies (2-3) Spring
Open to qualified juniors and seniors on a limited basis with permission from the coordinator of off-campus programs and the registrar. See catalog section "Individual Studies" on page 57 for procedures and policies. Note: SPCE 392-3 proposals must be submitted before November 1.

Studies Program At Northrise (SPAN) Dordt College offers students a spring/summer/fall semesterlong off-campus program in Zambia in cooperation with Northrise University in Ndola, Zambia. This young Christian university offers a wide variety of (English-language) courses in information technology, marketing, finance, business administration, project management, and in theology. For more details, students should contact the Coordinator for Off-Campus Programs.

Studies Program In Nicaragua* (SPIN) This fall semester program is offered in cooperation with The Nehemiah Center in Managua, Nicaragua. The goal of SPIN is to immerse students in Nicaraguan life and culture, with an eye to better understanding cultural diversity and the shaping power of differing worldviews. Students will live with host families in Leon. All participants will study Spanish at their level and will take a course on Nicaraguan History and Culture.

\section*{Studies Program In Nicaragua (SPIN) Academic Offerings}
1/300 Spanish Language (at least 3 credits) Fall
Tutored development of communicative skills in Spanish at the student's own level of expertise - from beginner to advanced.
270 Cross-Cultural Explorations: Conversation, Reflection, and Travel (2). Fall
Living and studying each day in Nicaragua will likely bring new information, new experiences, new values, new traditions, and new ideas. This course offers the means to take time to observe and to reflect on cultural differences and one's reactions and responses to new situations. Visits to significant historical, political, ecclesiastical, and cultural sites in Nicaragua provide important perspectives to the course.
271 Nicaraguan History and Culture (3) ..... Fall
This course addresses the social, religious, political, and economic factors that have shaped and are shaping Nicaragua, by focusing on pivotal historical events and the principal worldview perspectives that are at the root of current Nicaraguan culture and society. The course also examines some of the contemporary chal- lenges facing Nicaraguan society: youth gangs, immigration, and economic globalization.that relate to their academic and/or professional goals. Students will choose among various site options inwhich they will apply their academic knowledge and skills while learning about the needs associated with aspecific area of Nicaraguan society.

289 Agriculture in the Developing World (3) ..........................................................................................Fall
This course addresses the complexities of the global food system from a Nicaraguan perspective; focusing on justice issues of land ownership and the impact of large/small scale farming on the land, economy, and society.

310 Worldview and Societal Transformation (3) Fall
An analysis of the role of worldview in the discipline of community development and of the ways Latin Americans are applying a biblical worldview in their context. The course examines a variety of strategies employed by government and non-governmental organizations, including the local church, to eradicate extreme poverty in Nicaragua.

SPIN "Track Options" (3 credits each)
- Spanish Language Track: Options for specialized courses such as "Nicaragua: The Land of Poets" or "Ruben Dario: Father of Modernism."
- Nicaraguan Area Studies Track: Options for specialized study in such areas as history, political studies, communication or theology/missions.
- Agriculture Practicum Track: Options for specialized practicum experiences for agriculture students.

\section*{Shared Sponsorship Program}

Chicago Semester Selected juniors and seniors may register for a semester of living, learning, and working in a major urban center. The Chicago Semester is co-sponsored by Calvin, Central, Dordt, Hope, Northwestern, and Trinity Christian Colleges and is a fully accredited, educational program under the supervision of Trinity Christian College.

Students spend four days a week in an internship related to their academic major and career interest; they also participate in seminars one day per week. To achieve fifteen hours of academic credit, students must take the internship course plus two of the three seminars offered. The Metropolitan Seminar on Ethnic and Racial Diversity can be used to meet the cross-cultural requirement. Minimum requirements are junior status and a GPA of 2.50.

\section*{Calvin College Programs}

Calvin College offers several off-campus programs that Dordt students may attend on a room-available basis. Minimum requirements are sophomore status and a GPA of 2.50.

Study in China* (STCH) Study traditional and modern China, experience life in its capital, Beijing, and explore other areas of this fascinating country. Living and studying at the Capital Normal University allows for interaction with Chinese and foreign students and gives access to the National Library, sports facilities, and parks. Visit important cultural and historical sites such as the Great Wall and China's most holy mountain Taishan. Tackle the Chinese language and be immersed in Chinese history and contemporary issues. (Fall semester)

Study in Britain at St. John's University, located in York, England* (STBR) Each student will take four courses while in York, two courses taught by the Calvin program director(s), and two courses at St. John's-where courses are available in many majors, such as business, communication, education, English, film, history, information technology, religion, and sport and exercise. (Spring semester)

Study in France* (STFR) Live with French families in Grenoble, nestled in the French Alps, and study the French language with other foreign students from around the world. Become acquainted with the wide variety of historical, natural, and cultural forces that have shaped contemporary France by going on excursions offered by the CUEF and by taking classes about French history, politics, literature, and art. During free time, enjoy hiking and skiing in the mountains or travel to destinations such as Paris, Geneva, the French Riviera, or Italy. (Fall semester)

Study in Ghana* (STGH) Enter into dialogue with Ghanaians, study the history and peoples of the country, and encounter worldviews different from those prevalent in North America. The semester in Ghana program strives for understanding the emerging theological, historical, and social perspectives within Ghana and throughout sub-Saharan Africa. Reflection and discussion of the implication of common humanity and different understandings as Christians in God's world is promoted. Live in a university residence, study the Twi language, and interact with Africans to experience a part of this rich country. (Fall semester)

Development Study in Honduras* (STHO) Study development theory and Honduran history in class, then live with a Honduran third-world family, improve facility of the Spanish language, and visit urban squatters' camps, remote rural villages, and tropical rain forests. With this background and added experience from excursions to banana plantations, shrimp farms, and health and literacy projects of development organizations, talk with national leaders about Honduras' problems and future. The director leads discussions, both formal and informal, to encourage thinking and living as Christians in God's world. Wrap up the whole experience by evaluating a specific development program. (Spring semester)

Spanish Studies in Honduras* (SPHO) Become acquainted with the world of Honduras by immersion in the Spanish language and Latin American literature and culture. The Spanish Studies program provides an opportunity to be confronted with many situations that enable exploration of the meaning of faith in a third-world setting. Intensive study and living with a Honduran family grants necessary skills for building relationships with people of another language and culture. The emphasis on issues of poverty and development facilitates understanding of how North American lives are linked to those of the poor. (Fall semester)

Study in Hungary at Technical University of Budapest* (STHU) Witness the exhilarating changes of the twentieth century from the vantage point of one of Europe's most beautiful capital cities. Live and study together as a Christian academic community in the midst of a society engaged in intense conversation about the formation of culture. Develop and mature by experiencing a situation different from the familiar, by learning under a variety of teaching styles, by encountering a new set of behaviors and beliefs, and by drawing from course offerings and academic expertise unavailable elsewhere. Live in a university residence in Budapest; visit the Krakow and Auschwitz concentration camps, Transylvania (Romania), Croatia, and the Ukraine. (Fall semester)

Study in New Mexico at Rehoboth Christian School* (STNM) Native American society in the Southwest provides an exceptional opportunity to encounter the most culturally diverse area of the United States. Through interaction with Native Americans and their rich history, art forms, life styles, culture, and stark landscape, achieve a degree of liberation from the insularity of familiar culture and forcefully challenge stereotypical patterns of thinking. Arrive at a deeper self-understanding and a greater respect for other cultures. (not offered Fall 2010)

Study in Spain at Universidad Nacional de Educación a Distancia in Denia, Spain* (STSP) Includes both a foundation program and an advanced program. If accepted, preparatory courses in Spanish language, grammar, and culture at Calvin during the Interim term are required. In the foundation program,
earn 16 hours of credit in Spanish language. Live in Spain during the spring semester, and take four classes per day, four days per week, for fourteen weeks. The classes are in Spanish grammar, conversation, reading, writing, culture, and civilization. In the advanced program, take 12 to 14 semester hours of course work beyond Spanish 204. (Spring semester)

\section*{Council for Christian Colleges and Universities Programs}

CCCU programs are offered in the Fall and Spring semesters for junior and senior students with a minimum GPA of 2.75, unless noted otherwise. Participating students earn 16 semester hours of credit.

American Studies Program (ASP) Founded in 1976, the American Studies Program has served hundreds of students from member institutions as a "Washington, D.C. campus." ASP uses Washington as a stimulating educational laboratory where collegians gain hands-on experience with an internship in their chosen field. Internships are tailored to fit the student's talents and aspirations and are available in a wide range of fields. They also explore pressing national and international issues in public policy seminars that are issue-oriented, interdisciplinary, and led by ASP faculty and Washington professionals. ASP bridges classroom and marketplace, combining biblical reflection, policy analysis, and real-world experience. Students are exposed to on-the-job learning that helps them build for their future and gain perspective on the calling of God for their lives. They are challenged in a rigorous course of study to discover for themselves the meaning of Christ's lordship in putting their beliefs into practice. The aim of the program is to help Council schools prepare their students to live faithfully in contemporary society as followers of Christ. Students earn 16 semester hours of credit.

Australia Studies Centre* (ASC) Since Spring 2004, the CCCU has partnered with the Wesley Institute for Ministry and the Arts in Sydney, Australia to offer the Australian Studies Centre. Every student is required to take the courses Indigenous History, Culture and Identity, and The View from Australia: Issues in Religion, Politics, Economics and Cultural Values. Additionally, students choose from electives in theology/ ministry, music, drawing/graphic design, dance and/or drama. Home stays, service learning, and travel around Australia are important components of the ASC. Students also come to know the traditions of Aboriginal people during an Outback excursion and spend the last week of each semester traveling to New Zealand to meet with Maori people, explore the beautiful terrain, and compare and contrast the two cultures of their off-campus semester. ASC students receive 16 semester hours of credit.

China Studies Program* (CSP) The China Studies Program enables students to engage this large and intriguing country from the inside. While living in and experiencing Chinese civilization firsthand, students participate in seminar courses on the historical, cultural, religious, geographical, and economic realities of this strategic and populous nation. Students choose between completing a broad Chinese Studies Concentration or a Business Concentration including an internship in an international business in China. In addition to the study of standard Chinese, students are given opportunities such as assisting Chinese students to learn English or working in an orphanage, allowing for one-on-one interaction. The program introduces students to the diversity of China, including Beijing, Shanghai, Xi'an, and Xiamen. This interdisciplinary, cross-cultural program enables students to deal with this increasingly important part of the world in an informed, Christ-centered way. Students earn 16-17 semester hours of credit.

Contemporary Music Center (CMC) The Contemporary Music Center provides students the opportunity to live and work in community while seeking to understand how God will have them integrate music, faith, and business. Both interdisciplinary and multidisciplinary in nature, the CMC offers two tracks: the Artist Track and the Executive Track. The Artist Track is tailored to students considering careers as vocalists, musicians, songwriters, recording artists, performers, producers, and recording engineers. The Executive Track is designed for business, arts, management, marketing, communications, and other majors interested in possible careers as artist managers, agents, record company executives, music publishers, concert promoters, and entertainment industry entrepreneurs. Both Artist and Executive track students receive instruction, experience, and a uniquely Christian perspective on creativity and the marketplace, while working together to create and market a recording of original music. Both tracks include course work, labs, directed study, and a practicum. Students earn 16 semester hours of credit.

Latin American Studies Program* (LASP) Students of CCCU colleges have the opportunity to live and learn in Latin America through the Latin American Studies Program, based in San Jose, Costa Rica. The program introduces students to a wide a range of experiences through the study of the language, literature, culture, politics, history, economics, ecology, and religion of the region. Living with a Costa Rican family, students experience and become a part of the day-to-day lives of typical Latin Americans. Students also take part in a service opportunity and travel for three weeks to nearby Central American nations. Students participate in one of four concentrations: Latin American Studies (offered both fall and spring terms); Advanced Language and Literature (limited to Spanish majors and offered both fall and spring terms); International Business and Management (offered only in fall terms); and Tropical Sciences (offered only during spring terms). Students in all concentrations earn 16 semester credits.

Los Angeles Film Studies Center (LAFSC) Founded in 1991, the Los Angeles Film Studies Center is designed to train students to serve in various aspects of the film industry with both professional skill and Christian integrity. Each semester, students live, learn, and work in L.A. The curriculum consists of two required seminars, Hollywood Production Workshop and Theology in Hollywood, focusing on the role of film in culture and the relationship of faith to work in this very influential industry. In addition, students choose one elective course from a variety of offerings in film studies. Internships in various segments of the film industry provide students with hands-on experience. The combination of the internship and seminars allows students to explore the film industry within a Christian context and from a liberal arts perspective. Students earn 16 semester hours of credit, 6 from the internship and 10 from seminar study.
Middle East Studies Program* (MESP) This program, based in Cairo, Egypt, allows Council students to explore and interact with the complex and strategic world of the modern Middle East. The interdisciplinary seminars give students the opportunity to explore the diverse religious, social, cultural, and political traditions of Middle Eastern people. In addition to seminars, students study the Arabic language and work as volunteers with various organizations in Cairo. Through travel in the region (typically Israel, Palestine, Jordan, Syria, and Turkey), students are exposed to the diversity and dynamism of the region. MESP encourages and equips students to relate to the Muslim world in an informed, constructive, and Christcentered manner at a time of tension and change. Students earn 16 semester hours of credit.

Oxford Summer Programme (OSP) This program of the CCCU and Wycliffe Hall, Oxford, is designed for students wishing to gain a more comprehensive understanding of the relationship between

Christianity and the development of the West and those who wish to do specialized work under expert Oxford academics in the areas of History, Religious Studies, Political Theory, Philosophy, English, and History of Science. The program is structured for rising college sophomores, juniors, and seniors, graduate and seminary students, non-traditional students, teachers, and those enrolled in continuing education programs. Minimum GPA of 2.9.

The Scholars' Semester in Oxford* (SSO) SSO is designed for students interested in doing intensive scholarship in this historic seat of learning. Working with academic tutors, students hone their skills and delve into the areas that interest them most. As Visiting Students of Oxford University and members of Wycliffe Hall, students have the privilege to study and learn in one of the university's historic halls. The SSO is designed for students interested in the fields of Theology, Biblical Studies, Education, Science, Pre-Med, Psychology, Business, and the Humanities. Applicants are generally honors and other very highachieving students; minimum GPA of 3.5 . Students earn 17 semester hours of credit.

Uganda Studies Program* (USP) The USP offers students a very personal encounter with Uganda, which has become an economic and public health model in its region. Another success story, Uganda Christian University (UCU) serves as the base of study for students in the USP. Set on the outskirts of the capital city Kampala, this rapidly growing institution brings USP students together with the UCU Honours College. A variety of courses taught by local faculty in the English tutorial tradition will immerse students in a uniquely African education and will present many insights into African life because of the guidance of faculty who live in and love Uganda and East Africa. Home stays, travel, service learning, and daily interaction with Honours College students form the backbone of the USP experience. Students choose either the Uganda Studies Emphasis or the Intercultural Ministry and Missions Emphasis. In addition to the foundation experiential course, students will choose from an approved selection of courses from the UCU Honours College to earn up to 16 hours of credit.

Washington Journalism Center (WJC) This semester-long study program in Washington, DC, is created for students interested in the field of journalism. While in Washington students will take classes focusing on the history and future of the media and on their personal writing skills. These classes - Foundations for Media Involvement; Reporting in Washington; and Washington, News and Public Discourse - combined with an internship at a top news publication will help students learn to integrate their faith in a journalism career. Students will also participate in service learning opportunities as part of the WJC experience.

\section*{Other Approved Programs}

Au Sable Institute of Environmental Studies The Au Sable Institute offers field-based courses at two primary campuses, one in the Great Lakes Forest near the middle of the North American Continent; the other on the Puget Sound on the edge of the Pacific ocean north of Seattle, WA. The Institute also has a program at ECHO in North Fort Myers, Florida. There are three week and five week summer sessions. Courses can be applied toward meeting Dordt College graduation requirements in several majors. Au Sable courses and Dordt courses can also be used to meet requirements for Certificates issued by Au Sable Institute in the following areas: Naturalist, Land Resources Analyst, Water Resources Analyst, and Environmental Analyst. Au Sable fellowships and grant-in-aid are available to Dordt students. (Summer)

Creation Care Studies Program* (CCSP) A field-based education that explores Christian responsibility in a fragmented world-a world marked by poverty, hostility, environmental demise, opportunism, and social disintegration. While living in Belize, talk with community leaders, work with non-government organizations, interact with the Belizean people, and explore the remarkable natural resources, including the second largest barrier reef in the world and the rich diversity of a tropical rainforest. A similar program is offered in the South Pacific. The semester curriculum is guided by a view that the world is an integrated web of systems and philosophies that cannot be separated from each other. (Fall and spring semesters)

Jerusalem University College* (JUC) Study for a semester at Jerusalem University College, an independent Christian institution of higher education formerly known as the Institute of Holy Land Studies. Courses in the history, geography, cultures, religions, and languages of ancient biblical times and the modern Middle East provide rich insights into the past and a meaningful cross-cultural experience. The university is located on Mount Zion, overlooking the Hinnom Valley, and serves as an extension campus for more than 100 universities, colleges, and seminaries around the world. (Fall and spring semesters)

Trinity's Semester in Spain* (TSIS) A semester study program in Seville, Spain. The program offers beginning, intermediate, and advanced courses in Spanish Studies. Students live with a Spanish family for the entire semester and may choose to engage in optional service-learning experiences. Two summer terms are also offered. (Fall, spring, summer)

Trinity Western University's Laurentian Leadership Center (TLLC) Program located in Ottawa, Canada geared toward third and fourth year students who plan a career in business, communications, history, international studies or political studies. The fully accredited program includes nine hours of interdisciplinary courses and a six-hour internship in Canada's capital city. (Fall and spring semesters)

World Journalism Institute (WJI) The World Journalism Institute in Asheville, North Carolina was established to help train a cadre of young Christians who can write well, observe keenly, and think biblically. WJI holds its journalism courses in New York City, Washington, D.C., Los Angeles, and Asheville. Drawing its faculty from the ranks of working journalists as well as academic journalists, WJI offers summer courses with \(2-3\) weeks of classroom instruction and field based writing assignments. The WJI summer courses offer 3-4 credits. Students apply directly to WJI to participate in this program.

Special Topics Off-Campus Program In addition to the above list of approved programs, students may apply to participate in other off-campus programs to meet specifically defined learning objectives. Interested students must submit a written request that clearly indicates their learning goals and how this particular program meets these goals more effectively than any of the existing approved programs. In addition, the student's advisor and/or major department must recommend their participation in this off-campus program. The coordinator for off-campus programs and the registrar will grant approval for participation on a case-by-case basis.

\section*{Academic Policies}

Academic Standing A student is expected to maintain a minimum cumulative GPA of 2.00 to graduate. Students needing extra assistance in the form of individual tutors, study skills, time management, etc. should contact the staff of the Academic Skills Center, located in the lower level of the library. Students will be notified when they are not meeting the graduation minimum and will be expected to seek the necessary assistance. Academic standing is determined by the following:
\begin{tabular}{llll} 
& \begin{tabular}{l} 
ACADEMIC \\
ALERT
\end{tabular} & \begin{tabular}{l} 
ACADEMIC \\
PROBATION
\end{tabular} & \begin{tabular}{l} 
ACADEMIC \\
SUSPENSION
\end{tabular} \\
Total Credits & Cumulative GPA & \begin{tabular}{l} 
Cumulative GPA
\end{tabular} & \begin{tabular}{l} 
Cumulative GPA
\end{tabular} \\
Earned & is below & \begin{tabular}{l} 
is below
\end{tabular} & \begin{tabular}{l} 
is below
\end{tabular} \\
\hline 0 to 24 & 2.0 & 1.6 & 1.0 \\
24 to 54 & 2.0 & 1.8 & 1.4 \\
54 to 84 & - & 2.0 & 1.6 \\
84 or more & - & 2.0 & 1.8
\end{tabular}

Academic Alert Students who finish a semester with a cumulative GPA below the graduation requirement will be alerted to their academic status at the beginning of the following semester. Students will be informed of the support services available and encouraged to make use of them. Academic alerts may also be issued during a semester when an instructor reports that a student is in danger of failing his or her course. Academic alerts do not result in any additional restrictions of activity or loss of financial aid, but are intended to inform students of their current situation so they can take action to correct it.

Academic Probation Students who finish a semester with a cumulative GPA below the specified standard will be placed on academic probation. Students are notified by letter when placed on probation. The academic standing committee will set certain requirements for a student on probation - including a minimum GPA to be attained in the following semester. A student who has been placed on academic probation and fails to meet the requirements established by the committee the following semester will be subject to academic suspension. Probation may result in the loss of athletic eligibility and certain financial aid.

Academic Suspension Students who finish a semester with a cumulative GPA below the specified standard are subject to academic suspension from the college for a period of one semester. Students suspended from the college will be notified of their suspension immediately in writing and may be given an opportunity to file a letter of appeal prior to the start of the next semester. Students filing an appeal must do so in writing to the registrar by the time indicated in the notification of suspension. The letter of appeal should explain the situation leading up to the suspension - including extraordinary circumstances such as serious illness, injury, or family crisis - and include a specific plan for correcting the problems. Students allowed to return on the basis of an appeal will be placed on academic probation as described above. Students allowed to return on appeal will be subject to suspension without appeal or dismissal if they ever fail to meet the terms established by the academic standing committee. Students who do not file a letter of appeal or whose appeal is not granted may apply for readmission after a lapse of one semester. Readmission is not automatic but is based on evidence that
the circumstances leading up to the suspension have been resolved. Any student, regardless of prior academic standing, who receives less than a 1.0 GPA in any given semester is subject to academic suspension at the end of the semester.

Academic Dismissal Students who have been suspended and readmitted and who fail to meet the requirements specified by the academic standing committee will be subject to permanent academic dismissal. Any full-time student who earns no grade points in any given semester is subject to permanent academic dismissal.

Audit and Institutional Visitor Policies Full-time students may audit a course at no additional charge provided they do not go into an overload. Part-time students and students who will go into an overload may audit courses at the overload tuition rate. Students auditing a class are expected to attend lectures, do the readings, and participate in all in-class activities, and may participate in other activities. No credit will be given for audits, but an official record with grade of "AU" will be recorded for audited courses.

On a space-available basis, members of the community are welcome to visit classes at the visitor rate. Registration is subject to approval by the course instructor and registrar, and no official academic record will be kept. A maximum of one course per semester may be visited; applied courses (such as music lessons and ensembles or labs) may not be visited.

Class Attendance All students are expected to attend all class periods and all laboratory periods. Penalties for absence are left to the individual instructors. The instructor may lower a student's grade if there have been excessive unexcused absences. No allowed number of skips is permitted.

Credits All credit at Dordt College is given in semester hours, and unless noted differently in the course description, will count toward graduation. Each semester hour requires one period per week of class work and approximately two hours per week of preparation.

Dropping Courses Changes in registration must be completed during the drop/add period (within one week after the opening date of each semester). Courses dropped during the add/drop period do not appear on the student's transcript. After the drop/add period, a student may withdraw from a course with permission of the instructor and registrar. Withdrawn courses appear on a transcript as follows:

WP - withdrawn passing - if the student has a passing grade in the course when it is dropped or
WF - withdrawn failing - if the student is failing when the course is dropped. All courses dropped after the tenth week of the semester will be recorded as " F ."

Enrollment in Other Schools Students who are enrolled in Dordt College will not be permitted to take work for academic credit in the same semester in other schools without permission from the registrar. In no case will students be permitted to carry an academic load greater than that stated in the catalog. The registrar must approve in advance all courses taken at other institutions.

Dordt College does not offer undergraduate correspondence courses. However, if students plan to
enroll in a correspondence course offered by another college or university, they should have the course approved by the office of the registrar in advance.

Grade Point Average Students must have a minimum cumulative grade point average of 2.00 in courses taken at Dordt College to meet graduation requirements. The GPA is determined by dividing the total number of grade points by the total number of hours attempted.

A grade of " F " in a course will be computed in the student's grade point average (this refers to both regular courses and pass/fail courses); a student who withdraws from a course prior to the expiration of 10 weeks will not have the "WF" computed in his/her GPA.

Grade Reports First semester mid-term grades are reported to new students. These are not part of the permanent record, but serve as an indicator of student progress. Mid-term grades are obtained from the student's adviser. Final grades are released by the registrar's office as soon as possible after the close of each semester.

Grading System The following grading system is in effect at Dordt College:
\begin{tabular}{|c|c|c|}
\hline Grade & Points Per Hour & Description \\
\hline A & 4.00 & Exceptional \\
\hline A- & 3.67 & \\
\hline B+ & 3.33 & \\
\hline B & 3.00 & Good \\
\hline B. & 2.67 & \\
\hline C+ & 2.33 & \\
\hline C & 2.00 & Graduation level \\
\hline C- & 1.67 & \\
\hline D+ & 1.33 & \\
\hline D & 1.00 & Unsatisfactory \\
\hline D. & 0.67 & \\
\hline F & 0 & Failure \\
\hline P & 0 & Pass \\
\hline WP & 0 & Withdrawn Passing \\
\hline WF & 0 & Withdrawn Failing \\
\hline WM & 0 & Withdrawn - Medical Withdrawal \\
\hline AU & 0 & Audit \\
\hline
\end{tabular}

Graduation Students must make application for graduation the semester prior to their graduation. Commencement exercises are held only at the end of the spring semester. In order to participate in the commencement exercises, the student must have completed all course work for the degree. Requests for exceptions must be brought to the curriculum and academic policies committee via the registrar prior to February 1. There are no exceptions for the A.A. degree.

Individual Studies Courses Individual Studies 391, 392, and 393 courses are offered by many departments to provide properly qualified students the opportunity to do intensive work in a subject not normally included in the regular course offerings or to pursue in depth a topic encountered as part of
previous studies, or to engage in experiential education projects. The individual studies courses allow for greater flexibility of program as well as greater responsibility for the student in the learning process. Within the individual studies concept are included such options as research, practicum, independent study, service-learning, readings, and performance. It is understood that the burden of responsibility for learning will be on the student-it is not a tutorial program.

Students who wish to enroll in an individual studies course must complete a course proposal form that may be obtained from the registrar's office. In the written proposal the student will describe in some detail the object or goal of the study, the procedures to be followed, the materials to be used, a projected product or outcome, and the method of evaluation. The faculty project supervisor must sign the proposal. Completed proposals must be returned to the registrar for approval by the deadline for adding courses.

If a proposed individual studies project is interdepartmental or falls within a department that does not have an individual studies option, the student may consult the registrar for permission to register for Individual Studies 391, 392, or 393. (See pages 59-60 for policies that govern individual studies.)

Official Transcripts Requests for transcripts should be submitted well in advance of the time they are required by the student. Transcripts will not be made during the week of registration or at the time semester grades and reports are being processed.

A transcript will be released only if all accounts have been settled with the college.
Transcripts are released only with the written permission of the student. They will not be sent to employers or other agencies without the permission of the student. Dordt College recognizes and desires to protect student rights of privacy, rights of access to educational data, and the right of challenging the contents of records for inaccurate or misleading information. Most records pertaining to the education of an enrolled student are open to the student upon request. Records may be released to specified persons by written consent of the student. College policies for the privacy rights of students and parents are in compliance with the Family Educational Rights and Privacy Act of 1974. Inquiries concerning compliance should be directed to the provost.

Participation in the Assessment Program Dordt College has a comprehensive assessment program to evaluate student learning. Assessment activities are an important part of the total educational program. They are scheduled into the academic calendar and embedded in academic programs. The various facets of assessment involve academic skills, academic programs and majors, and the educational goals of the core program. Dordt College and its faculty are dedicated to evaluating the quality and effectiveness of all facets of its educational program. The purpose of assessment is to help make improvements in curriculum, student learning, and teaching.

Students will be required to participate in assessment activities. Baseline data will be collected at the freshman level, and additional assessment will occur throughout the student's academic career. The number and type of assessment activities may vary from student to student.

Pass/Fail Option Sophomores, juniors, and seniors have the option of selecting elective courses on a pass/fail ( \(\mathrm{P} / \mathrm{F}\) ) basis. The pass/fail option was adopted to provide more flexibility in program planning and to encourage students to explore many interests outside of their normal program without the worry of overload or about the effect of the grade on their grade point average. The following polices govern \(\mathrm{P} / \mathrm{F}\) courses:
1. A maximum of 15 credits of \(\mathrm{P} / \mathrm{F}\) work will apply to the 124 credits required for a bachelor's degree; a maximum of 8 credits of \(\mathrm{P} / \mathrm{F}\) work will apply to the 60 credits required for an associate's degree.
2. Students successfully completing a \(\mathrm{P} / \mathrm{F}\) course will have a grade of " P " recorded on their transcript. They will receive credit for the course, but no grade points. Thus, a grade of " P " will have no effect on the student's grade point average.
3. Students failing a \(P / F\) course will have a grade of " \(F\) " recorded on their transcript. This "F" will be calculated the same way as an " \(F\) " under the normal grading system. Thus, a failing grade in a \(\mathrm{P} / \mathrm{F}\) course will affect the student's grade point average.
4. Students taking a course \(\mathrm{P} / \mathrm{F}\) are expected to participate fully in the course. Instructors are not explicitly notified of the students taking the course pass/fail, but that information is available to them upon request.
5. Students who receive a " P " in a \(\mathrm{P} / \mathrm{F}\) course may not repeat the course on a graded basis.
6. Only elective courses may be taken \(\mathrm{P} / \mathrm{F}\) - courses required for a student's core program, major, or minor may not be taken \(P / F\).
7. Departments have the prerogative to identify courses that should not be \(\mathrm{P} / \mathrm{F}\).
8. Changes from A-F to \(\mathrm{P} / \mathrm{F}\) grading and from \(\mathrm{P} / \mathrm{F}\) to A-F grading may be made on forms supplied by the registrar's office as follows:
- \(\mathrm{P} / \mathrm{F}\) to A-F grading - any time prior to the last full week of classes
- A-F to P/F grading - any time during the first two weeks of the semester
9. Students must petition the registrar's office to have a course revert to the original grade earned when, due to a change in major, a course previously taken \(\mathrm{P} / \mathrm{F}\) becomes part of the student's major.

Repeating Courses Any course with a grade of B- or lower may be repeated. The original grade remains on the transcript with a reference to the repeated course. Only the last instance of the course on the transcript is factored into the cumulative GPA.

Residence Requirement A minimum of eight semesters of full-time college study is required for the bachelor's degree and four semesters for the associate's degree. A maximum of eight credits \((1 / 2\) of a typical full-time semester) of overload work will be applied toward the residence requirement (see the section relating to student load on page 60). Requests for an accelerated program are based upon equivalent residency for approved transfer or summer study and must be submitted to the registrar at least one year prior to graduation.

A minimum of 30 credits shall be earned in residence at Dordt College. A minimum of six credits from upperlevel courses in the major and nine credits from the core program curriculum must be completed in residence at Dordt College. If only 30 credits are earned at Dordt College, the credits normally shall be earned in full-time residence during the final academic year. The curriculum and academic policies committee may grant nontraditional students exception to the full-time residency requirement.

Under normal circumstances, the final 30 credits toward the Dordt College degree shall be completed at Dordt College or in an off-campus program sponsored by Dordt College. Students may request special permission from the registrar to complete final credits at another college. Up to 30 credits may be granted if a minimum of 90 Dordt College credits has been completed; up to 15 credits may be granted if a minimum of 60 Dordt College credits has been completed. These credits normally are taken at
four-year colleges or universities. Permission is not automatic but is contingent upon the rationale of the request. A maximum of 12 of the final 30 credits or 6 of the final 15 credits earned off campus may be applied to the student's major requirements with written approval from the major department. Appeals may be submitted to the curriculum and academic policies committee.

Service-Learning Courses Service-Learning 281, 282, and 283 courses may be directly connected to courses in and across departments, or students may choose to participate independently in service activities with a select community organization under the supervision of a faculty/staff member. ServiceLearning courses allow for greater flexibility of program as well as greater responsibility for the student in the learning process.
Service-Learning is an educational method and experience:
- through which students learn and develop through active participation in thoughtfully organized service experiences that meet actual community needs.
- that is integrated into the student's academic curriculum or provides structured time for a student to think, talk, or write about what the student did and saw during the service activity.
- that provides students with opportunities to use newly acquired skills and knowledge in real-life problem-solving situations in the community.
- that enhances student learning beyond the classroom and fosters a clearer sense of servanthood and living as kingdom citizens.

Students who wish to enroll in a service-learning course must complete a course proposal form that may be obtained from the registrar's office. In the written proposal the student will describe in some detail the community setting for the project, the student's learning goals, the service activities provided, the plan for reflection activities, and the method of evaluation. The faculty project supervisor must sign the proposal. Completed proposals must be returned to the coordinator of community-based learning and the registrar for approval by the deadline for adding courses.

If a proposed service-learning is interdepartmental or falls within a department without an individual studies option, the student may consult the registrar for permission to register for Individual Studies.

Individual studies courses and Service-Learning courses are governed by the following policies:
1. They may have \(1-3\) credits (281 and 391- one credit, 282 and 392 - two credits, and 283 and 393 three credits).
2. Individual Studies: Second semester freshmen and sophomores may take 391 courses, juniors and seniors 391, 392, and 393 courses (the registrar may grant exceptions).
Service-Learning: First semester freshmen may take 281 courses; second semester freshmen, sophomores, juniors and seniors may take 281, 282, and 283 courses (the registrar may grant exceptions).
3. A student must have a cumulative grade point average of at least 2.00 to enroll in 281 and 391 and 2.25 for 282, 283, 392 and 393.
4. A maximum of nine individual studies/service-learning credits may be applied to the B.A. degree; a maximum of four credits to the A.A. degree.
5. Students may enroll in a course more than once. For example, a student may enroll in Business Administration 391 or 392 or 393 more than once. Not more than four individual studies/
service-learning credits may be taken in a semester.
6. Normally, an individual studies/service-learning course should be completed in the semester of enrollment, but with advance notice the course may be spread over the first and second semesters of the year. Register for the course only in the semester that the course will be completed.
7. Individual studies courses 392 and 393 and service-learning courses 282 and 283 are open to students who have had extensive previous course-work in the department.

Student Classification Classification is made at the end of every semester and is determined by the number of credits successfully earned:

Sophomore.......... 24 credits
Junior ................... 54 credits
Senior .................. 84 credits

Student Load Since 124 credits are required for bachelor's degrees and 60 credits are required for associate's degrees, students who plan to complete these degrees in the standard amount of time must average 15 to 16 credits per semester. Students must be enrolled in a minimum of 12 total credits per semester in order to be considered full-time. Students registering for more than 15 total credits should do so in consultation with their academic advisor.

The following policies govern the maximum student load and are monitored by the registrar:
1. The normal maximum student load for all students is 18.5 credits.
2. First semester freshmen admitted with a high school GPA below 2.25 or a composite ACT score below 19 (SAT I score below 920 ) are limited to 14 credits.
3. Second semester freshmen, sophomores, juniors, and seniors with a college GPA of 3.0 or better may register for an overload with the permission of the academic advisor and the registrar. Only under rare circumstances will a student be allowed to register for 22 or more credits.
4. No more than a total of eight credits earned in excess of 16 credits per semester will be applied to the residence requirement.

Withdrawal From School A full-time student who wishes to withdraw from school must obtain the necessary withdrawal form and receive permission to leave school from the Student Services office. The form must be signed by the vice president for student services, director of admissions, assistant to the vice president for business, and returned to the office of the registrar. Refunds are based upon the date of such approval. Students who withdraw before the end of the semester will receive grades of "WP" or "WF" depending on their current standing in each course. Students who withdraw without notifying the registrar will have grades of " \(F\) " recorded for all courses. (Part-time students must notify the registrar of their withdrawal.)

\section*{Academic Offerings}

This section contains descriptions of programs, majors, minors, areas of concentration, fields of specialization, and courses. Semesters following course titles indicate when each course is normally offered. On rare occasions, a course may not be available when indicated because of low enrollment or unexpected staffing changes.

Courses listed as Fall Even and Spring Odd are scheduled to be offered during the 2010-2011 academic year. i.e., Fall 2010-2011 is Fall Even, Spring 2010-2011 is Spring Odd.

\section*{Accounting}

General Major- \(\quad\) Business Administration 100, 201, 202, 225, 301, 302, 310, 311, 312, 313, 314, 315, 316, 320, 351; one elective course in business administration; Economics 202, 203; one elective course in economics; Mathematics 107.

\section*{Agriculture}

The objectives of the course requirements in agriculture, and the other majors as well, are to enable students to develop a basic understanding of the discipline, to learn skills that will equip them to serve in God's kingdom in this area, and to prepare them for future learning experiences.

General Major- \(\quad\) Foundation (common to all emphases): Agriculture 101, 105, 111, 290, 361, 370, 380, 381.

Students must select one of the following emphases:
General: Foundation; Chemistry 101, 122 or 103, 104; Agriculture 201, 221, 232; six credits from Agriculture 233, 234, 235, 238, 291, 331, 332, 334, 336, Biology 213, 302; six credits from Agriculture 251, 255, 311, 315, 316, 350, Biology 115, 217, 319. Agriculture 321 and 371 are also recommended.

Agri-business: Foundation; Chemistry 101; Agriculture 221, 312, 321; one course from Agriculture 201, 232, 233, 234, 235, 238, 251, 255; Business Administration 201, 202, 205, 206; Economics 202, 203; business administration or economics elective 200 level or above. Agriculture 371 is also recommended.

Animal Science: Foundation; Chemistry 101 or 103, 104 or 122; Biology 122, 213, *302; Agriculture 221, 232, 234, 291; one course from Agriculture 233, 235, 238; two courses from Agriculture 331, 332, 334, 336. Agriculture 321 and 371 are also recommended. *Pre-vet students and those considering graduate school should take Biology 310 rather than Biology 302.

Biotechnology: Foundation; Chemistry 101, 122 or 103, 104; Chemistry 221, 222, 325, 326; Biology 213, 214, 310, 322, 335; Biotechnology 213; three credits from Agriculture 201, 232, 234, 291, 315, 316, 332, 334, Biology 319, 323. Students in the biotechnology emphasis must take Biotechnology 361 instead of Agriculture 361 and may substitute Biotechnology 373 for Agriculture 380 and 381 in the foundation requirements.

Missions: Foundation; Chemistry 101 or 103; Agriculture 221; nine credits from Agriculture 201, 232, 233, 234, 235, 238, 251, 255, 311, 350, BY 291 Sustainable Tropical Agriculture (Gordon College); Theology 231, 331, 332; Theology 322 or 323; one course from Theology 211-217; CORE 270.

Plant Science: \(\quad\) Foundation; Chemistry 101 or 103, 104 or 122; Biology 115, 213, 319; Agriculture 201, 221, 311; Agriculture 251 or 255; Agriculture 315 or 316; one course from Agriculture 341-350. Agriculture 321 and 371 are also recommended.

Associate of Arts Degree Options Area of Concentration (Associate of Arts in Agriculture) See the "Academic Program" section for the core program for all A.A. programs.

Agriculture 101, 105, 111, 221, 290; Agriculture 201 or 232; three elective credits of agriculture; Chemistry 101; Economics 200 or 202; CORE 200 (fulfills core distribution elective).

For details of the Bachelor of Science SECONDARY Agriculture Education degree available through articulation agreement with the University of Nebraska-Lincoln, see Dr. Duane Bajema in the agriculture department.

\footnotetext{
101 Biology, Care, and Production of Domestic Animals (4) ............................................................. Spring History, management, physiology, breeding, lactation, feeding, health, and products of cattle, swine, sheep, poultry, companion animals, and other species as they relate to humans and the creation. Three lectures and one three-hour laboratory period per week. [Cross-listed: CORE 213]
}
105 Orientation and Agricultural Safety (1.5) .................................................................................Fall, Spring
Classroom discussion and practical experience are used to familiarize students with the ASC and green-
house and to develop understanding and competency in the areas of current agricultural production prac-
tices and safety procedures. Students will be certified in CPR and will complete first aid training. The
course meets for six weeks. Two lectures, a three-hour laboratory, and three hours of scheduled activity at
the ASC per week.

106 Agricultural Operation and Experience (1.5)
Fall, Spring
Designed to give students the opportunity to develop additional skills and proficiencies in agricultural operations. Prior permission from the instructor(s) is required for enrollment. Prerequisite: Agriculture 105.

111 Introduction to Plant Science (4)
Fall
Students will study plants, their care and use within agroecosystems, as well as their role in creation. Stu-
dents will be introduced to how agriculture both influences and is influenced by human cultural development, how humankind's understanding of stewardship influences creation care, and how plants serve as sources of food, fiber, fuel, and fascination. Plant biology concepts including plant structure and function, growth, development and reproduction, and plant/environment interactions will be introduced. The course will demonstrate how these biotic and environmental factors integrate with plant biotechnology, crop breeding and propagation, protection, cropping systems, and crop economics and utilization. Three lectures and one three-hour laboratory per week. [Cross-listed: CORE 215]

201 Nature and Properties of Soils (3)
Spring
A comprehensive introduction to the field of soil science with emphasis on scientific principles and their application in solutions to practical soil management problems. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 111; Chemistry 101.

221 Introduction to Farm Management and Accounting (3) Spring The study of decision making in the operation of an agricultural business using financial information and other criteria. Topics include current agricultural policy, goal setting, planning, organization of the farm business, systems management, record keeping, budgeting, balance sheets, income statements, cash flow statements, investment analysis, tax planning, and risk analysis. Two lectures and one three-hour laboratory per week. Prerequisite: Economics 200 or 202.
\(\qquad\) The evaluation, composition, and values of feedstuffs as they relate to animal nutrient requirements will be considered. The basics of ration formulation and feeding management will be covered for the major livestock species. Two lectures and one two-hour laboratory per week. Prerequisites: Agriculture 101; Chemistry 101.

233 Principles of Dairy Science (3)
Spring Even Dairy reproduction, physiology, lactation, breeding, nutrition, and genetics will be discussed with an emphasis on scientific principles and their application to dairy science. Two lectures and one three-hour laboratory period per week. Prerequisites: Agriculture 105, 232; Chemistry 101.

234 Principles of Animal Health (3) Spring Odd
Animal care and facility sanitation will be discussed, focusing on care, disease prevention, disease detection, animal treatment, pharmacology, and health programs. Three lectures per week. Prerequisites: Agriculture 101, 232; Chemistry 101 . Biology 302 or 310 is recommended.

235 Principles of Swine Science (3) Fall Even
A study of swine care and management, physiology, diseases, equipment, reproduction, and nutrition. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 105; Chemistry 101. Agriculture 232 is recommended.

238 Beef and Sheep Science (3) Fall Odd
A study of beef and sheep management, production, physiology, nutrition, reproduction, diseases, equipment, facilities, and care. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 105; Chemistry 101. Agriculture 232 is recommended.

251 Horticultural Plants (3) Spring The study of greenhouse, vegetable, and ornamental plants. The aesthetics, culture, physiology, and propa-
gation of horticultural plants will be examined. Two lectures and one three-hour laboratory per week. Prerequisite: Agriculture 111 or Biology 115.

255 Forage Crop Management (3) ...................................................................................................Fall Even The production and management of crops for livestock feed are considered and the establishment, growth, harvesting, preservation, and quality of these crops are examined. Primary emphasis is given to the value of major temperate region grasses and legumes as livestock feed, and the energy, protein, and other nutritional components they supply. The identification of common and alternative forage species is an important component of the course. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 111.

Service-Learning (1-3)
.Fall, Spring, Summer
See "Individual Studies" section of "Academic Offerings."
290 Perspectives on Agricultural Economics, History, and Policy (3)
Fall Even, Spring The historical changes in food production, management, and processing systems are examined, and the impacts of past philosophies, religions, and worldviews on contemporary agricultural systems are discussed. Domestic and international agricultural policy is also studied. Several views on these topics are examined, and a Reformed perspective is developed. Two lectures and a one-hour small group discussion period per week. Prerequisites: CORE 200; sophomore standing. Economics 200 or 202 or Political Studies 201 is recommended.

291 Anatomy and Physiology of Animals (4)
Fall Even
The structures and functions of the major body systems will be studied as they work together in the life processes of an animal. The nervous, skeletal, muscle, circulatory, endocrine, digestive, and reproductive systems will be examined. Three lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101 or Biology 122; Chemistry 104 or 122.

303 Geographic Information Systems (3) \(\qquad\) Fall Even An introduction to the acquisition, display, manipulation and management of geographic information. Topics include geographical data input, storage, maintenance, analysis and retrieval. Students will utilize common GIS software and associated hardware. Lectures will place an emphasis on the concepts that underlie GIS technology. Application of GIS to agriculture, business, environmental management and other disciplines will be a significant component of the course. Prerequisite: sophomore standing or above. [Cross-listed: Business Administration 303, Construction Management 207, Environmental Studies 303]

311 Soil Fertility (3)
Spring Even
An integrated discussion of soil-crop yields relationships with emphasis on the soil as a source of mineral nutrients for crops and the role of fertilizers and manure in crop production. Three lectures per week. Prerequisites: Agriculture 111, 201; Chemistry 101 or 103.

312 Marketing of Agricultural Products (3).............................................................................................Fal
An analysis of agricultural marketing systems, factors determining agricultural prices, and farmer marketing management. Topics include setting marketing goals, government price institutions, contract and futures markets, and marketing under risk and uncertainty. Three lectures per week. Prerequisite: Agriculture 221 or Business Administration 205, 206.

315 Entomology and Pest Management (3) Fall Odd
An introduction to entomology and insect-pest management including insect biology, taxonomy, ecology,
life cycles, and integrated pest management. Three lectures per week. Prerequisites: Agriculture 111 or Biology 115; Chemistry 101 or 103 ; junior standing.

316 Plant Protection - Weed Science and Plant Pathology (3)
Spring Odd
A study of the major weed and plant pathology principles and theories and their application to the field of pest management. The course will include identification, physiology, ecology, life cycles, and stewardly management practices for important pest species. Prerequisites: Agriculture 111 or Biology 115; Chemistry 101 or 103; junior standing.

321 Advanced Farm Management (3)
Fall
Christian concepts of stewardship and justice in agriculture, advanced planning techniques, investment analysis, agricultural finance, decision-making under risk and uncertainty, intergenerational transfer of the family business, governmental regulation and promotion of agriculture. Three lectures per week. Prerequisites: Agriculture 221 or Business Administration 100; Business Administration 201, 205; Economics 200 or 202.

331 Reproductive Physiology (1.5)..........................................................................................................Spring Even A study of the principles of reproductive physiology and lactation focusing on the major classes of livestock. Students will use these principles to develop an understanding of reproductive management techniques and will examine the ethics of reproductive technologies. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 291; Chemistry 101.

332 Advanced Animal Nutrition (1.5)
Spring Odd
A problem-solving approach will be taken to examine the nutrient requirements of animals in different production systems. The methods that can be used to meet those requirements will be evaluated. Ration formulation will be discussed as it relates to the different digestive systems and production requirements. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 232; Chemistry 122.

334 Applied Animal Breeding (1.5) \(\qquad\) Spring Even Quantitative genetic principles will be applied to livestock production systems. Improvement programs utilizing selection practices and mating systems will be discussed. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 101; Chemistry 101. Biology 213 is recommended.tures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 101; Chemistry 101.
337 ECHO Agricultural Missions Conference (1) ..... Spring
Participation in the major agricultural mission conference held the second week in November in Fort Myers, Florida. The Educational Concerns Hunger Organization hosts this international conference, which focuses on agricultural missions, cross-cultural issues, and community development. Prerequisite: sophomore standing. [Cross-listed: Theology 337]talents of experts in the community. Each course covers material not usually treated in regularly scheduled courses.

350 Field Crop Production and Management (3)
Fall
Grain and forage production in the North Central Region of the US is investigated using lectures, group projects, field trips, and production and research experiences at the ASC. The role of grains in world food production is examined, and students are challenged to find solutions to the problems frequently associated with grain production. Students collect and analyze field crop data and explore sustainable crop production methods and systems. The investigation of new and innovative crop production strategies is an important component of the course. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 105, 111, 221; one course from Agriculture 201, 251, 255, 311, 315, 316.

361 Senior Seminar (3)
Spring
An integration of departmental courses, research, and analysis of current topics with emphasis on Christian perspective for persons involved in agriculture. Issues will include government policies, world hunger, the family farm, meat production, and others. Three lectures per week. Prerequisites: Agriculture 290; senior standing.

An introduction to the principles of agricultural ecology with an emphasis on Christian stewardship of God's world. Topics include the development and characteristics of agroecosystems, ecological disturbance and succession, diversity, pest management, nutrient cycling, environmental quality, energy use, climate change, social capital, conservation practices, and global food production. The interaction of agroecosystems with surrounding ecosystems is studied, and the utilization of ecological principles in agroecosystem design and management are examined. Three lectures and one three-hour laboratory per week. Prerequisites: Agriculture 111, 101 or Biology 115, 122; Chemistry 101; junior or senior standing.

Practicum (3)
Spring
Students are given the opportunity to apply the principles of agriculture and business in an off-campus assignment. Ten hours per week at an off-campus site. Prerequisite: senior standing in the agriculture department.

380 Directed Study - Class Component (1.5). Fall
Students, in groups of two or three, design a study of particular interest to them with the guidance of a faculty member in the agriculture department. The course involves identifying a relevant problem or question, reviewing background information, preparing a study proposal, and obtaining the agriculture department's approval of the proposal. Class meets one period per week (Tuesday or Thursday). Prerequisites: Agriculture 101, 105, 111; Agriculture 290 or 370 ; junior or senior standing.

381 Directed Study - Project Component (2.5). \(\qquad\) .Fall, Spring, Summer A continuation of Agriculture 380. Students, working in groups of two or three, will collect and analyze data, evaluate the findings from a Christian perspective, and present their results in written and oral form. Research will typically be conducted during the spring or summer semester with a presentation the following fall (for seniors the presentation will be at the end of spring semester). Prerequisite: Agriculture 380.

Individual Studies (1-3)
.Fall, Spring, Summer
See "Individual Studies" section of "Academic Offerings."

\section*{American Studies}
\begin{tabular}{ll} 
General Minor- & \begin{tabular}{l} 
History 201; one course from English 201, 202, 203, 321; one course outside the \\
student's major discipline from Economics 309, Political Studies 202, 322, Social
\end{tabular} \\
Work 216; two additional courses outside the student's major discipline from Art \\
209, English 201, 202, 203, 321, History 305, 306, 308.
\end{tabular}

Art History emphasis: Art 201, 202, 207, 208, 209, 210, 216; two courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340.

Fine Arts Studio emphasis: Art 201, 202, 216, 302, 370; three courses from Art 207, 208, 209, 210; two courses from Art 218, 225, 228, 230, 240; two courses from Art 316, 318, 325, 328, 330, 340; one course from Art 295, 352, 366, 368, 375, 378, 380, 390; Philosophy 206.

Graphic Design emphasis: Art 201, 202, 209, 228, 230, 240, 295, 340, 370, 390; Art 225 or 302; Business Administration 206.

Prearchitectural Design Emphasis: Art 201, 202, 207, 208, 209, 240, 340, 370, 390; three courses from Art 225, 228, 230, 295, 302; Business Administration 206; Chemistry 103; Environmental Studies 151; Mathematics 112; Physics 201; Engineering 103, 104, 202, 210, 212, 310, 390.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" on pages 108-130.

201 Design Theory (3) Fall Manipulation of two-dimensional design through the use of the basic art elements: line, shape, value, color, texture, and space. The course is intended to develop a visual vocabulary and an imaginative approach to design. Required of all majors and minors.

202 Drawing I (3)
.Fall, Spring
Acquiring the basic skills of drawing through an objective investigation of reality. Common media and tools are used. Required of all art majors and minors.

207 Art History: Ancient and Medieval (3) \(\qquad\) Fall Odd This course is the first of a three-semester survey of the history of the visual arts. It investigates the role of the visual arts in the historical and cultural development of world civilization between prehistory and the 14th century.

208 Art History: 14th to 19th Centuries (3) \(\qquad\) .Spring Even
This course is the second part of a three-semester survey of the history of art. It covers the history of architecture, painting, and sculpture from the 14th century through the 19th century.
209 Art History: Contemporary Art and Architecture (3) ..... Fall EvenThis is the third course in an historical survey of art and architecture. The course will begin with thefoundations of modernism in the last half of the 19th century and then cover the plurality of styles in the20th century.
210 Non-Western Art History (3)

\(\qquad\) ..... Spring Odd
This course studies non-European art and culture including Islamic art, Japanese art, and Chinese art.
211 Teaching Art in the Elementary School (3) ..... Fall
A course for art majors and minors designed to provide a detailed study of methods, materials and tech- niques of art education in the elementary school.
216 Sculpture I (3) Spring
An introductory course emphasizing 3-D design, utilizing a variety of materials including clay, wood, plaster, stone, and mixed media.
218 Ceramics I (3) ..... Fall
An introduction to clay and the basic process of slab, pinch, coil and wheel-thrown constructions. Class size is limited.
225 Painting I (3) ..... Fall
An introduction to painting, emphasizing techniques and methods of communicating ideas visually. Class size is limited. Prerequisite: Art 201 or 202.
228 Printmaking I (3) ..... Spring
An introduction to some basic printmaking methods: serigraphy, linocuts, collographs, and intaglio. Classsize is limited. Prerequisite: Art 201 or 202.
230 Photography I (3) Spring
An exploration of black and white photography as an art form. Students must provide their own 35 mm camera. Class size is limited.
240 Graphic Design I (3) ..... Fall
An introductory class in the use of the Macintosh computer, covering basic layout software, object-oriented drawing software, and a paint program for scanning, image manipulation and their use in graphic design. Through assignments that address the functional and experimental aspects of typography, students explore the interaction of form and meaning in typographic design. This course provides an initial exploration of visual communication issues and applications along with design methodology. Prerequisites: Art 201, 202 or by permission of instructor.
281- Service-Learning (1-3) .Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."Motion Graphics (3)SpringThis course is an introduction to the art of 2-D and 3-D digital graphics animation and interactivity forvideo, the Web, and DVD. Students will gain knowledge of digital animation and its history. Projectsare centered on getting hands-on experience and will integrate learning with real-world video production.The course also focuses on planning, design, and production using lectures, demonstrations, workshops,
and screenings. Students will focus on using the most popular software programs. Prerequisites: Art 240; permission of instructor.

Note: Courses 302-340 are continuations of the introductory media courses. Each 300-level media course has a corresponding 200 -level media course as its prerequisite. Permission of instructor is also required.
302 Drawing II (3) ..... Fall
316 Sculpture II (3) Spring
318 Ceramics II (3) ..... Spring
325 Painting II (3) ..... Spring
328 Printmaking II (3) ..... Fall
330 Photography II (3) ..... Fall
340 Graphic Design II (3) ..... SpringA continuation of Art 240, students apply their growing knowledge of the interaction between typographyand visual form to specific design situations. Type/image relationships are important aspects of this course;typographic syntax and arrangement are stressed. Design methodology, research, the development of avariety of ideas, and print production technology is emphasized. Prerequisite: Art 240.
341- Special Topics (3)Occasional
348 These courses vary each year and are intended to utilize various staff talents and communal expertise while involving the student in in-depth studies of art and art history.
352 Drawing III (3) ..... Fall
Prerequisites: Art 202, 302; permission of instructor
366 Sculpture III (3) ..... Spring
Prerequisites: Art 216, 316; permission of instructor
368 Ceramics III (3) ..... Spring
Prerequisites: Art 218, 318; permission of instructor370 Senior Seminar in Art (3).FallA critical examination of contemporary problems and trends in the field of art. The course will includereadings, discussions, a paper or presentation, critique of current exhibitions, and a senior art show.A professional opportunity for the art major to apply the knowledge, principles and skills gained in the class-room in an actual work place environment. Prerequisites: level I art course in area of internship (Art 202,216, 225, 228, 230, 240 or one of the following: Art 207, 208, 209, 210); permission of instructor.
room in an actual work place environment. Prerequisites: level II art course in area of internship (Art 302, \(316,325,328,330,340\) or two of the following: Art 207, 208, 209, 210); permission of instructor.
373 Art Internship (3) ............................................................................................................................. Spring
A professional opportunity for the art major to apply the knowledge, principles and skills gained in the
classroom in an actual work place environment. Prerequisites: level III art course in area of internship (Art
352, 366, 375, 378, 380, 390 or three of the following: Art 207, 208, 209, 210); permission of instructor.

374 Art Internship (4)
Fall, Spring
A professional opportunity for the art major to apply the knowledge, principles and skills gained in the classroom in an actual work place environment. Prerequisites: level III art course in area of internship (Art \(352,366,375,378,380,390\) or three of the following: Art 207, 208, 209, 210); permission of instructor.

375 Painting III (3) \(\qquad\) Fall, Spring Prerequisites: Art 225, 325; permission of instructor.
\(\qquad\)
378 Printmaking III (3) Spring Prerequisites: Art 228, 328; permission of instructor.
\(\qquad\) Prerequisites: Art 230, 330; permission of instructor.
390 Graphic Design III (3)..........................................................................................................................Fall

391- Individual Studies (1-3)
.Fall, Spring, Summer
See "Individual Studies" section of "Academic Offerings."

\section*{Astronomy}

121 Solar System Astronomy (4)
.Fall Even
An introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic "neighborhood" from the ancient Greeks to Einstein as well as recent discoveries and their implications for an improved understanding of our Earth. Students will obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Students may take either Solar System Astronomy or Stellar and Planetary Astronomy for core program credit, but not both. Prerequisite: completion of core mathematics requirement. [Cross-listed: CORE 224, Earth Science 121]

122 Stellar and Galactic Astronomy (4)
Spring Odd
An introduction to stellar and galactic astronomy, focusing on the historical development of understanding of the cosmos as well as recent discoveries and their implications. Topics include the classification and explanation of stars, stellar life-cycles, remnants of stellar collapse (white dwarfs, neutron stars, black holes),
galaxies, and cosmology (the study of the universe as a whole). Students will examine origins in light of Scripture and modern scientific evidence. Students will also obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Students may take either Solar System Astronomy or Stellar and Planetary Astronomy for core program credit, but not both. Prerequisite: completion of core mathematics requirement. [Cross-listed: CORE 225]

\section*{Biology}

The biology major is divided into a three-tier curriculum including foundational principles, distribution/exploration, and directed research. Integrative threads in biblical perspective, biological structure, unity and diversity, historical context, and environmental stewardship are treated throughout the major. The major includes five cognate support courses in chemistry. A course in technical writing is highly recommended.

General Major- Biology 115, 122, 200, 213, 358, 380; *one botanical science course from Biology 217, 316, 319, Agriculture 251, 316; *one zoological science course from Biology 201, 202, 301, 304, 312, Agriculture 315, Environmental Studies 270; *Four 3- or 4-credit courses including at least two biology courses from the following: Biology 201 or above, Agriculture 251, 315, 316, Environmental Studies 270.
*Courses may be used from off campus study sites such as the Au Sable Institute or the Latin American Studies Program, if appropriate and approved.

Students must select one of the following chemistry cognates:
A. For graduate school or one of the allied health professions: Chemistry 103, 104, 221, 222, 325. Physics 115, 116, Mathematics 107 or 206 are recommended.
B. For analytical, technical support work or a career in natural history: Chemistry 103, 104, 122; two courses from Chemistry 212, 251, 312.
C. For service in the pharmaceutical or molecular biology fields: Chemistry 103, 104, 221, 222; one course from Chemistry 212, 251, 312, 325.

The Biotechnology/Molecular Biology emphasis retains the organismic foundations of the general biology major, but focuses on cellular and molecular biology. The link between organismic and molecular biology is emphasized in a course on bioinformatics, and the program includes a strong science foundation with course work in chemistry, mathematics, and physics. The program also includes an internship within the biotechnology field.

Biotechnology/Molecular Biology Emphasis-Biology 115, 122, 200, 213, 214, 310, 322, 323, 335, 358, 380; Biotechnology 213, 361, 373; one zoological course from Biology 201, 202, 301, 304; one botanical course from Biology 217 or 319; Chemistry 103, 104, 221, 222, 325, 326; two courses from Mathematics 107, 111, Physics 115, 116.

Biology 115, 122, 200, 213; one elective in biology; Chemistry 101, 122 (preferred) or Chemistry 103, 104.

\section*{For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and} teaching endorsements, see the "Teacher Education Program" on pages 108-130.
\(\qquad\)
An introductory study of the anatomy, physiology, taxonomy, and ecology of the major plant groups. Three lectures and one laboratory period of three hours per week. [Cross-listed: CORE 216]

122 General Zoology (4) ......................................................................................................................Spring
A study of the anatomy, physiology, ecology, taxonomy, and economic importance of the invertebrate and chordate animals. Three lectures and one laboratory period of three hours per week.

200 Principles of Ecology and Field Biology (4)
Fall
An introduction to ecological studies including topics in ecosystem and community structure, nutrient cycling, energy flow, limiting factors, and population interrelationships. The laboratory will emphasize study of local flora and fauna via field work. Three lectures and one laboratory period of three hours per week plus one or two Saturday field trips. Prerequisite: one year of college biology.

201 Human Anatomy and Physiology I (4) ...................................................................................Fall, Spring An introduction to the study of human biology, with emphasis on the structures and functions of the organ systems of man. Three lecture hours and one laboratory period of two hours per week. Not open to freshmen; an introductory course in Chemistry is recommended.

202 Human Anatomy and Physiology II (4)..................................................................................Fall, Spring
210 Nutrition (3)
.Fall, Spring
This course will focus on the basic science of foods and their components including relationships to health and disease. The implications of personal decision making and behavior change as well as social, economic, and cultural influences will be discussed. Fall course open to all majors; Spring course offered to nursing students or by permission of instructor. Does not count toward the biology major. [Cross-listed: HPER 211]

213 Genetics (3)
Spring
An introduction to the principles of inheritance and variation in plants, animals, microbes, and man. Three lectures per week. Prerequisites: Biology 115, 122 or Agriculture 101, 111 or by permission of instructor.

214 Genetics Laboratory (1) Spring
A laboratory course investigating the inheritance of traits in plants, animals, bacteria, and fungi. Participants will make controlled crosses, do cytogenetic analysis, and utilize the techniques of molecular genetics to manipulate and analyze DNA. The course is designed for students preparing for graduate school, medical school, secondary education, or another area in which a practical knowledge of genetic techniques is particularly useful. Pre- or corequisite: Biology 213.

217 Plant Morphology (4)
Fall Occasional
A comparative study of the structure, reproduction, life habits, and relationships of the major plant groups. Three lectures and one laboratory period of three hours per week. Prerequisite: Biology 115 .

227 Paleontology (3) \(\qquad\) Fall Occasional
An introduction to the major fossil plants and animals, and the environments (paleoecology) in which they are found. Three lectures, or two lectures and a two-hour laboratory per week. The course includes several Saturday field trips and one weekend field trip to the Pella area. Prerequisite: Biology 122 or by permission of instructor. [Cross-listed: Earth Science 227]

251 Perspectives on Origins (3) Spring Odd
A study of the philosophical, theological, and scientific aspects of evolutionary theory and the creationevolution debate. The course will use a seminar format in which students will be required to articulate and critically analyze the different positions on origins. Not open to freshmen. Prerequisite: one college science course. [Cross-listed: CORE 219]

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
300 Conservation Biology (3) .Occasional An upper level course emphasizing principles of applied population and community ecology, including the biology of endangered and threatened species, their conservation, and restoration. The course will be developed in the context of Christian environmental stewardship principles. The class will meet in seminar/ discussion format. Occasional field trips. Prerequisite: Biology 200.

301 Developmental Biology (3) ...................................................................................................... Fall Odd A study of the development of representative vertebrates and invertebrates including fruit fly, sea urchin, frog, fish, and chick. Two lectures and one laboratory period of three hours per week. Prerequisite: Biology 213 or by permission of instructor.

302 Microbiology (4)...............................................................................................................................Fall
A study of the form, structure, and classification of microorganisms, including an introduction to viruses. The course will emphasize bacteria, general laboratory techniques, culturing and control of microbial growth. A substantial portion of the course will deal with immunologic processes: antibodies and antigens, host-antigen reactions, T \& B cells response mechanisms, and non-specific host defense mechanisms. Three lectures and one laboratory period per week. Prerequisite: second year student in the BSN program or by permission of instructor.

304 Histology (4) .Spring Even
A study of the microscopic anatomy of animal tissues and organs, with emphasis on the relationship between structure and function. Three lectures and one laboratory period of three hours per week. Prerequisite: Biology 201; Pre- or corequisite: Biology 202; or by permission of instructor.

310 Advanced Microbiology (4) Spring
An upper level course in the study of microbes, their history, their cell biology and inter-organism (symbiotic) processes. Topics will include and build on pro- and eu-karyotic distinctions, in-depth study of viruses and plasmids, anaerobic metabolism, biofilms, endosymbiosis, antibiosis, antibiotic resistance, disease mechanisms, how host immune responses develop and adapt. Laboratory work will include basic microscopic
observation, culturing and identification. Isolation and characterization of bacteria, viruses, and potential antibiosis will be featured as "unknown" work. Intended for biology majors and premedical students. Students cannot receive credit for both Biology 302 and 310. Three lectures and one three-hour laboratory per week. Prerequisite: Biology 213 or 335 or by permission of instructor.

312 Comparative Chordate Anatomy (4)
Occasional
A comparative study of the anatomy of chordate animals. Two lectures and two laboratory periods of three hours per week. Prerequisite: Biology 122.

316 Local Flora (3)
.Fall Even
A course in field biology and taxonomy of local vascular plants. Emphasis will be on the native vegetation of the tall-grass prairie landscape and its associated gallery forests and wetlands. Based on local studies, comparisons will be made with other geographic plant complexes. Two class periods per week, plus extensive lab and field work including weekend field trips. Prerequisite: Biology 115 or equivalent.

319 Plant Physiology (3) \(\qquad\) Spring Odd
A study of the basic functional aspects of plant growth, development, and reproduction. Lecture topics will include water relations, nutrient relations, translocation, photosynthesis, flowering, fruiting, seed germination, growth, development, and phytohormones. Two or three lectures and/or one three-hour laboratory period per week. Prerequisites: Biology 115; Chemistry 103, 104 or Chemistry 101, 122.

320 Wildlife Ecology and Stewardship (3).................................................................................. Spring Odd Advanced examination of animal (especially terrestrial vertebrate) populations, communities, and habitats, particularly as such analysis is applied to the manipulation and exploitation of animal populations and communities to regulate their abundance and distribution and/or to restore them. Considerable exploration and critique of the development and practice of wildlife management, particularly as it compares to biblical principles for creation stewardship. Two lecture/discussion sessions and one three-hour lab per week. Prerequisites: Agriculture 370 or Biology 200. [Cross-listed: Environmental Studies 320]

322 Molecular Biology and Biotechnology (4)
.Fall Even
An introduction to the theory of the molecular mechanisms of eukaryotic and prokaryotic gene expression, with applications for biotechnology. Laboratory work will include use of recombinant DNA and transformation techniques, polymerase chain reaction, blotting techniques and computer based sequence analysis. Social and ethical ramifications of biotechnology will be discussed from a Christian perspective. Three lectures and one laboratory of three hours per week. Prerequisites: Biology 214; Chemistry 103, 104 or Chemistry 101, 122.

Bioinformatics (3).
.Spring Even
An introduction to the study of genomics and proteomics. Students learn to access and analyze gene and protein sequences from web databases and use this information to understand better the biology of the organism. Topics include genome structure, sequence analysis, fingerprinting, protein structure, molecular modeling, and microarrays. The relationship between the organism and its genetic information and potential abuses of bioinformatics will also be addressed. Three lectures per week. Prerequisite: Biology 213.

Cell Biology (3). Fall
A study of the morphology and physiology of the cell, its organelles and its constituents. A unit on transmission electron microscopy will be a part of the course. Three lectures per week. Prerequisites: Biology 115, 122; Chemistry 103, 104.

348 Special Topics (3) .................................................................................................................Occasional
These courses will vary from year to year and are offered as student demand and instructor availability permit. They are designed to open additional areas of biological inquiry.

355 Research (1)
Fall, Spring
Laboratory, field, or library research on an approved topic, supervised by the department staff. Strongly recommended for majors (sophomores, juniors, and seniors). This course can also be seen as preliminary to Biology 391.

356 Research (1) .........................................................................................................................Fall, Spring
A continuation of Biology 355.
357 Medical Terminology (1)
Fall, Spring
The course is designed for students in the pre-health professions and secretarial science-medical emphasis. Students will learn medical terminology and its meaning within the context of the healing professions. Programmed texts and computer software will be used, with regular testing periods throughout the semester. It is suggested that CORE 212 be completed before taking this course. Graded on a pass/no record basis.

Introduction to Biological Research (1)
Fall, Spring
This is a mini-course designed to prepare students for directed senior research. The course will introduce the idea and practice of biological research. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The class will meet weekly in seminar or tutorial format. Students will be expected to make two short presentations, finalize their proposal for Biology 380, and (if appropriate) begin the work for the directed research project. Graded on a pass/no credit basis. Prerequisites: Biology 115, 122, 200, 213. [Cross-listed: Environmental Studies 358]

380 Directed Senior Research (3)
.Fall, Spring
A senior-level research course that focuses on problem solving and critical thinking in the biological sciences. The project will be chosen and conducted interactively with a staff mentor(s). Research should begin in the context of earlier courses and library literature and extend to the lab and field on or off campus. Project results are to be presented in a peer seminar. Prerequisite: Biology 358. [Cross-listed: Environmental Studies 380]

391- Individual Studies (1-3)
.Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Biotechnology}

Dordt College offers emphases in Biotechnology in the following academic areas: Agriculture, Biology, Business Administration, and Computer Science. For details of each emphasis, consult the appropriate section under each department.
213 Introduction to Biotechnology (3) .........................................................................................Spring Even
technology. Prerequisites: one life science course or a score of 24 or higher on the science component of the ACT test; sophomore standing. [Cross-listed: CORE 218]

\begin{abstract}
361 Senior Seminar (3)
Spring
A capstone course involving various methods including, but not limited to Investigative Case-Based Learning (ICBL) to critically examine, from a reformed, Christian perspective, a variety of aspects of particular biotechnology applications -- biological, engineering, economic, political, and philosophical. The course meets in a seminar/discussion format and culminates in formal student presentations. Prerequisites: Biotechnology 213; senior standing. Required for all students in a biotechnology program.
\end{abstract}

Internship (3) \(\qquad\) .Fall, Spring, Summer Students are involved in molecular biology research at a local biotechnology firm or in a molecular biology laboratory. Projects will be approved and progress will be monitored at regular intervals by a faculty member. Includes a written report submitted at the end of the specified time period. Prerequisites: Biology 322 or 323; Biotechnology 213. Designed for biology or agriculture students in the biotechnology emphasis.

\section*{Business Administration}

General Major- Foundation (common to all emphases): Business Administration 100, 201, 202, 205, 206, 225, 301, 351; Economics 202, 203.

Students must select one of the following emphases:
Biotechnology: Foundation; Biology 115 or 122; Biology 213; Biotechnology 213, 361; Chemistry 101, 122; Environmental Studies 151; Mathematics 107.

Construction Management: Foundation; Business Administration 207 or 307; Chemistry 101 or 103; Construction Management 102, 207, 213, 214, 318; Engineering 103, 104; Mathematics 111 or 112; Physics 115 or 201.

Finance: Foundation; Business Administration 226, 315, 325, 326; Economics 303; Mathematics 107, 111.

General Business: (recommended for people interested in general business or economics) Foundation; three business administration electives; one economics elective; one elective from business administration or economics.

Human Resource Management: Foundation; Business Administration 207, 333, 335; Communication 228, 260; Mathematics 107; Psychology 210; two electives from Communication 220, 222, English 305, Psychology 204, 376, Sociology 216.

Information Systems: Foundation; one business administration course elective; Computer Science 111, 120, 131, 220; one from Computer Science 211, 231, 320; one Economics course; Mathematics 107, 111.

\title{
International Business: Foundation; Business Administration 330; Economics 321; Political Studies 210; Theology 231 or 322; CORE 270 or any 200-level foreign language course; a minimum of six credits in an approved international off-campus experience. \\ Marketing: Foundation; Business Administration 306, 308, 336, 338, Marketing Internship 374; Communication 260; Mathematics 107. \\ Public Administration: Foundation; Political Studies 202, 214, 245, 333; Communication 228; Business Administration 320; Economics 303 or 321; Economics 315.
}

\section*{General Minors-}

Business: Business Administration 100, 205, 206; Economics 200 or 202; Business Administration 201, 202 and one elective from business administration/economics or Business Education 203 and two electives from business administration/economics.

Human Resource Management: Business Administration 205, 207, 333, 335; Communication 228, 260; Psychology 210.

\section*{Associate of Arts Degree Option}

Area of Concentration (Associate of Arts - Administrative Assistant) See the "Academic Program" section for the core program for all A.A. programs.

> Business Education \(105,112,321,322\); Business Administration 100; Business Education 203 or Business Administration 201; one elective from business administration; two electives in any combination of business administration, communication or English writing courses; Communication 100 or CORE 110; CORE 180 (fulfills core distribution elective).
> Note: Medical Emphasis Option includes Biology 201 and 202, or 357 .
\[
\begin{aligned}
& \text { Computer Literacy for Business/Accounting Majors (3)............................................................................. Spring } \\
& \text { This course teaches computer skills needed for an entry-level position in a technologically oriented business. } \\
& \text { Areas of study include word processing, spreadsheet, presentations, database, Internet, data interpretation } \\
& \text { and integration, computer terminology, purchasing criteria, ethics, stewardship, Windows operating system } \\
& \text { basics, file management, and information search and retrieval. Students will demonstrate skills through } \\
& \text { proficiency tests. Required for, and enrollment preference given to, all accounting, business, business educa- } \\
& \text { tion and administrative assistant majors. }
\end{aligned}
\]
emphasis is placed on problem-solving, critical thinking, and communications skills that are necessary for forming conclusions about business activities and to communicate these conclusions to others.

202 Principles of Accounting (3)
Spring
An introduction to managerial accounting, presenting basic accounting concepts that are important to management decisions. Emphasis is placed on analyzing and interpreting accounting information that enables management accountants to work with managers from other areas, particularly marketing and operations, and to make decisions about costing, pricing, and production. The tools and information that are important are described within the decision framework rather than as isolated accounting procedures.

205 Principles of Management (3)
Fall, Spring
An introductory course in management theory and practice. Major topics covered include planning and strategic management, organizational design, leadership and motivation theory, and control mechanisms. Prerequisite: sophomore standing.

206 Principles of Marketing (3)
Fall, Spring
A study of marketing institutions, product development, channels of distribution, price determination, promotion methods, government influences, and ethical problems facing marketing personnel. Includes a foundational study and discussion of business from a Christian perspective.

207 Human Resource Management (3) Fall
Introduces students to the role that Human Resource Management (HRM) plays in organizational settings. Course content is geared towards developing the foundational body of knowledge required of entry-level HRM practitioners and is organized around the four foundation areas of HRM expertise: staffing and recruitment, employee and organizational development, compensation and benefits administration, and labor relations. Prerequisite: Business Administration 205.

225 Introduction to Finance (3) Fall
An introduction to the theory, issues, and practice of business finance. Key components include valuation of financial assets, financial planning and control, working capital management, and capital budgeting. Prerequisite: Business Administration 201.

226 Personal Financial Management (3)
Spring
Prepares students for the many personal/family financial decisions that they will be making during their lives and provides insight and encouragement for making those decisions in a way that glorifies God.

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."

301 Business Law I (3) Fall Business and non-business students will benefit from this basic course in law that includes among other areas, an overview of constitutional law, personal injury, insurance law, employment law and contracts. A generous portion of time is devoted to studying related court cases.

302 Business Law II (3) Spring
A continuation of Business Administration 301, expanding on important areas of law such as personal injury, property law and contracts. Students learn the elements of buying a house, making a will, and forming a sales contract. A generous portion of time is devoted to studying related court cases.

303 Geographic Information Systems (3) ........................................................................................Fall Even
An introduction to the acquisition, display, manipulation and management of geographic information. Topics include geographical data input, storage, maintenance, analysis and retrieval. Students will utilize common GIS software and associated hardware. Lectures will place an emphasis on the concepts that underlie GIS technology. Application of GIS to agriculture, business, environmental management and other disciplines will be a significant component of the course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Construction Management 207, Environmental Studies 303]

304 Entrepreneurship/Small Business Management (3)
Fall Odd
A study of the importance of entrepreneurship in both the forprofit and not-for-profit sectors to the development of a society, with emphasis on the different paths to business concepts, interactions with entrepreneurs, and the development of a business plan. Prerequisite: junior or senior standing or by permission of instructor. ceptable ethical standards will be discussed. Through case studies and a simulation students will apply the concepts learned in Principles of Management and Principles of Marketing. Prerequisites: Business Administration 205, 206; junior or senior standing.

307 Production and Operations Management (3) Fall Odd
Designed to acquaint students with the theory underlying production and operations management, to give them practice in solving the kinds of problems confronted by managers of production and service operations, and to inform them of the opportunities and challenges in the field. Prerequisites: Business Administration 202; junior or senior standing.

308 Integrated Marketing Communications (3)................................................................................................. Fall In this course students will study the principles and practices of promoting a product or service including advertising, personal selling, direct marketing, public relations, trade promotions, and the internet, all from a Christian perspective. The importance of integrating all these areas of marketing communications will be emphasized. Prerequisites: Business Administration 206; junior or senior standing.

Analysis of financial accounting theory and current practice. Analysis of problems concerning valuation of assets, evaluation of liabilities and capital structure, communication and reporting of financial information. Prerequisite: Business Administration 202.

311 Intermediate Accounting II (3)
Spring
Continuation of Business Administration 310, includes special financial reports and financial analysis.
312 Advanced Accounting (3) Fall
A comprehensive study of accounting problems of partnerships, consolidations, branch operations, bankruptcies, estates, trusts, etc. Prerequisite: Business Administration 202.

313 Cost Accounting (3)............................................................................................................Spring Even
A study of measurement and evaluation of production costs, including job order costing, process costing, standard costing, and quantitative methods of costing. Prerequisite: Business Administration 202.

314 Auditing (3)
A working knowledge of principles and procedures of professional auditing and accounting with special emphasis on AICPA standards and professional ethics. Prerequisites: Business Administration 311, 312.

315 Federal Income Tax (3)
Fall
A study of federal income tax regulations and forms, based on the Internal Revenue Code, with primary emphasis on tax problems for the individual. Prerequisite: Business Administration 201 or Business Education 203 or by permission of instructor.

316 Advanced Federal Income Tax (3).
Spring Odd
A study of federal income tax regulations and forms, based on the Internal Revenue Code, with primary emphasis on corporations, partnerships, S corporations, estates, and trusts. Prerequisite: Business Administration 315.

320 Not-For-Profit-Accounting (3) Fall Odd
Accounting methods and managerial analyses employed for governmental bodies and private and public not-for-profit institutions. Prerequisite: Business Administration 201.

325 Advanced Financial Management (3).
.Spring Even
The study of advanced topics in financial management, such as risk analysis, capital structure, dividend policy, mergers, acquisitions, foreign investment, etc. Case analysis will be used extensively. Prerequisites: Business Administration 202, 225.

Investments Management (3)
Spring
The study of all types of investments with primary emphasis on stocks, bonds, and related securities. Includes a discussion of the function of securities markets and institutions and portfolio management. Prerequisite: Business Administration 225 or by permission of instructor.

327 Introduction to Insurance and Risk Management (3).
.Spring Even Addresses the fundamental issues of risk management, property insurance, liability insurance, life and health insurance, the insurance market, and the operation of insurance companies. Topics to be discussed include the functions of insurance, government regulation, the nature and legal characteristics of insurance documents, marketing, loss adjustment, social insurance programs, employee benefit plans, re-insurance and the international role of insurance underwriting. Open to juniors and seniors.

330 International Business (3)
Spring Odd
A study of the special problems involved in doing business across national boundaries, with emphasis on the economic basis for trade, and the impact of religious, cultural, and political environments on business practice. Includes an evaluation of the management, marketing, and financial practices of multinational corporations from a Christian perspective. (Credit will be granted for either this course or the International Marketing course taught in the Netherlands, but not both.) Prerequisites: Business Administration 206; Economics 202; junior or senior standing.

Strategic Human Resource Management (3) Spring
An advanced course in Human Resource Management (HRM). Specific emphasis is placed on the critical strategic role that HRM plays in the success of any organization and the application of HRM practices and theory via case studies and interactive in-class exercises. Prerequisites: Business Administration 205, 207; senior standing.FallAn advanced study of the theory and practice of organizational behavior. Topics include personality, moti-vation, group leadership, organization/work design, and group/team dynamics. Specific emphasis is placedon the diagnosis of organizational dysfunction and the design and implementation of appropriate HumanResource Management-driven interventions. Prerequisites: Psychology 210; junior or senior standing. Busi-ness Administration 205 and Psychology 376 recommended.A study of the various techniques used to assess the wants and needs of consumers - including focus groupsand market surveys. Both qualitative and quantitative procedures will be studied with emphasis on ques-tionnaire development and interpretation using SPSS. Business market and not-for-profit research will alsobe discussed. The value of secondary sources will be explored. A Christian response to the use of thisanalytical tool will be developed. Prerequisite: Mathematics 107.
338 E-Marketing (3) ..... Spring
An exploration of the methods businesses use to approach customers in the age of the internet. Topicsinclude using the internet to convey information, sell a product position, comparing the product to competi-tors, order entry and payment. Attention given to determining when the internet is useful in developingand selling a product and when products are not suitable for the internet approach. The use of the internetin Christian endeavors is also explored. Prerequisite: sophomore standing.
341- Special Topics (3) .Occasional
348 Courses on different topics of special interest, utilizing individual instructor strengths, interests, and compe-tencies. Each course selected will involve a topic not usually treated in depth in regularly scheduled courses.ness and economics, with primary emphasis on Christian perspectives for the businessperson. Requiredfor business administration seniors.

373 Intended to provide the business administration major the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual business environment. Prerequisite: junior or senior status and 2.0 grade point average or by permission of Internship Coordinator.

Marketing Internship (3-9).
.Fall, Spring, Summer Intended to provide the business administration major with a marketing emphasis the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual business marketing environment. Prerequisite: junior or senior status and 2.0 grade point average or by permission of Internship Coordinator.

Accounting Internship (3-9).
.Fall, Spring, Summer
Intended to provide the accounting major the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual accounting environment. Prerequisite: junior or senior status and 2.0 grade point average or by permission of Internship Coordinator.

393 See "Individual Studies" section of "Academic Offerings."

\section*{Business Education}

For descriptions of SECONDARY majors, minors, and teaching endorsements, see the "Teacher Education Program" section on pages 108-130.
105 Calculating Machines/Records Management (3) ..... SpringThe development of job-level skill in the operation of the electronic calculator, emphasizing the applicationto the solution of typical problems in business Mathematics. Includes an overview of records managementprinciples and procedures and an introduction to database application software. (Priority is given to busi-ness education majors and administrative assistant majors.)
112 Keyboarding and Document Formatting II (3) ..... Fall
Development of accuracy and speed. Application of skill to more complex tabulations, correspondence, reports, business forms, and composition at the keyboard. This course will also introduce students to the college network word processing software. (Priority is given to business education majors and administra- tive assistant majors.)as to content and value for management. Designed for administrative assistant students. Students whowish to complete additional accounting courses should begin with Business Administration 201.
321 Office Procedures and Administration (3) ..... Fall
A study of procedures and duties essential to the efficient administration of an office by an executive secre- tary, including receiving, transmitting, duplicating, storing, and retrieving business information, composing business letters, reports, and memoranda. Pre- or corequisite: Business Education 112.
322 Advanced Secretarial Procedures and Communications (3)

\(\qquad\)
 Spring

A continuation of Business Education 321, with emphasis in human relations in communication, taking
 and giving dictation, financial and legal aspects of secretarial work, administrative and supervisory oppor
tunities for the secretary, and general development of skills and secretarial ethics. Prerequisite: Business
 Education 321.

\section*{Chemistry}

\author{
General Major-
}

General Minor-

Chemistry 103, 104, 212, 221, 222, 311, 325, 326, 331, 332, 333; two courses from Chemistry 251 (or Au Sable 332), 312, 327, 393, Biology 322; Biology 115 or 122 or Environmental Studies 151 and 161; Mathematics 112, 113; Physical Science 201; Physics 115, 116 or 201, 202, 203.

Chemistry 103, 104, 221, 222; one course from Chemistry 212, 312, 331 and 332; one course from Chemistry 251, 311, 325.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" on pages 108-130.

101 General Chemistry (4)......................................................................................................................Fall
A study of the basic concepts of general chemistry. Atomic structures and chemical bonding, states of matter, chemical reactions, solutions, rates of reactions and equilibria, acids and bases, and oxidation reactions will be studied. Three lectures and one three-hour laboratory period per week. The laboratory experiments will parallel the lecture content.

103 Chemical Principles I (4) ..................................................................................................................Fall
A study of the fundamental principles of chemistry and an introduction to foundational issues in science. Topics include discussion of the mole, reaction stoichiometry, gases, the first law of thermodynamics, atomic and molecular structure and bonding, and the structure and properties of liquids and solids. An introduction to laboratory safety and chemical hygiene is included in the laboratory. Three lectures and one three-hour laboratory period per week. One year of high school chemistry and four years of high school mathematics are strongly recommended.

104 Chemical Principles II (4)
Spring Topics include solutions, chemical equilibria, chemical kinetics, acid-base chemistry, the second law of thermodynamics, and electrochemistry. Laboratory safety and chemical hygiene is continued. Three lectures and one three-hour laboratory period per week. Prerequisite: Chemistry 103 or by permission of instructor. [Cross-listed: CORE 227]

122 Organic and Biological Chemistry (4)
Spring Organic molecules and their functional groups and biomolecules and their function in living cells will be studied. Three lectures and one three-hour laboratory period per week. The laboratory will include experiments in organic and biological chemistry. Prerequisite: Chemistry 101 or 104 or by permission of instructor.

212 Quantitative Analysis (4) .Fall Even An in-depth study of the theory and practice of quantitative methods of chemical analysis. Includes discussion of proper laboratory techniques, theory of operation of common laboratory equipment, discussion of various analytical methods, sampling and sample preparation, and discussion of statistical methods for evaluating and interpreting data. Three lectures and one three-hour lab period per week. Prerequisite: Chemistry 104.

221 Organic Chemistry I (4).....................................................................................................................Fall A study of the chemistry of the hydrocarbons, alcohols, and alkyl halides. An introduction to organic reaction mechanisms and stereochemistry. Three lectures and one three-hour laboratory period per week. Prerequisite: Chemistry 104 or by permission of instructor.

222 Organic Chemistry II (4)
Spring
A study of ethers, ketones, amines, acids, and aromatic hydrocarbons. The study of organic reaction mechanisms is continued. Spectroscopic methods of analysis (IR, NMR, mass spectrometry) are introduced. Three lectures and one three-hour laboratory period per week. Prerequisite: Chemistry 221.

251 Environmental Chemistry (4) Spring Odd
A study of the nature and transport of chemical species-both natural and human-introduced-in the natural environment (atmosphere, hydrosphere, geosphere, and biosphere). The lab will include methods of
sampling and analysis of samples from natural and/or human influenced environments. Three lectures and one three-hour laboratory per week. Prerequisites: Chemistry 101, 122 or Chemistry 103, 104. Prior completion of Chemistry 221 recommended but not required. [Cross-listed: Environmental Studies 251]

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
311 Inorganic Chemistry (3).......................................................................................................Spring Odd
A survey of the chemistry of the elements based on the physical principles underlying the periodic arrangement of the elements. Three lectures per week. Prerequisite: Chemistry 104.

312 Instrumental Analysis (3)
Spring Odd Optical, electrical, and chromatographic methods of quantitative analysis and theoretical study. The class meets for three lectures per week for the first two-thirds of the semester; laboratory experiments are performed during the last one-third of the semester Prerequisite: Chemistry 104 or by permission of instructor.

An exploration of the creation of God as it manifests itself in the compounds and reactions found in the living cell. We will learn about the structure and properties of the four major classes of biological molecules in the cell. We will apply knowledge from General Chemistry and Organic Chemistry to explore the compounds found in the various cell organelles. This will include a study of the catalysis of all biological reactions by enzymes and also the flow of molecules through membranes and the importance of bio-signaling mechanisms. Three lectures per week. Prerequisite: Chemistry 222.

326 Biochemistry Laboratory (1) Fall Odd The purpose of the laboratory is to provide practical hands-on experience for students so they can appreciate the reactions taking place in the cells God has created. The experiments will be organized to parallel the various topics in Chemistry 325. One three-hour laboratory per week. A-F grading. Pre- or corequisite: Chemistry 325.

327 Biochemistry II (3) \(\qquad\) Spring Even
A study of the way the cell uses the breakdown of molecules to extract energy and then uses this energy for sustaining the functions of the cell by producing new needed biomolecules. This sequence will begin with the study of the metabolism of the carbohydrates culminating in the electron-transfer processes leading to the production of ATP. The metabolism of other types of biomolecules such as lipids, proteins, and nucleic acids will also be studied. Finally, the processes of biosynthesis will be investigated beginning with photosynthesis of carbohydrates in plants and ending with biosynthesis of lipids and proteins. The last chapter will help the student to appreciate how all of these complex created biological processes are regulated by the use of hormonal signals which integrate and coordinate the metabolic activities of different tissues and optimize the allocation of fuels and precursors to each organ. Prerequisite: Chemistry 325.

Thermodynamics and Statistical Mechanics (3)
Fall Odd
Heat, the laws of thermodynamics, thermodynamic generating functions, Maxwell's relations, kinetic theory, partition functions, and classical and quantum statistics. Prerequisites: Chemistry 103, 104; Mathematics 112, 113; Physics 115, 116 or Physics 201, 202, 203. [Cross-listed: Physics 331]

332 Thermodynamics Laboratory (1). Fall Odd A laboratory course to accompany Chemistry 331, illustrating techniques and principles in chemical ther-
modynamics. Experimental design is emphasized and formal reports are required. One three-hour laboratory period per week. A-F grading. Corequisite: Chemistry 331.
333 Quantum Mechanics, Spectroscopy, and Chemical Kinetics (4)..............................................Spring Even \(\quad\)\begin{tabular}{l} 
Quantum mechanics with application to chemical systems, theoretical foundations of spectroscopy, and \\
chemical kinetics. Three lectures and one three-hour laboratory period per week. Prerequisites: Chemistry \\
103, 104; Mathematics 112, 113; Physics 115, 116 or Physics 201, 202, 203; or by permission of instructor.
\end{tabular}

341- Special Topics (3) Occasional
348 This course will consist of topics not normally covered in other chemistry courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

391- Individual Studies (1-3) \(\qquad\) .Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Communication}

General Major- Foundation (common to both emphases): Communication 201, 220, 222, 228, 240, 301, 311 or 314, 322, 380; CORE 270.
Students are advised to select an emphasis and courses in consultation with a member of the communication department. See also the student handbook of the communication department for elective and core program course selection.

Students must select one of the following emphases:
General: Foundation; three courses designed to fit the vocational choice of the student. Two of these courses must be communication courses and the communication department advisor must approve all three. Communication 372 and 373 will not be counted toward the major.

Public Relations: Foundation; Communication 241, 260; Business Administration 205, 206, 306.

Digital Media Production Major-Note: Foundation courses not required for Digital Media Production majors. Art 201 or 202, 240, 295; Communication 240, 250, 255, 320, 330, 333, 380; two courses from English 307, Theatre Arts 205, Business Administration 206, Music 306. Courses from the Los Angeles Film Studies program could satisfy these two requirements.

\section*{General Minors-}

Communication: Communication 201, 220 or 322, 222, 228, 240, 301; CORE 270.

\section*{Digital Media Production: Art 201 or 202, 240; Communication 240, 250, 320; two from Business Administration 206, Communication 330, 333, English 307, Music 306, Theatre Arts 205. \\ Journalism: \(\quad\)\begin{tabular}{l} 
Communication 240, 241, 301, 302; Art 201 or Communication 242; Art 240 or \\
Communication 393.
\end{tabular}}

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 108-130.

\section*{41 Student Publications Production (1) \\ \(\qquad\) Fall, Spring \\ Open to all who work on student publications-who submit, in advance, a learning activities contract listing the types of projects and learning experiences in which they will participate. Graded on a pass/no record basis. \\ 100 Fundamentals of Speaking and Listening (3) Fall, Spring \\ The study of the basic concepts and designs of public speaking including organization, style, content, and delivery. The course will also concentrate on listening concepts and abilities. This course emphasizes the presentation of speeches and the ability to listen.}

201 Principles of Communication (3)......................................................................................................Spring Designed to introduce the beginning communication student to some basic principles and thought in the field of communication: communication models, variables, symbols, perception, intrapersonal communication, and semantic problems.

220 Small Group Communication (3) Fall
A study of the theory and practice of group problem-solving in cooperative face-to-face discussion; the development of awareness and understanding of group dynamics, and the presentation of panel, symposium, and dialogue.

222 Interpersonal Communication (3) ...........................................................................................Fall, Spring
The study of concepts, problems, and responsibilities in communication between two or more persons,
focusing on conversation with consideration of many variables and contexts. [Cross-listed: CORE 254]
228 Organizational Communication (3). Spring
The analysis of formal and informal communication in such organizations as corporations and institutions. Included will be considerations of communication problems related to grapevine, rumor, channels, perception, power, status, roles, structures, etc.

240 Introduction to Mass Communication (3) Fall
An introduction to the concept of mass communication and its application to electronic and written media. The course will survey the historical development of the technology, effects, and theory of the media through major issues.

241 Introduction to Journalism (3) Fall An introduction to reporting and writing news for the print and broadcast media. The course includes
practice in writing several types of news stories, an overview of the historical, cultural foundations of journalism, and a critical examination of the theoretical foundations of journalism. [Cross-listed: English 241]

242 Print Journalism (4)
Spring Odd
Students will study interviewing, editing, in-depth reporting, critical and feature writing, developing headlines and titles, copy-editing. They will explore the way text and design work together. Students will be introduced to production and layout, using the Diamond and other assignments as laboratory work. Prerequisite: Communication 241 or by permission of instructor.

250 Introduction to Film/Video Production (3)
Spring
In this introductory course, students will gain working knowledge of sophisticated cameras and equipment, a beginning knowledge of editing on the Avid platform, and in-depth discussion of what it means to be a Christian in the communication and entertainment industry today. Students will work in teams to produce DVDs during the semester.

255 Film Criticism (3)
Spring
After watching numerous films in order to develop a critical sense of the history, themes, motivations, and aesthetic of motion pictures, students will pay particular attention to the concept of Christian film. Film screenings will include popular films, classic films, and films that both critics and audiences praise. Students will be introduced to theories of film criticism.

260 Public Relations (3) Fall As an introduction to public relations, this course will set the background for additional courses in communication and business administration. After a study of the history of public relations, the student will learn what is expected of public relations workers, study the various publics, become familiar with current problems and issues in public relations, analyze several cases, and develop a Christian perspective for the continued study of public relations.

281- Service-Learning (1-3)
Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
301 Advanced Expository Writing I (3) Fall
This course is designed to introduce students to types of non-fiction writing frequently sought by magazines and journals. Major assignments include the interview, the narrative essay, and the review. Especially featured is the personal narrative. In addition to writing, students will read and react to various types of non-fiction writing-both essays and longer works. Significant class time is spent in workshop format with students reading and discussing their own work. Satisfies core writing-intensive requirement. [Cross-listed: English 301]

302 Advanced Expository Writing II (3)
Spring
The primary goal of this course is to help students write with clarity, grace, and power. To achieve this goal, they will write expository essays, hone research skills, work style exercises, and critique one another's papers. Note: Advanced Expository Writing I emphasizes narrative prose, while Advanced Expository Writing II emphasizes argumentative and explanatory prose. Satisfies Core writing-intensive requirement. [Cross-listed: English 302]

311 Advanced Public Address (3)
Spring Odd
An emphasis upon proper speech construction and delivery with application of communication concepts. Includes analysis of some public addresses. Prerequisite: Communication 100 or by permission of instructor.

314 Argumentation and Persuasion (4)
Spring Even
After a study of the history of argumentation and persuasion and the relationship of argumentation and persuasion, this course will focus on various theories of attitude change, the structure of argument, and the development of a Christian perspective. Applications of argument and persuasion to be considered are: propaganda, advertising, political campaigns, and political debate. The student will be expected to apply the course studies to his/her specific vocational decisions. Prerequisite: Communication 201.

Advanced Film/Video Production (3)
Fall
Building on the preproduction, production and postproduction skills gained in Communication 250, students will bring their film/video production skills to a deeper level through in-depth analysis of other filmmakers' work and through hands-on work with green screen techniques and more. A variety of videos will be produced during the semester. Prerequisite: Communication 250.

Family Communication (3) Spring The focus is analyzing and understanding communication in long-term interpersonal relationships in the family. Problems specific to family communication will receive attention. The course aims at improving communication by stressing application of communication principles to family interaction. Prerequisite: Communication 222 or by permission of instructor.

Advanced Video Editing (3)
Spring Odd
Students will do an in-depth study of the film/video editing techniques of great editors through history, study the impact that editing decisions have on a final product and bring their own editing abilities to a new level through advanced training on the Avid platform. Prerequisite: Communication 250.

333 Documentary Film Making (3)
Spring Even A study of the history of the genre; screen documentary films and draw upon a wealth of critical writings produced in the past to help us decipher the textual strategies that create documentary films' "reality effect." Students will also explore the creative, technical and practical aspects of creating a documentary film. Teams will produce documentary films for their final projects. Prerequisite: Communication 250.

341- Special Topics (3) Occasional
348 Courses will consist of topics not normally covered in other communication courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

371- Communication Internship (3-9) .Fall, Spring, Summer
373 A supervised work experience designed to provide the student with the opportunity to apply principles and skills gained through course work. Open to qualified juniors and seniors. Communication 372 and 373 may not be applied toward the major.

380 Senior Seminar (3)
Fall
The capstone for communication and digital media production majors. Students will research, discuss, and struggle with major issues in communication such as freedom of speech, media impact, modern technology, and the information superhighway. Students will be pressed to expand and refine their Christian perspectives regarding communication with the study of the role and responsibility of communication in society. Students will examine current communication theories, research, and research design. Prerequisite: senior standing and completion of all foundation courses in the major.

391- Individual Studies (1-3) \(\qquad\) .Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Computer Science}

General Major- \(\quad\) Foundation (common to all emphases): Computer Science 111, 112, 120, 131, 145, 202, 390; Mathematics 212; one course from Communication 220, 222, English 305.

Students must select one of the following emphases:
Biotechnology: Foundation; Biology 115 or 122; Biology 213, 323; Biotechnology 213; Computer Science 220, 320, 371; Economics 200; Mathematics 107, 111. Students in the biotechnology emphasis must take Biotechnology 361 instead of Computer Science 390 in the foundation requirements.

Hardware Systems: Foundation; Computer Science 305, 311; Engineering 204, 220, 304; Mathematics 112, 113, 204, 209; Physics 201, 202.

Information Systems: Foundation; Business Administration 201, 202; two courses from Business Administration 205, 206, 225; Computer Science 220, 320, 371; Computer Science 211 or 231; Economics 200; Mathematics 107, 111.

Systems Administration: Foundation; Computer Science 245, 305, 308, 311, 371; Mathematics 112, 113, 209; one course from Computer Science 220, 231, Mathematics 203, 206.

Computer Science/Mathematics Major- Computer Science 111, 112, 120, 131, 145, 202, 305; one course from Computer Science 220, 231, 308, 311; Mathematics 112, 113, 203, 207, 209, 212, 304; one course from Mathematics 201, 204, 206; Computer Science 390 or Mathematics 390.

\section*{General Minors-}

Computer Science: Computer Science 110 or 111; Computer Science 131, 145; two additional Computer Science courses; Mathematics 107; one course from Mathematics 109 or above.

Web Software Development: Computer Science 111, 112, 120, 220, 231; Art 240; Business Administration 338; Math 107 or 111.

\section*{Associate of Arts Degree Option}

Area of Concentration (Associate of Arts in Computer Networking). See the "Academic Program" section for the core program for all A.A. programs.

Computer Science 111, 112, 120, 131, 145, 245; two courses from Computer Science 202, 211, 220, 231; Economics 200; English 305; Mathematics 110 or 111 or 112; Physics \(115,116\).

Recommended electives: Business Administration 205, Communication 220, 222, Computer Science 220, Mathematics 107, Psychology 201.

110 Programming for Engineers (3).........................................................................................................Spring An introduction to structured computer programming with an emphasis on engineering problem solving applications. The course will focus on algorithm development and implementation in the C programming language. Basic concepts of computer programming, elementary composition principles, and the fundamental data structures are covered.

111 Programming I (3)
Fall
An introduction to computer programming. Basic notions of abstraction, elementary composition principles, the fundamental data structures and object-oriented programming technique are introduced. Topics include variables, control structures, arrays, and input/output.

112 Programming II (3)
Spring
A continuation of Computer Science 111. The course includes advanced programming techniques, indepth examination of object-oriented principles, and good programming style including documentation. Prerequisite: Computer Science 110 or 111 or by permission of instructor.

120 Information Systems Design (3) Fall
An introduction to the nature of information systems, the conceptual foundations and use of such systems. Topics include information systems project management, requirements analysis and use cases, structural and behavioral modeling, prototyping, and use of the Unified Modeling Language. Corequisite: any college level computer science course.

131 Introduction to Data Communications (3) Fall
A study of the concepts, issues, and technology involved in the transmission of data. Topics include network configurations, communications protocols, data coding schemes, and transmission hardware. Prerequisite: completion of core mathematics requirement.

145 Computer Systems (4)
Spring
An introduction to the organization and inner workings of a modern digital computer and its components. Topics include introductory digital logic and circuits, CPU components, memory systems, input/output, storage systems, and introductory operating systems concepts. Students gain experience in working on computers in the laboratory component of this course. Three lectures and one laboratory period of two hours per week. Prerequisites: Computer Science 110 or 111; Mathematics 110 or its equivalent.

202 Data Structures (3) Fall Even
A study of the various types of information forms handled by a computer. This includes the format of data and the design and analysis of algorithms to manipulate data. Prerequisite: Computer Science 112; Pre- or corequisite: Mathematics 111 or 112; or by permission of instructor.
\(\qquad\)
An introduction to techniques and tools used in developing computer business solutions. Focus will be on the development of solutions integrated with standard office suite tools, such as spreadsheets and database management systems. Prerequisites: Computer Science 111; Computer Science 120 or Business Administration 100; or by permission of instructor.

220 Database Systems Design (3) . \(\qquad\) Spring Odd A study of the design, development, and implementation of an information system for management. Topics include database architecture, data definition and manipulation, report generation, and high-level language interface. Prerequisites: Computer Science 111, 120.

231 Client/Server Programming (3)
Fall Odd
An introduction to software development in a networked computing environment. Focus will be on development of web-based software solutions employing tools such as scripting languages for both the client (browser) side and the server side. Prerequisite: Computer Science 111; Corequisite: Computer Science 120.

245 Network Systems Administration (3). \(\qquad\) Spring Even An introduction to the issues involved in installing and maintaining a network operating system and other network servers. Students will gain hands-on experience with modern network operating systems and servers for common network services. Topics include managing network applications such as file serving, e-mail, web serving, and security implementation. Prerequisites: any other computer science course; Mathematics 110 or equivalent; or by permission of instructor.

305 Operating Systems (3) ....................................................................................................................... Spring Odd
A study of the basic principles of modern multi-programming operating systems and the interrelationships between the operating system and the architecture of the computer system. Topics include concurrent processes and deadlock, memory management and virtual storage, multiprocessing, auxiliary storage management, and systems security. Prerequisites: Computer Science 145, 202.

308 Programming Language Concepts (3)
Spring Even
A study of the syntax, design, and history of programming languages and programming language structures. Topics discussed include variables, expressions, data types, scoping, and procedures. Prerequisite: Computer Science 202 or by permission of instructor.

311 Computer Architecture and Assembly Language Programming (3)
Fall Odd
The topics of this course cover the design of a computer, how data is converted and represented, CPU organization, addressing, relocatability, use of base registers, multiple radix arithmetic, and programming in machine language. Prerequisites: Computer Science 145 or Engineering 204; Computer Science 202.

320 Information Systems for Decision Support (3) Spring Odd
A study of computer tools and techniques used in support of decision-making. Topics may include simulation, business intelligence, online analytical processing, data warehousing, knowledge management, expert systems, and artificial intelligence. Prerequisites: Computer Science 131; Mathematics 107. Pre- or corequisite: Computer Science 220.
341- Special Topics (3) Occasional348 These computer science courses cover topics that maximize individual instructor strengths, interests, andcompetencies. Each course will deal with a topic in computer science not usually treated to any great extentin regularly scheduled courses.
371 Practicum (3) Fall, Spring
Students will be given opportunity to apply the principles of management information systems in an on- campus or offcampus assignment. Prerequisites: three 200-level or above Computer Science courses; junior standing.
390 Technology and Society (3). ..... SpringAn examination and critique of the relationship of technology to other areas of Western society. Duringthe first half of the course students examine a Christian philosophy of technology and application is madeto such problems as the role of the computer, technocracy, appropriate technology, and the historical two-cultures dualism. During its second half, the course focuses on the question of engineering ethics, withparticular emphasis on such questions as safety and risk, professional responsibility and authority, whistleblowing, normative socioeconomic structures, and morality in career choice. This course requires thestudent to write and orally present a significant research paper and to work in a small group on the designof one aspect of a technological business enterprise. Prerequisites: CORE 200; junior or senior standing.[Cross-listed: CORE 267, Engineering 390] See "Individual Studies" section of "Academic Offerings."

\section*{Construction Management}
102 Construction and Architectural Graphics (3) ..... Fall
The course introduces architectural and construction communication by practicing the fundamentals ofconstruction documentation and the methods of documents preparation. The course will focus on graphi-cal communication for construction and architectural disciplines, using computer-aided drawing skills andmethods in two and three dimensions. The course will culminate in a final design project.
207 Geographic Information Systems (3) Fall Even
An introduction to the acquisition, display, manipulation and management of geographic information. Topics include geographical data input, storage, maintenance, analysis and retrieval. Students will utilize common GIS software and associated hardware. Lectures will place an emphasis on the concepts that underlie GIS technology. Application of GIS to agriculture, business, environmental management and other disciplines will be a significant component of the course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Business Administration 303, Environmental Studies 303]
213 Engineering Statics for Construction Management (2). ..... FallA mechanics course that examines the effects of forces on statically determinate rigid bodies in equilibrium,including the analysis of determinate truss structures. Prerequisites: Math 111; Physics 115 or 201.
214 Mechanics of Materials for Construction Management (2) ..... SpringA mechanics course that examines the stresses, strains, and deformations that develop when various loadsare applied to deformable bodies including beams and columns. Prerequisites: Math 111; Physics 115 or 201.

\begin{abstract}
318 Soil Mechanics and Foundation Design (4)
Fall Odd
A study of the engineering principles relating to soil properties and foundation design. The material properties of soil including structure, index properties, permeability, compressibility, and consolidation will be explored. Methods of soil testing, identification, and remediation will be covered. Principles of settlement and stresses in soils will be considered. Slope stability, retaining walls, and bearing capacity of shallow foundations will be introduced. The soils lab will provide hands-on opportunities to determine water content, perform sieve analyses, and test liquid, plastic, and shrinkage limits. Soil classification, compaction, compression, and consolidation testing will be explored. Prerequisites: Engineering 202, 212. [Cross-listed: Engineering 318]
\end{abstract}

\section*{Core}

The Core Program is required of all Dordt College students. Its central purpose is to prepare students for faithful Christian discipleship in the areas and responsibilities of life that we all share in common across our various specialized academic majors and vocations. The Core curriculum articulates and helps students to develop a broad and firmly-rooted Christian perspective on life and learning; it helps them to develop their understanding of who we are and how we are called to live in our relationships and in our historical development and context; and it equips them with competencies, critical thinking, understanding, and connections needed for both their specialized programs and for life-long learning and service to God's kingdom in all areas of their lives in the contemporary world.

> 100 Kingdom, Identity and Calling (2)..............................................................................................Fall, Spring A first-term seminar for all students new to Dordt College. The seminar examines our belief in Christ, especially as that identity relates to the college years within a lifetime of following Jesus.

110 Communication and Culture (3)...........................................................................................Fall, Spring
Examines the ways in which communication is used to create, maintain, and change culture. Students will have the opportunity to apply a basic understanding of the concept of culture and communication to a range of contemporary social issues, cultural texts, and communication practices. Emphasis is given to rhetorical methods to help students learn about analyzing and constructing oral and written arguments and work cooperatively doing a research project for class presentation. Prerequisite: one high school speech class.

120 English Composition (3) Fall, Spring Students will write a number of essays and a research paper. As they work on these, they will become aware of writing as a process and develop skills in generating ideas, revising, and editing. They will also review traditional grammar and principles of usage and style.

130 Health, Sport, and the Body (1.5)
Fall, Spring
A study of the concept of fitness and health from a Christian view of humankind. Designed to help students evaluate their own physical needs and strengths. This course assists students in developing their personal exercise and activity program. Preferably should be taken in the freshman year. Graded.
will complete different activity sectionals that will equip them with the terminology, rules, etiquette, techniques, and strategies for lifetime fitness.

140 Roots of Western Culture and Worldviews (3).
Fall, Spring
A study of the roots and formation of Western Culture from ancient times to the early modern period, in the light of a Biblical view of history. Special attention is given to the synthesis of and tensions between classical, Christian, and Germanic worldviews and cultures.

145 Western Culture in Global Context (3).
Fall, Spring Continuation of CORE 140. A study of the emergence of modern and contemporary Western culture in its increasingly global context. Prerequisite: CORE 140 or by permission of instructor.

150 Biblical Foundations (3) \(\qquad\) Fall, Spring A survey of biblical revelation in its progressive unfolding of key ideas and institutions against their culturalhistorical background and within their covenant setting. Emphasis is placed on the normativity of Scripture that reaches its fullness and fulfillment in Christ for all academic work.

160 Introduction to the Arts (3) ..................................................................................................Fall, Spring Students choose from a variety of sub-courses in art, drama, film, and music topics that are of interest to them. Students also fulfill requirements by attending special arts events and lectures.

180 Responding to Literature (3).
Fall, Spring
This course asks students to respond to poems, essays, stories, plays, a novel, and perhaps a film. Its purpose is to teach students how to understand these various forms and how to evaluate the moral vision when the imaginative world intersects with their own lives.

200 Perspectives in Philosophy (3).
Fall, Spring
An introduction to the nature, task, and basic problems of philosophy, its relationship to worldview, and a survey of its history. Prerequisites: CORE 140, 150.

211 Introduction to Environmental Studies (3) Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. [Cross-listed: Earth Science 151, Environmental Studies 151]

212 Human Biology (3) Fall
A study of the nature of organisms and their functioning based on an understanding of how the human body functions. Some bioethical questions (such as abortion and aging) are explored. The course also provides a brief survey of plants and animals and a Christian perspective on the biotic world. A biology course designed for non-majors.

213 Biology, Care, and Production of Domestic Animals (4) Spring
History, management, physiology, breeding, lactation, feeding, health, and products of cattle, swine, sheep, poultry, companion animals, and other species as they relate to humans and the creation. Three lectures and one three-hour laboratory period per week. [Cross-listed: Agriculture 101]
214 Apian Biology: the Biology and Role of Honeybees in Creation (3) Fall
History, anatomy, physiology, management, reproduction, health, and the products of the honeybee, especially the honey and the wax. Their role in the pollination of plants.
215 Introduction to Plant Science (4) ......................................................................................................Fal Students will study plants, their care and use within agroecosystems, as well as their role in creation. Students will be introduced to how agriculture both influences and is influenced by human cultural development, how humankind's understanding of stewardship influences creation care, and how plants serve as sources of food, fiber, fuel, and fascination. Plant biology concepts including plant structure and function, growth, development and reproduction, and plant/environment interactions will be introduced. The course will demonstrate how these biotic and environmental factors integrate with plant biotechnology, crop breeding and propagation, protection, cropping systems, and crop economics and utilization. Three lectures and one three-hour laboratory per week. [Cross-listed: Agriculture 111]

216 General Botany (4) Fall
An introductory study of the anatomy, physiology, taxonomy, and ecology of the major plant groups. Three lectures and one laboratory period of three hours per week. [Cross-listed: Biology 115]

217 Avian Biology and Conservation (3) .Spring Even The identification, natural history, ecology, and stewardship of birds. Topics include morphological and physiological ecology of birds, habitat selection, communication, migration, reproductive ecology, territoriality, taxonomy, and conservation. The connections between avian ecology and creation stewardship will be explored. Recognition of a diverse set of birds by sight and sound is an important component of the course. Two lecture/discussion sessions and one three-hour lab per week. Field work will concentrate on local birds, but at least one trip to a distant site will be included. Prerequisite: one of Agriculture 101, Biology 122, CORE 211, CORE 212. [Cross-listed: Environmental Studies 270]

218 Introduction to Biotechnology (3)
.Spring Even This course is intended to be an introduction to the field of biotechnology. We will develop a Christian approach to biotechnology and use that approach to examine the various aspects and applications of biotechnology. Prerequisites: one life science course or a score of 24 or higher on the science component of the ACT test; sophomore standing. [Cross-listed: Biotechnology 213]

219 Perspectives on Origins (3) Spring Odd
A study of the philosophical, theological, and scientific aspects of evolutionary theory and the creationevolution debate. The course will use a seminar format in which students will be required to articulate and critically analyze the different positions on origins. Not open to freshmen. Prerequisite: one college science course. [Cross-listed: Biology 251]

221 Physics Applications and Implications (4)
Fall, Spring
The development of modern physics will follow an historical framework with particular attention given to the relationship between scientific discovery and Christian faith.

222 Introduction to Environmental Studies II (4)
Spring Further exploration of the foundations of contemporary environmental studies. Particular attention is given to the physical dimensions of creation care including energy sources and consumption, use of materials, and environmental pollution. The human social aspects of creation stewardship are also explored.

Environmental Studies 151 is not a prerequisite. Three lectures and one laboratory period of three hours per week. [Cross-listed: Environmental Studies 152]

223 Introductory Geology and Physical Geography (4) Fall A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week and one or two field trips. [Cross-listed: Earth Science 201, Environmental Studies 201, Geography 201]

224 Solar System Astronomy (4) Fall Even
An introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic "neighborhood" from the ancient Greeks to Einstein as well as recent discoveries and their implications for an improved understanding of our Earth. Students will obtain handson experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Students may take either Solar System Astronomy or Stellar and Planetary Astronomy for core program credit, but not both. Prerequisite: completion of core mathematics requirement. [Cross-listed: Astronomy 121, Earth Science 121]

225 Stellar and Galactic Astronomy (4) Spring Odd
An introduction to stellar and galactic astronomy, focusing on the historical development of understanding of the cosmos as well as recent discoveries and their implications. Topics include the classification and explanation of stars, stellar life-cycles, remnants of stellar collapse (white dwarfs, neutron stars, black holes), galaxies, and cosmology (the study of the universe as a whole). Students will examine origins in light of Scripture and modern scientific evidence. Students will also obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Students may take either Solar System Astronomy or Stellar and Planetary Astronomy for core program credit, but not both. Prerequisite: completion of core mathematics requirement. [Cross-listed: Astronomy 122]

226 Introduction to Engineering I, II (3)
Fall
This two-semester engineering foundations sequence introduces students to a Christian perspective on technology and engineering. The course will provide an introduction to engineering communication, engineering mathematics, engineering design, and engineering economics. Students will learn to communicate graphically using a 3-D solid modeling computer application. Principles of graphical communication, such as orthographic projection and auxiliary views, isometric and oblique pictorials, sections, dimensioning, and tolerances are covered. The course includes group design projects. The course meets for two lectures and one design studio. [Cross-listed: Engineering 103/104]

227 Chemical Principles II (4)
Spring
Topics include solutions, chemical equilibria, chemical kinetics, acid-base chemistry, the second law of thermodynamics, and electrochemistry. Laboratory safety and chemical hygiene is continued. Three lectures and one three-hour laboratory period per week. Prerequisite: Chemistry 103 or by permission of instructor. [Cross-listed: Chemistry 104]

Lifespan Development (3) Fall, Spring This course studies the growth and maturation of persons throughout the entire lifespan, including examination of physical, cognitive, personality, social changes, faith development, and other developmental tasks. This course will also focus on evaluating the theoretical issues and descriptive information portraying
the growth of an individual from conception through late adulthood. Students will develop a Biblicallyinformed vision of who we are as image-bearers of God and what it means to be humans living in God's creation. [Cross-listed: Psychology 204]

252 The Social Psychology of Persons (3)
Fall, Spring
We influence and are influenced by culture, social structures, groups, personality, family, and the media, just to name a few. Studying the situational and personal/interpretive factors that influence an individual's social behavior can reveal new insights about the grace and sin at work in our relationships and social situations. Utilizing a Biblical perspective on the social psychology of persons, this class will explore how we can function as faithful Christians within all of these situations. [Cross-listed: Psychology 210, Sociology 210]

253 Technology, Lifestyle, and the Self (3) \(\qquad\)
Topics will include an exploration of what it means to be human, the role technology can play in aiding or impairing our development as human selves, the effects of technologically mediated communication, the role of authenticity in a simulation-filled world, and the inner work that is required to follow Christ's radical call in our lives.

254 Interpersonal Communication (3)
Fall, Spring
The study of concepts, problems, and responsibilities in communication between two or more persons, focusing on conversation with consideration of many variables and contexts. [Cross-listed: Communication 222]

Educational Psychology (3)
Fall, Spring
Introduces students to fields of educational psychology and developmental psychology as they inform the teaching and learning environment. Research in the field of educational psychology is explored as a tool for effective teaching and decision-making. This course also introduces students to developmental theories and explores in-depth learning theories that impact education today. Research methodology, developmental and learning theories are discussed and explored from a reformational perspective. [Cross-listed: Education 135]

261 Sociology and Social Justice (3).
Fall, Spring
Includes an examination of culture, socialization, social structure, group behavior, and inequalities (of class, race, and gender), as well as identifying and analyzing the pressing problems in our world that requires an understanding of social change that occurs through collective action and social movements. Through an exploration of predominant sociological theories, students are able to contrast those with a biblical worldview that challenges them to articulate how a reformed Christian understanding of creation (and norms) sin, redemption, and consummation may be used to positively affect social interaction, organizations, and institutions. [Cross-listed: Sociology 201]

262 Introduction to Politics (3)
Spring
An introduction to the political dimension of life from a biblically-oriented perspective. Examines the components (political culture, ideology, institutions, etc.) that shape and direct the principles and practice of politics in the contemporary world. Special attention is given to a major world issue (e.g., nuclear arms) to stimulate students to develop a Christian political consciousness. [Cross-listed: Political Studies 201]

Faith and Social Justice (3)
Spring
As an introduction to a social justice perspective, this course will explore the biblical call to do justice. After a study of historical and contemporary literature on issues related to social justice, the student will explore
how a biblically-based social justice perspective influences the way in which Christians are called to redemptive living in a world of systems and institutions affected by sin. While the course will focus broadly on religious, economic and political institutions, it will also explore specific and timely issues such as poverty, food distribution and the environment.

264 American National Politics (3) Fall
A general introduction to the American political process-its foundations, external influences, institutions, political actors, and policymaking. [Cross-listed: Political Studies 202]

265 World Regional Geography (3) Fall
A geographic survey of major world regions. Emphasis is placed on both human and physical geography as each region is surveyed as to location, component countries, world role, distinctive physical and cultural characteristics, and major problems. [Cross-listed: Geography 151]

266 Economics and Christian Stewardship (3)
Fall, Spring
Seeks to expose students who are not majoring in business administration or accounting to a wide variety of principles, policies, institutions, and problems within the field of economics. It includes the discussion of concepts such as property, value, work, wages, prices, profits, Christian stewardship in the marketplace, and comparative economic systems. [Cross-listed: Economics 200]
NOTE: Credit toward graduation will not be given for both CORE 266 (Economics 200) and Economics 202.

267 Technology and Society (3) Spring
An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course students examine a Christian philosophy of technology and application is made to such problems as the role of the computer, technocracy, appropriate technology, and the historical twocultures dualism. During its second half, the course focuses on the question of engineering ethics, with particular emphasis on such questions as safety and risk, professional responsibility and authority, whistle blowing, normative socioeconomic structures, and morality in career choice. This course requires the student to write and orally present a significant research paper and to work in a small group on the design of one aspect of a technological business enterprise. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Computer Science 390, Engineering 390]

270 Cross-Cultural Communication (3)
Fall
This course explores a variety of cross-cultural and intercultural communication experiences. We will explore the concept of culture and examine the relationship of culture and communication to build a framework for studying cross-cultural communication patterns from a variety of representative cultures (including North American culture). Special emphasis will be given to the influence of worldview, ethnic identity, and socialization on the process of communication. Overall, this course is designed to help you appreciate and understand different forms of communication and begin to develop a Christian perspective for the differences and relationships between cultures.

272 History of the Muslim World (3).
.Spring Even
A survey of the history of the Muslim world focusing on the Middle East, North Africa, and Southwest Asia. Primary emphasis is on the development and features of Muslim society and culture, the relations between Muslim and Western civilizations, and the sources of tension in the modern Muslim world. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 212]
273 Latin America (3). Fall
A selective survey of the history of Latin America from pre-Columbian times to the present. Attention will be given to the indigenous and colonial origins of Latin American culture and society. Twentieth-century developments will be explored through a series of case studies. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 213]

274 East Asia (3) \(\qquad\) Spring Odd The history of East Asia, paying special attention to China, Japan, and Indonesia in the early-modern and late-modern periods. The primary emphasis will be on east Asian responses to the challenges represented by western ideas, commerce and imperialism in its various expressions. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 214]

Faith and Cultural Aspects in Health Care (3) Fall
Students will engage in an introductory study of culture and its influence on behavior. Specific crosscultural issues that affect health care delivery are discussed. Students will consider the worldviews of modern cultures and the implications for Christian discipleship; define health and illness as Christian individuals and part of the community as a whole; and comprehend traditional and alternative health care practices, incorporating religious beliefs, practices, and rituals. A phenomenological assessment is applied to the populations studied. Prerequisites: BSN major or junior standing; permission of instructor. [Cross-listed: Nursing 310]

276 Diversity and Inequality (3) Fall
Students examine the historical and contemporary factors related to diversity and inequality in North America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and we explore how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: Social Work 216, Sociology 216]

281 Central America: Language, Culture and Society (3) Summer
Learn or improve your Spanish language skills while living in a Central American setting. Explore the historical roots and influences shaping a contemporary Central American country. Emphasis is placed on understanding the challenges and potential of Central America today. Students will live with families and have ample opportunities to interact with local Spanish speakers. Several excursions are planned to supplement classroom instruction. Previous Spanish courses are not required.

282 Serving and Learning in Hungary and Transcarpathia, Ukraine (3) \(\qquad\) Summer Odd Arrive in Budapest, Hungary and spend time exploring and studying Hungarian culture and history. Then spend two weeks living in Hungarian ethnic communities in rural Transcarpathia, Ukraine. Visit schools in the region and assist in teaching English to middle and high school students and adults. Absorb and experience the local culture and be of service in appropriate ways to people living in the post-communist era. There will be pre-trip orientation and assignments related to history, culture and language of the region.

Dutch Culture and a Reformed Worldview (3). Summer Even
Study the identity of the Dutch people from the 17th century to the present while living in the Netherlands for three weeks. Examine the history of the Calvinist heritage from the Synod of Dort to the contribution of Abraham Kuyper to the present. Discover how Kuyper's Reformed worldview has shaped various aspects of life and society such as church, politics, trade, land reclamation, etc. Special attention will be given to events and sites relating to World War II. There are classes in the morning and field trips in the afternoon.

284 Culture, Missions, and Community Development in Nicaragua (3) ................................. Summer Even The course will focus on culture, missions and community development in Nicaragua in cooperation with the Nehemiah Center in Managua, Nicaragua. Through pre-trip orientation and assigned readings and a variety of in-country experiences students will explore the history, culture, government and social life of Nicaragua and examine how a variety of mission outreaches and community development have attempted to offer assistance in Nicaragua. Utilizing representatives from a variety of agencies active in Nicaragua, the students will be involved in discussions about the future of Nicaragua and its relationship to the rest of the world, as well as having an opportunity to learn about the differing philosophies and implementation plans of these different mission agencies and community development organizations. Where possible, students will be given the opportunity to get involved in the day-to-day work of the agencies visited in Nicaragua.

Korean Culture through Religion and Music (3
Summer Even
Students will stay in Korea for three weeks in urban and rural areas and study its culture through religion and music. Both in a classroom setting and through travels, students will learn about the history and religions of Korea with emphasis on their modern development. They will experience Korean culture and music through personal relationships with Chong-Shin University students while they take lectures, discussions, and excursions together. This course is open to students of any major who have completed at least one year of college.

Serving and Learning in Southern Africa (Zambia)
Summer Even
Arrive in Ndola, Zambia, and spend time exploring and studying Zambian culture and history. Spend two weeks living in the Northrise University dormitory with African students and/or in Zambian homes. Visit NGO's in the region and assist in teaching agriculture to Northrise students and other adults. Absorb and experience the local culture and be of service in appropriate ways to people living in this country that was a British colony until the 1960's. There will be pre-trip orientation and assignments related to history, culture, and language of the region.

Cross-Cultural Reflections (3) ...Fall, Spring, Summer A 'portable', supervised reading and journal writing course that students complete while participating in a semester-long internship or practicum experience in a cross-cultural setting (following established criteria for cross-cultural experiences). The selected readings and journal writing instructions are designed to help the student to bring coherence to both the inner journey that occurs when students reflect upon a significant experience in their lives and the external journey they make into a cross-cultural situation. The reading and reflective journaling is not intended to substitute for or replace the requirements for the internship/practicum, but rather to build on the total impact of the experience and to enrich the student's cross-cultural understanding.

Philosophy of Education (3)
Spring
Why do we "do school" the way we do? Are the ways we educate the best? What does "the best" mean when we apply it to education? Most of all, what do the ways we "do school" say about our most basic commitments and beliefs? Philosophy of Education explores these questions and others like it, examining how basic commitments affect the ways we govern schools, see students, plan teaching and learning, and make curriculum. Students draw on resources, especially those from the tradition of Reformed Christian education, to construct a statement describing their own education philosophy. While this course meets a requirement in the Teacher Education Program, it does not assume a background in teacher education. Students from outside teacher education are welcome. Prerequisite: CORE 200. [Cross-listed: Education 300]
312 History of Science and Technology (3) Spring

Enables the student to examine from a Reformed-Biblical perspective the narrative of scientific unfolding and technological development as two human activities that are manifest in all cultures. Emphasis is on the major paradigms and events that have shaped the development of science and technology in the West and most recently in North America. The course focuses on the historical activity of engineers and artisans, while investigating the interrelationship between scientific thought and technological development. Events and ideas such as the philosophical origins of Western science, the Copernican revolution, Enlightenment rationalism, the industrial revolutions, 20th century positivism, the Einsteinian revolution, and the modern systemization ethic are discussed. Prerequisites: CORE 140, 145, 200. [Cross-listed: Engineering 310]

315 Perspectives in Physical Science (3)
.Spring Even
Historical, philosophical, and theological perspectives on the physical sciences are discussed and developed. The historical and contemporary roles of Christianity and other influential forces in science are considered. Prominent positions in the philosophy of science are examined. Aspects of the complex interactions between Christian faith and the physical sciences are discussed. Prerequisites: CORE 200; completion of the Natural Science requirement that must include at least one physical science (Astronomy, Chemistry, Physics, or CORE 220-229) course. [Cross-listed: Physical Science 201]

317 Professional Practice Development (3) Spring
Theories and concepts in leadership and management are examined which impact the professional practice setting. Political, economic, and psychosocial issues and trends affecting nursing and health care are analyzed along with issues in professional practice and education. The ability to conceptualize issues and apply critical thinking, theoretical reflection, and serviceable insight into the life of contemporary society is facilitated. Prerequisite: enrollment in BSN program. [Cross-listed: Nursing 390]

324 History of Psychology and Worldview (3) Fall
A brief study of the historical development of psychological theories from the ancient world to the present, with extended treatment given to major contemporary movements or perspectives in psychology (such as psychoanalysis, behaviorism, and humanism) and to recent attempts by Christians to "integrate" theology and psychology. Prerequisites: CORE 200; Psychology 201; senior standing. [Cross-listed: Psychology 384]

325 History of Calvinism (3)
.Spring Even
A study of historic Calvinism as it was expressed by John Calvin and those who followed in his name. Explores the permutations and applications of Calvinism through time including, but not limited to, Counter Remonstrants, English and American Puritans, Hungarian Calvinists, Afrikaners, and the modern Dutch Calvinist movement. Prerequisite: CORE 140. Some European history recommended. [Cross-listed: History 335]

399 Calling, Task, and Culture (3)
.Fall, Spring
A study of common issues involved in being Christ-centered disciples who, after graduating from college, are called upon to implement in practical life (and graduate studies) the "serviceable insights" they have learned. Emphasis will be placed on the nature of Christian witness, need for responsible strategy, and effects of concrete service. Prerequisites: CORE 140, 150, 200, junior or senior standing.

\title{
Criminal Justice
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\author{
General Major- \(\quad\) Criminal Justice 101, 202, 205, 302, 305, 322, 323, 350, 373; Political Studies 214; Sociology 216. To complete this interdisciplinary major, students will work with their advisor to select three additional courses to complement their vocational goals from Communication, Psychology, Political Studies, or Recreation. Students are advised to consider taking a minor in one of these programs. \\ General Minor- Criminal Justice 101, 202, 205, 373; one from Criminal Justice 302, 305, Sociology 216; Criminal Justice 322 or 323.
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101 Introduction to Criminal Justice (3)
 Fall

Overview of the criminal justice system, including: criminal justice research, criminal law, procedure, evi
dence, criminology, victimology, policing, the courts and corrections. We will explore how our views of
 crime and the criminal justice system have been influenced by government leaders and the media. We will
 also seek to apply biblical norms to our analysis of the criminal justice system with suggestions on reform.

202 Criminology (3)............................................................................................................................... Fall A theory-based course that studies crime causation, typologies of crime, and crime control. It looks at both historical and modern theories, including those that look to individual, social, and structural causes. It also broadly analyzes the guardianship and enforcement functions of the criminal justice system. Students will be able to identify criminology theories in modern media and engage in theory-building exercises. Prerequisite: Criminal Justice 101 or by permission of instructor. [Cross-listed: Sociology 202]

205 Crime Scene Investigation (3) Spring
Students will become acquainted with the forensic sciences, learn how to gather evidence and use it to solve crimes, and understand how proper investigation promotes justice. Considerable emphasis will be placed on how to conduct interviews and interrogations, write reports, and testify in court. Students will learn how to evaluate criminal investigations in current and high profile cases. We will apply biblical norms and discuss police ethics in conducting investigations. Intended for anyone interested in criminal investigation and hands-on learning.

302 Juvenile Justice (3).
Spring
Students will review causal theories of juvenile crime and will also examine the history and philosophy of the treatment of juveniles in the criminal justice system and the goals and effectiveness of the system. Promising alternatives rooted in a biblical reconciliation worldview will be included. Problems such as gangs, drug usage, and school violence will also be explored. The emphasis will be on how to be a salt and a light in a strategic part of society. Prerequisites: Criminal Justice 101, 202 or by permission of instructor.

Victimology and Family Violence (3) Spring
The victimology section will look at the various harms suffered due to crime, how victims interact with various agencies and players, public reaction to victims, the victims' rights movement, and how to better serve the victims of crime through our criminal justice system. We will also identify and describe the problem, measure its true dimensions, and review evidence and hypotheses of victimologists. In the family violence portion, theories on family violence will be analyzed, the consequences of family victimization will be
considered, as well as how to recognize child abuse and understand the dynamics of partner violence. We will analyze legal and enforcement responses, consider how institutional responses can prevent or lessen revictimization, and look to how a restorative justice model can alleviate some of the harms of victimization. Prerequisite: junior standing or by permission of instructor. [Cross-listed: Sociology 305]
322 American Constitutional Law (3)...................................................................................................Spring

323 Criminal Law and Procedures (3) Fall An introduction to the basic concepts of criminal law and procedure including the constitutional limitations from arrest to release in the administration of criminal justice. This course is a combination of 323 and formerly offered 324. Prerequisite: sophomore standing.
350 Terrorism: Political Violence, Security and Weapons of Mass Destruction (3) ..... Fall
This course is currently being developed.
373 Field Experience in Criminal Justice (3)

\(\qquad\)
 Fall, Spring
 This field experience provides exposure to the type of activities in which Criminal Justice graduates are
 likely to be involved. Requires 8-10 on-site hours per week plus one hour of weekly supervision. Applica
tion deadline for the spring semester is November 1 ; deadline for the fall semester is April 1. Prerequisites:
 declared criminal justice emphasis or minor; junior or senior standing; approval of the department.

391- Individual Studies (1-3)
.Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Dutch}

General Major- \(\quad\) Dutch 201, 202, 204, 206 or CORE 283, 301; Linguistics 201; four courses from Dutch 101, 102, 208, 341-348, 393; four semesters of Dutch conversation 251-258. Six credits in study-abroad courses are required.

\author{
General Minor-
}

Dutch 201, 202, 204, 206 or CORE 283, 301; one course from Dutch 102, 341348, 393; three semesters of Dutch conversation 251-258. Three credits in studyabroad courses are required.

\footnotetext{
101 Elementary Dutch I (4) Fall An introductory study of the language and culture of the Dutch-speaking people. Emphasis on the acquisition of oral and written language skills in a communicative context combined with the study of cultural etiquette and social customs. If desired, students can schedule extra sessions with advanced students (often native speakers) to practice oral skills.
}
102 Elementary Dutch II (3). ..... Spring
Continuation of 101. Prerequisite: Dutch 101 or its equivalent.
201 Intermediate Dutch I (3) ..... Fall
An intermediate course that continues the study of the language in a communicative context with emphasison precision and expansion of linguistic skills. Emphasis is also put on the development of cultural under-standing and sensitivity, studying people's values and beliefs as expressed in their economic, political, andreligious systems. Dutch culture will be compared with our culture in the light of the cultural mandate.Prerequisite: Dutch 102 or its equivalent.
202 Intermediate Dutch II (3) Spring Even
Continuation of Dutch 201. Prerequisite: Dutch 201 or its equivalent.
204 Literary and Cultural Readings (3) ..... OccasionalDesigned to develop reading skill and an appreciation for Dutch culture and literature, with emphasis oncontemporary literature. Permission will be granted for individual readings in academic areas of interest tothe student. Prerequisite: Dutch 202 or department approval.
206 Dutch Culture (3) .... Occasional
Designed to cover many aspects of the Dutch way of life. Listening and speaking skills will be developed through classroom activities. Prerequisite: Dutch 201 or departmental approval.
207 World Literature I (3) ..... Fall Odd
See English 207.
208 World Literature II (3) Spring Even
See English 208.
251- Conversation (1) .Fall, Spring
258 Designed to give the student practice in listening and speaking. The content of the courses will be altered each year. The class will meet two times each week. Graded on a pass/no record basis. Prerequisite: Dutch 201.
281- Service-Learning (1-3) Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
301 Dutch Phonology (3) ..... Fall Odd
An application of the principles of general phonology to the sound system of Dutch. See Linguistics 301. Prerequisites: Dutch 201; Linguistics 201.
341- Special Topics (3) ..... Occasional
348 The topics for these courses will be chosen from the areas of literature, advanced language studies, culture,or teaching methods. The offering of the courses as well as the content will reflect student interest and need.Prerequisite: departmental approval.
391- Individual Studies (1-3) .Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Earth Science}

121 Solar System Astronomy (4)
.Fall Even
An introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic "neighborhood" from the ancient Greeks to Einstein as well as recent discoveries and their implications for an improved understanding of our Earth. Students will obtain handson experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Students may take either Solar System Astronomy or Stellar and Planetary Astronomy for core program credit, but not both. Prerequisite: completion of core mathematics requirement. [Cross-listed: Astronomy 121, CORE 224]

\begin{abstract}
151 Introduction to Environmental Studies (3)
Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. [Cross-listed: CORE 211, Environmental Studies 151]
\end{abstract}

201 Introductory Geology and Physical Geography (4).............................................................................Fall
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week and one or two field trips. [Cross-listed: CORE 223, Environmental Studies 201, Geography 201]

202 Meteorology, Climate Change, and Aquatic Ecosystems (3) .................................................Spring Even Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular .attention given to the impact of these changes on the structure and function of aquatic ecosystems. [Cross-listed: Environmental Studies 202, Geography 202]

227 Paleontology (3) \(\qquad\) Fall Occasional An introduction to the major fossil plants and animals, and the environments (paleoecology) in which they are found. Three lectures, or two lectures and a two-hour laboratory per week. The course includes several Saturday field trips and one weekend field trip to the Pella area. Prerequisite: Biology 122 or by permission of instructor. [Cross-listed: Biology 227]

\section*{Economics}

For descriptions of the SECONDARY minors, teaching endorsements, and the ELEMENTARY fields of specialization, see the "Teacher Education Program" section on pages 108-130.

200 Economics and Christian Stewardship (3) \(\qquad\) .Fall, Spring Seeks to expose students who are not majoring in business administration or accounting to a wide variety of principles, policies, institutions, and problems within the field of economics. It includes the discussion of concepts such as property, value, work, wages, prices, profits, Christian stewardship in the marketplace, and comparative economic systems. [Cross-listed: CORE 266]

NOTE: Credit toward graduation will not be given for both Economics 200 (CORE 266) and Economics 202.

202 Principles of Economics: Micro (3)...................................................................................................Fall
The study of allocation of scarce resources at the level of the individual, the household, and the firm. Included are human motivation and preferences, the market, the function of prices, supply, demand, perfect and imperfect competition, and selected policy questions. Also studied are Christian views on the nature of humanity, human motivation, and the market.

203 Principles of Economics: Macro (3) ...............................................................................................Spring
An introduction to the study of human choice in the allocation of scarce resources, concentrating on the aggregate or national level. Economic systems, national income accounts and analysis, income distribution, fiscal and monetary policy, banking systems, economic growth, and selected economic policy problems are covered. Christian views on the origin and nature of economic resources and man's stewardship responsibilities are discussed. Prerequisite: Economics 202 or by permission of instructor.

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
303 Money and Banking (3) ....................................................................................................................Fall An analysis of the nature and function of money, the operation of the financial system, the organization of commercial banking, and the Federal Reserve System. Also included is a study of the principles of monetary policy and their application in our economy. Prerequisites: Economics 202, 203.

309 Economic History of the United States (3)
Spring Odd
A history of the development of the United States from an economic point of view. To set the context for the U.S. experience, the course will trace the roots of American economic development back to European and Medieval Economic thought. The causes and effects of major historical events are analyzed using contemporary economic thought. Some of the economic institutions and policies that played an important role in U.S. economic history will be evaluated from a Christian perspective. Prerequisite: Economics 200 or 203.

315 Government Finance (3)
.Occasional
A study of government taxing and spending primarily at the federal level. Christian and secular views on government economic activity, forms of taxation and their effects, debt financing, budget processes and problems are studied. The broad purpose of the course is to help students learn how to apply economic principles in an analysis of the effects of governmental policies particularly tax and expenditure policies. The course places emphasis on analytical skills.

321 Economic Development in Low Income Countries (3)
.Occasional
A study of economic aspects of poverty and underdevelopment in the modern world. Specific topics include the dimensions and nature of poverty in the world, characteristics and types of developing nations, theories of development and emerging issues in development. We will also consider the implications of biblical principles for policy to promote economic development and alleviate poverty. Prerequisite: Economics 200 or 202 or 203 or by permission of instructor.

334 Economics of Natural Resources and the Environment (3) Fall Odd
A study of economic aspects of Christian stewardship in relation to the environment and use of natural resources. Major topics include biblical norms on creation, property rights, economic justice, the economic
dimensions of current environmental problems and trends in resource use, institutions and social structures that affect environmental policy, economic theories related to resource use and environmental quality, and evaluation of current and proposed policies from a Christian point of view. Prerequisite: Economics 200 or 202 or 203 [Cross-listed: Environmental Studies 334]

Individual Studies (1-3)
.Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Education}

Master of Education Program See pages 120, 128-130.

Teacher Education Program The teacher education program is built on a liberal-arts base and on professional courses that prepare students for teaching in early childhood, elementary, middle, and secondary classrooms. Following successful completion of either an elementary and/or a secondary education program, students are recommended for the initial level of licensure granted by the State of Iowa.

Admission to the Program Formal application for admission to the teacher education program is required. Application forms are distributed by or may be obtained from the director of the teacher education program. The standards for admission to the teacher education program are described in The Teacher Education Program Handbook. Completed applications are evaluated by the Education Department and approved by the Teacher Education Committee.
The Teacher Education Committee takes the following formal actions:
- Admits applicants who have met all the criteria for admission.
- Conditionally admits applicants whose deficiencies can be remediated.
- Rejects applicants who do not meet the standards for admission. If denied admission a student may reapply for admission after one semester by contacting the director of the teacher education program. Generally, acceptance into the teacher education program must precede student teaching by at least one semester. Each applicant is informed in writing of the decision of the Teacher Education Committee regarding admission to the program.

The following are requirements for admission to the teacher education program:
- Completed application form with letter of recommendation.
- Pass a basic skills (reading, writing, mathematics) test. Students may choose to take either the Collegiate Assessment of Academic Proficiency (CAAP) or Praxis I (PPST). Students must achieve CAAP passing scores of 57 in reading, 59 in writing, and 54 in mathematics or Praxis I passing scores of 174 in reading and 173 in writing and mathematics.
- Minimum GPA of 2.5 , not including level two education courses.
- Grade of C or higher in all level one education courses.
- Grade of C or higher in Communication 100.
- Completed level one courses with key competencies met as indicated in the Teacher Education Candidate Assessment Plan.
- Acceptable professional dispositions based on recommendations from Student Services, the Education Department, and the Teacher Education Committee.
- Satisfy professional portfolio requirements at level one.

Approval for Student Teaching Student teaching is required of all students preparing for licensure. To receive graduation credit and a recommendation for licensure, student teaching must be taken at Dordt College. Formal application for approval for student teaching is required. Application forms are distributed or may be obtained from the director of teacher education. Standards for approval for student teaching are described in the Teacher Education Program Handbook. Completed applications are evaluated by the education department and approved by the Teacher Education Committee.
The following are requirements for approval for student teaching:
- Formal application to student teaching completed.
- Cumulative grade point average of 2.6 or above.
- Grade point average of 2.6 or above in each endorsement area.
- Acceptance into teacher education program at least one semester prior to student teaching.
- Successful completion of level two courses with competencies as indicated in the Teacher Education Candidate Assessment Plan.
- Grade of C or higher in all level two education courses.
- Acceptable professional dispositions based on recommendations from Student Services, the Education Department, and the Teacher Education Committee.
- Satisfy professional portfolio requirements at level two.

Requirements for Institutional Recommendation for Licensure To be recommended by the Teacher Education Committee for initial Iowa licensure, the student must have completed student teaching and successfully met all standards described in the Teacher Education Candidate Assessment Plan. Formal application for licensure is required. Application forms are distributed or may be obtained from the director of the teacher education program. Completed applications are evaluated by the education department and approved by the Teacher Education Committee.

The following are requirements for recommendation for initial Iowa teaching licensure:
- Completed application form.
- Undergo an FBI Criminal Background Check (including fingerprinting process).
- Submit a money order for \(\$ 150\) ( \(\$ 85\) licensure fee and \(\$ 65\) background check) payable to the Iowa Board of Educational Examiners.
- Satisfactory completion of student teaching.
- Satisfactory completion of the professional portfolio.
- Students completing the Elementary General Classroom Major (Endorsement 102) must pass one of the following Praxis II tests before they are recommended for licensure. (There is a charge of \(\$ 130\) for taking either Praxis II test.)
- 10011 Elementary Education: Curriculum, Instruction, and Assessment (Qualifying score of 151)
- 10014 Elementary Education: Content Knowledge (Qualifying score of 142)

Program Options and Requirements The program of courses in teacher education meets requirements for graduation and enables the student to achieve the requirements for initial licensure from the State of Iowa.

Each program option in teacher education includes:
- core program requirements.
- professional education and licensure requirements.
- content courses in the selected endorsement program(s).
- a human relations component (met by completing Education 109, the core program cross-cultural requirement, plus units from other coursework).
- electives (depending on the program option selected).

Note the following core requirements for education students:
- Mathematics-All teacher education students must take at least one mathematics course. Mathematics 106, 107, 110 or 111 are suggested for secondary education students. Elementary education students must take Mathematics 108. Mathematics 108 should be taken in the fall, followed by Education 332 in the spring of the sophomore or junior year. Mathematics 108 is not recommended for secondary education majors.
- Natural Sciences-Teacher education students must take one course from the life sciences and one course from the physical sciences. CORE 210-219 will fulfill the life science requirement. CORE 220-229 will fulfill the physical science requirement.
- Education 135 meets both the core social sciences I component (CORE 250-259) and a professional education requirement.

Teacher Education students choose from four major emphases. Several endorsement options are available under each emphasis.

Education Major Foundation (common to all options): Education 101, 101L, 109, 135, 201, 239, 251, 300, 381.

OPTION I: Elementary General Classroom Emphasis Major (provides endorsement to teach in the general elementary, grades K-6, classroom): Education 235 or 236; Education 205, 226, 228, 229, 331, 332, 333, 334 (Education 260 is strongly recommended); Communication 100 or CORE 110; CORE 120 or a writing-intensive course; Mathematics 108 and a mathematics elective; CORE 140, 145; one from CORE 210-219; one from CORE 220-229; one from CORE 260-269; 16 credits of student teaching. (Note: Students who choose the elementary emphasis must also complete a field of specialization, an academic minor in a content area, or the middle school endorsement.)

Fields of Specialization Note: a field of specialization does not provide the student with an endorsement area. A minor or major in any academic area offered by the college fulfills the requirements for a field of specialization.
1. ART: Art 201, 202; one from Art 207, 208, 209; Art 216 or 218.
2. BIOLOGY: Biology 115, 122, 200; one elective course in biology.
3. CHEMISTRY: Chemistry 101, 122; two elective courses in chemistry.
4. COMPUTER SCIENCE: Business Administration 100; Computer Science 111, 131; one course from Computer Science 112, 120, 220.
5. ECONOMICS: Economics 202, 203; two economics electives.
6. ENGLISH/LANGUAGE ARTS: English 201 or 202; one course from English 203, 205, 221, 222, 225; English 306, 336.
7. ESL: Education 341, 349; two courses from Foreign Language 201, Linguistics 201, 301.
8. FRENCH: French 201, 204, 206; three credits from French 251-258 or French 301. Study abroad courses are recommended.
9. HISTORY: History 201; one course from History 212, 213, 214; two courses from History 220-225, 230.
10. LANGUAGE ARTS: Education 262; one course from English 201, 202, 203, 221, 222; English 306, 336.
11. MATHEMATICS: Mathematics 108, 109; two electives in mathematics. One three-hour computer science course may be substituted for one of the elective mathematics courses.
12. MUSIC: Music 103, 103L, 104, 104L, 312; one semester each of Music 240 and Music 250. (Do not take Education 229 as part of the program.)
13. PHYSICAL EDUCATION: HPER 204, 207, 209, 306. (Do not take Education 226 and 227 as part of the program.)
14. POLITICAL STUDIES: Political Studies 201, 202, 214, 333.
15. PSYCHOLOGY: Psychology 201, 210, 364; one course from Psychology 224, 374, 376.
16. READING: Education 254, 314, 320; one course from Education 206, 262, 349.
17. SCIENCE-BASIC: Biology 115, 122; CORE 221; one course from Physical Science 201, Environmental Studies 151, Biology 251.
18. SOCIAL STUDIES: Geography 151; History 201; one course from History 212, 213, 214; one course from Economics 200, Political Studies 201, Psychology 201, Sociology 201.
19. SOCIOLOGY: Sociology 201, 210,216 ; one sociology elective.
20. SPANISH: Spanish 200/201, 204, 206; three hours of Spanish \(251-258\) or Spanish 301. Study- abroad courses are recommended.
21. SPECIAL EDUCATION: Education 251; three courses from Education 252, 253, 310, 315.
22. SPEECH COMMUNICATION/THEATRE: Communication 220; Theatre Arts 212; Education 254; Education 262 or Theatre Arts 101.
23. THEATRE ARTS: Education 262; Theatre Arts 101, 102, 210.
24. THEOLOGY: one course from Theology 211-217; Theology 221 or 222; Theology 231; Theology 322 or 323.

Elementary Subject Area Minor Completion of the Elementary General Classroom Major along with one of the following subject area minors prepares the student for general elementary classroom teaching in grades K-6 and provides an additional endorsement to teach in a specialized subject area in grades K-8. (The term "endorsement" and the endorsement numbers are part of the Iowa licensure code.)
1. ART: Endorsement 113. Art 201, 202, 216; two courses from Art 207, 208, 209, 210; two courses from Art 218, \(225,228,230,240\); one course from Art 302, 316, 318, 325, 328, 330, 340. (Art 211 is required as a professional education course.)
2. ENGLISH/LANGUAGE ARTS: Endorsement 119. Theatre Arts 212 or Education 262; Education 205; English 201 or 202; English 306, 336; two courses from English COURSES FOR MAJORS. (Education 333 is required as a professional education course.)
3. HEALTH: Endorsement 137. HPER 101, 202, 204, 205, 207, 209, 211; Sociology 302. (Education 226 is required as a professional education course.)
4. HISTORY: Endorsement 162. History 201, 280; one course from History 212, 213, 214; three courses from History \(220-225,230,319,326,327,335\), Engineering 310; two courses from History 301, 306, 307, 308, Economics 309. (Education 331 is required as a professional education course.)
5. MATHEMATICS: Endorsement 142. Mathematics 106, 107, 108, 109, 111 or 112, 207, 390; Computer Science 111. (Education 332 is required as a professional education course.)
6. MUSIC: Endorsement 144. Music 103, 103L, 104, 104L, 207 or 208, 215, 308; Music 19; one semester each of Music 240 and Music 250; one course from Music 203 and 203L, 207 or 208, 209, 305, 316-319; four large ensemble credits or a second course from Music 203 and 203L, 207 or 208, 305, 316-319; *312 (*This course is required as part of the professional education sequence.)
7. PHYSICAL EDUCATION: Endorsement 146. HPER 22, 26 or 30, 101, 203, 204, 207, 208, 306, 325; one course from HPER 205 or 209, or two courses from HPER 212-217. (Note: HPER 212-217 are half-courses.) (Do not take Education 227 as part of the program.)
8. READING: Endorsement 148. Education 205, 254, 265, 310, 314, 320, 339; English 306; (Education 333 is required as a professional education course).
9. SCIENCE-BASIC: Endorsement 150 Three courses from CORE 221, Physics 115, 116, Chemistry 101, 122; two courses from CORE 212, Biology 115, 122; two courses from Environmental Studies 151, Astronomy 121, Earth Science 201, 202, 227; Education 334. (Education 334 is required as a professional education course.) It is recommended that students earning this endorsement take Physical Science 201 or Biology 251.
10. SOCIAL STUDIES: Endorsement 164. Economics 200; Geography 151; History 201; one course from History 212, 213, 214; two courses from History 220-225, 230; two courses from Political Studies 201, 202, 214, 312. (Education 331 is required as a professional education course.)
11. SPANISH: Endorsement 133. Spanish 200/201, 204, 206, 300, 301, 302; three semesters of Spanish 251-258; one course from 304, 341-348, 393. Three credits in study-abroad courses are required. (Education 355 is required as a professional education course.)
12. SPECIAL EDUCATION: K-6 INSTRUCTIONAL STRATEGIST I: MILD TO MODERATE: Endorsement 260. Education 251, 252, 253, 254, 310, 314, 315, 317, 319. Completion of the special education minor will prepare teachers to serve as instructional strategists for students with mild or moderate disabilities in either inclusive education settings or special education placements.
13. SPEECH COMMUNICATION/THEATRE: Endorsement 167. Communication 201, 220; Education 254, 262; Theatre Arts 101, 102, 212. (Education 333 is required as a professional education course.)

Option II: Elementary Subject Area Classroom Emphasis Major: Education 235 or 236; Education 265 or 333; one mathematics course (108 recommended); one of Art 211, Education 355, Physical Education 306, or Music 312, 314 or \(316-319 ; 16\) credits of student teaching. (Note: The elementary subject area classroom emphasis is not a "stand alone" major. It must be completed concurrently with an approved elementary academic content area major. Completion of the Elementary Subject Area Classroom Emphasis Major along with one of the following subject area majors prepares the student for specialized
subject area teaching in grades \(\mathrm{K}-8\) and allows the student to obtain the endorsement indicated. (The term "endorsement" and the endorsement numbers are part of the Iowa licensure code.)
1. ART: Endorsement 113. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340. (Art 211 is required as a professional education course.)
2. MUSIC: Endorsement 144. Music 103, 103L, 104, 104L, 209, 215; Music 203 and 203L or 305; one course from Music 207, 208, 308; one additional course from Music 203 and 203L, 207, 208, 305, 308; Music 19; six semesters of Music 09; two semesters each of Music 240 and Music 250; four large ensemble credits; *Music 312, *Music 314 or 316-319. (*These courses are required as professional education.) (Music 313 is recommended as a professional education course.)
3. PHYSICAL EDUCATION: Endorsement 146. HPER 22, 26 or 30, 101, 203, 204, 205, 207, 208, 209, 306, 325; two courses from HPER 212-217. (Note: HPER 212-217 are half-courses.)
4. SPANISH: Endorsement 133. Spanish 200/201, 204, 206, 300, 301, 302; Linguistics 201; two courses from Spanish 102, 207, 208, 304, 341-348, 393; four semesters of Spanish 251-258. Six credits in study-abroad courses are required. (Education 355 is required as a professional education course.)

OPTION III: Secondary Subject Area Classroom Emphasis Major: Education 236 or 237; Education 267; one mathematics course (106, 107, 110, 111 recommended); one of Education 350, 351, 354, 355, \(356,357,358,359 ; 16\) credits of student teaching. (Note: The secondary subject area classroom emphasis is not a "stand alone" major. It must be completed concurrently with an approved secondary academic content area major. See subject area majors below.) Completion of the Secondary Subject Area Classroom Emphasis Major along with one of the following subject area majors prepares the student for specialized subject area teaching in grades 5-12 and allows the student to obtain the endorsement indicated. (The term "endorsement" and the endorsement numbers are part of the Iowa licensure code.)
1. AGRICULTURAL EDUCATION: Dordt College has developed an articulation agreement with the University of Nebraska-Lincoln leading to a Bachelor of Science in Agriculture Education from UNL. This agreement involves three years at Dordt plus one year at UNL. See Dr. Duane Bajema in the agriculture department for details.
2. ART: Endorsement 114. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340 . (Education 350 is required as a professional education course.)
3. BUSINESS EDUCATION-GENERAL: Endorsement 115. Two courses from Business Education 203, Business Administration 201, 202; Business Administration 301 or 302; Business Administration 100 or Computer Science 211; Business Administration 205, 206; one course from Business Administration 304, 306, 308; Economics 202 and 203 or Economics 200 and one from Economics 309, 321, 334; one from English 305, Communication 220, 228. (Education 359 is required as a professional education course.
4. ENGLISH/LANGUAGE ARTS: Endorsement 120. Education 206; English 201, 202, 210, 306, 314, 316, 336; one course from English 220, 241, 301, 302, 303, 304; one course from English COURSES FOR MAJORS. English 203, 312, and 333 are recommended. (Education 354 is required as a professional education course.)

\section*{5. HISTORY:}
A. HISTORY-UNITED STATES and WORLD: Endorsements 158 and 166. History 201, 280, 380; one course from History 212, 213, 214; three world history electives from History 212-214, 220-225, 230, 319, 326, 327, 335, 341-344, Engineering 310; four American history electives from History 301, 306, 307, 308, Economics 309; History 388 or 389 strongly recommended. (Education 356 is required as a professional education course.)
B. HISTORY-WORLD: Endorsement 166. History 201 or 230, 280, 380; one course from History 212, 213, 214; seven history courses numbered above 201, including Engineering 310 and Economics 309. A maximum of three courses may be from History 301, 306, 307, 308, 345-348, Economics 309. At least three must be 300 -level. History 388 or 389 strongly recommended. (Education 356 is required as a professional education course.)

Students who complete a history major can add an endorsement in American government, economics, psychology, or sociology by completing 15 semester hours in one of these social sciences:
- Endorsement 157-American Government. Political Studies 202, 214, 322, 333, 370.
- Endorsement 160-Economics. Economics 202, 203, 303; two courses from Economics 309, 315, 321, 334. (NOTE: 309, 315, 321, and 334 are offered in alternate years.)
- Endorsement 163-Psychology. Psychology 201, 210, 364; two from Psychology 218, 224, 374, 376.
- Endorsement 165-Sociology. Sociology 201, 216; three electives in sociology.
6. MATHEMATICS: Endorsement 143. Mathematics 112, 113, 203, 206, 207, 208, 212, 304, 311, 390, 392; one course from Mathematics 291-294; Computer Science 111. (Education 357 is required as a professional education course.)
7. MUSIC:
A. MUSIC-CHORAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 207, 208, 209, 215, 305 or 308, 315; Music 19; six semesters of Music 09; four semesters of Music 240; two additional semesters from Music 240, 250, 260, or 270; six semesters of Concert Choir or Chorale; Music *312, *313, *323, two semesters from *316-319. (*These courses are required as professional education courses.)
B. MUSIC-INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 207, 208, 209, 215, 305 or 308, 315; Music 19; six semesters of Music 09; four semesters of Music 270; Music 240 or 04; two additional semesters from Music 240, 250, 260, or 270; six semesters of Band or Orchestra; Music *312, *314, and *316-319. (*These courses are required as professional education courses.)
C. MUSIC-CHORAL/INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 207, 208, 209, 215, 305 or 308, 315; Music 19; six semesters of Music 09; four semesters of Music 240; four semesters of Music 270; six semesters of Concert Choir or Chorale; six semesters of Band or Orchestra; Music *312, *313, *314, *316-319, *323. (*These courses are required as professional education courses.)
8. PHYSICAL EDUCATION: Endorsement 147. HPER 22, 26 or 30, 101, 203, 204, 205, 207, 208, 209, 305, 325; two courses from HPER 212-217. (NOTE: HPER 212-217 are half-courses.)
9. SCIENCES: (Single Academic Program Science Majors)
A. BIOLOGY: Endorsement 151. Biology 115, 122, 200, 213; one course from Biology 217, 316, 319, Agriculture 251; one course from Biology 201, 202, 301, Agriculture 315; two additional three- or four-credit elective courses in Biology numbered above 200, with a strong recommendation that Biology 302 or Biology 335 be included; Chemistry 101 and 122 or Chemistry 103 and 104. (Education 351 is required as a
professional education course.)
B. CHEMISTRY: Endorsement 152. Chemistry 103, 104, 212, 221, 222; Chemistry 331 and 332 or Chemistry 333; one course from Chemistry 251 (or Au Sable 332), 311, 312, 325, 393; Physics 115, 116 or Physics 201, 202, 203; Mathematics 112, 113. (Education 351 is required as a professional education course.) Note: Mathematics 112 and 113 are pre- or corequisites for the physics courses and will fulfill the core program mathematics requirement for education majors. Students should ordinarily take Physical Science 201 to fulfill the Advanced Reformed Thought requirement in the core program and should take Biology 115 as the biological science requirement in secondary education.
C. PHYSICS: Endorsement 156. Physics 201, 202, 203; Physical Science 201; Mathematics 112, 113; three courses from Physics 206, 325, 326, 331, 335, 336, 393. (Education 351 is required as a professional education course.) Note: Mathematics 112 and 113 are pre- or corequisites for Physics 201 and 202 and will fulfill the core program mathematics requirement for education majors. Most of the 300 level courses have additional prerequisites.

\section*{SCIENCES: (Multiple Academic Program Majors)}

The following endorsements in the sciences may be acquired by meeting the course requirements listed. Endorsements may be added to the single academic program majors (biology, chemistry, or physics) above. Alternatively, combinations of two or more of the endorsement options listed below constitute a secondary education major in those endorsement areas.
D. GENERAL SCIENCE: Endorsement 154. Biology 115, 122; Chemistry 101, 122 or Chemistry 103, 104; Physics 115, 116 or Physics 201, 202, 203; one from Environmental Studies 151, Astronomy 121, Earth Science 201, 202, 227. (Education 351 is required as a professional education course.)
E. PHYSICAL SCIENCE: Endorsement 155. Physics 115 and 116 or Physics 201, 202, and 203; Physical Science 201; Chemistry 101 and 122 or Chemistry 103 and 104; two courses from Astronomy 121, Earth Science 201, 202, 227. (Education 351 is required as a professional education course.)
F. BIOLOGY: Endorsement 151. Biology 115, 122, 200, 213; one elective course from Biology numbered above 200. (Education 351 is required as a professional education course.)
G. CHEMISTRY: Endorsement 152. Chemistry 103, 104; two from Chemistry 122 (or Chemistry 221), 212, 251 (or Au Sable 332). (Education 351 is required as a professional education course.)
H. EARTH SCIENCE: Endorsement 153. Earth Science 121, 151, 201, 202, 227. (Education 351 is required as a professional education course.)
I. PHYSICS: Endorsement 156. Physics 201, 202, 203; Mathematics 112, 113; one course from Physics \(206,325,326,331,335,393\). Mathematics 112 and 113 will fulfill the mathematics core program requirement for education majors. Most of the course options have additional prerequisites. (Education 351 is required as a professional education course.)
10. SOCIAL SCIENCE: Endorsement 186. History 201, 280; two courses from History 301, 306, 307, 308, *388; one course from History 212, 213, 214; two courses from CORE 145, History 220, 221, 222, 223, 224, 225, 230, 319, 326, 335, *389 (students planning to teach in Canada are advised to take 230); Political Studies 202, 214; Political Studies 201 or 210; Psychology 201; one course from Psychology 210, 218, 224; Sociology 201; one course from Sociology 215, 216, 302; Geography 151; Geography 201 or 202; Economics 202, 203; Mathematics 107 . History 380 is strongly recommended. (Education 356 is required as a professional education course.) (*Note: History 380 is a prerequisite for History 388 and 389.)
11. SPANISH: Endorsement 134. Spanish 200/201, 204, 206, 300, 301, 302; Linguistics 201; two courses from Spanish 102, 207, 208, 304, 341-348, 393; four semesters of Spanish 251-258. Six credits of study abroad courses are required. (Education 355 is required as a professional education course.)

Secondary Subject Area Classroom Emphasis with an Additional Academic Minor Completion of the Secondary Subject Area Classroom Emphasis Major along with a subject area major (described above) may add an additional grade 5-12 teaching endorsement by completing one of the following subject area minors. (The term "endorsement" and the endorsement numbers are part of the lowa licensure code.)
1. AMERICAN GOVERNMENT: Endorsement 157. Political Studies 201, 202, 214, 322, 333, 370; two courses from Political Studies 245, 335, Criminal Justice 101. One course taken on the American Studies Program may be substituted for one of the courses. (Education 356 is required as a professional education course.)
2. ART: Endorsement 114. Art 201, 202, 216; two courses from Art 207, 208, 209, 210; two courses from Art \(218,225,228,230,240\); one course from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional education course.)
3. BIBLE: No state endorsement is available. Theology 222, 254; Theology 322 or 323; two courses from Theology 211-214; two courses from Theology 215-217; Education 261.
4. BIOLOGY: Endorsement 151. Biology 115, 122, 200, 213; plus electives from biology courses numbered above 200 for a minimum of 24 semester hours total. (Education 351 is required as a professional education course.)
5. CHEMISTRY: Endorsement 152. Chemistry 103, 104, 221, 222, 325, and two electives (suggested from Chemistry 212, 312, Au Sable 332). (Education 351 is required as a professional education course.)
6. ENGLISH/LANGUAGE ARTS: Endorsement 120. Education 206, 267; English 210, 306, 336; English 201 or 202; English 314 or 316; one from English 220, 241, 301, 302, 303, 304; one course from English COURSES FOR MAJORS. (Education 354 is required as a professional education course.)
7. GENERAL SCIENCE: Endorsement 154. Biology 115, 122; Chemistry 101; Environmental Studies 151; Physics 115,116 ; two elective courses in biology, chemistry, earth science, or physics. (Education 351 is required as a professional education course.)
8. HEALTH: Endorsement 138. HPER 101, 202, 204, 205, 207, 209, 211, 305; Sociology 302.
9. HISTORY-WORLD: Endorsement 166. History 280, 380; one from History 212, 213, 214; three from History 201, 220, 221, 223, 224, 225, 230; two from History 319, 326, 327, 335, Engineering 310. (Education 356 is required as a professional education course.)
10. MATHEMATICS: Endorsement 143. Mathematics 112, 113, 203, 206, 208, 212, 390; Computer Science 111. (Education 357 required as a professional education course.)
11. MUSIC
A. CHORAL MUSIC: Endorsement 145. Music 103, 103L, 104, 104L, 215, *313, 315, 323; two courses from Music 207, 208, 308; Music 19; two semesters of Music 240; four semesters of Concert Choir or Chorale. (*This course is required as a professional education course.)
B. INSTRUMENTAL MUSIC: Endorsement 145. Music 103, 103L, 104, 104L, 215, *314, 315, *316-319; two courses from Music 207, 208, 308; Music 19; two semesters of Music 270; four semesters of Band or Orchestra. (*This course is required as a professional education course.)
12. PHYSICAL EDUCATION: Endorsement 147. HPER 22, 26 or 30, 101, 203, 204, 205, 207, 208, 305; six credits from HPER 209, 212-217, 325. (Note: HPER 212-217 are half-courses. Only two may be applied to the minor.)
13. PHYSICAL SCIENCE: Endorsement 155. Chemistry 103, 104; Physics 201, 202; Physical Science 201. Two courses from Astronomy 121, Earth Science 201, 202, Physics 203. (Education 351 is required as a professional education course.)
14. PHYSICS: Endorsement 156. Physics 201, 202, 203, 325; three elective courses in physics. Most of the course options have additional prerequisites. (Education 351 is required as a professional education course.)
15. SPANISH: Endorsement 134. Spanish 200/201, 204, 206, 300, 301, 302; three semesters of Spanish 251-258; one course from Spanish 304, 341-348, 393. Three credits in study-abroad courses are required. (Education 355 is required as a professional education course.)
16. SPECIAL EDUCATION: 7-12 INSTRUCTIONAL STRATEGIST I: MILD TO MODERATE: Endorsement 261. Education 251, 252, 253, 254, 310, 314, 316, 318, 319. Completion of the special education minor will prepare teachers to serve as instructional strategists for students with mild or moderate disabilities in either inclusive education settings or special education placements.
17. SPEECH COMMUNICATION/THEATRE: Endorsement 168. Communication 201, 240, 241, 314; Theatre Arts 102, 103, 210, 212; Theatre Arts 101 is strongly recommended. Communication 311 and Education 262 are also encouraged. (Education 358 is required as a professional education course.)

Option IV: Vertical Subject Area Classroom Emphasis Major (provides endorsement to teach a content area at both elementary and secondary, grades K-12, levels): One of Education 235, 236, 237; one of Education 265, 267, 333; one mathematics course (106, 107, 110, 111 recommended); Education 355 or one of the following combinations of pedagogy courses: Art 211 and Education 350; Physical Education 305 and 306; Music methods courses (see below); 16 credits of student teaching. Note: the vertical subject area classroom emphasis is not a "stand alone" major. It must be completed concurrently with an academic content area major. See subject area majors below.) Completion of the Vertical Subject Area Classroom Emphasis Major along with one of the following subject area majors prepares the student for specialized subject area teaching in grades K-12 and allows the student to obtain the endorsements indicated. (The term "endorsement" and the endorsement numbers are part of the lowa licensure code.)
1. ART: Endorsements 113 and 114. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340. (Art 211 and Education 350 are required professional education courses.)
2. MUSIC: Endorsements 144 and 145. Students getting the vertical endorsement in music must complete one of the three options listed. (*Denotes courses that are required as professional education courses.)
A. CHORAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 207, \(208,209,215,305\) or 308 , 315 ; Music 19 ; six semesters of Music 09 ; four semesters of Music 240 ; two additional semesters from Music 240, 250, 260, or 270; six semesters of Concert Choir or Chorale; Music *312, *313, *323; two semesters from Music *316-319.
B. INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 207, 208, 209, 215, 305 or 308, 315; Music 19; six semesters of Music 09; four semesters of Music

270; Music 240 or 04; two additional semesters from Music \(240,250,260\), or 270 ; six semesters of Band or Orchestra; Music *312, *314, and *316-319.
C. CHORAL/INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 207, 208, 209, 215, 305 or 308, 315; Music 19; six semesters of Music 09; four semesters of Music 240; four semesters of Music 270; six semesters of Concert Choir or Chorale; six semesters of Band or Orchestra; Music *312, *313, *314, *316-319, *323.
3. PHYSICAL EDUCATION: Endorsements 146 and 147. HPER 22, 26 or 30, 101, 203, 204, 205, 207, 208, 209, 305, 306, 325; two courses from HPER 212-217. (Note: HPER 212-217 are half-courses.)
4. SPANISH: Endorsements 133 and 134. Spanish 200/201, 204, 206, 300, 301, 302; Linguistics 201; two courses from Spanish 102, 207, 208, 304, 341-348, 393; four semesters of Spanish 251-258. Six credits of study abroad courses are required. (Education 355 is required as a professional education course.)

\section*{Other Endorsement Options:}
1. MIDDLE SCHOOL CLASSROOM TEACHING ENDORSEMENT: Endorsement 182. The middle school endorsement may be added to either the Elementary General Classroom Teaching Major (Option I) or to the Secondary Subject Area Classroom Major (Option III). Students will earn the middle school classroom teaching endorsement by completing the program content courses listed.

\section*{Program Content Courses (Credit Hours)}

Education 266 - Middle School Curriculum and Instruction (3)
Education 236 - Applied Educational Psychology in Middle School Education (3)
Education 239 - Service Learning: Field Experience (2) This experience must be completed in a middle grade (5-8) class room.
One of the following:
Education 265 - Reading in the Content Areas - Elementary (1.5) or
Education 267 - Secondary Instructional Design and Content Area Reading (3) or
Education 333 - Teaching Reading and Language Arts in Pre-K through Middle School (4)
The Middle School endorsement requires students to complete two of the following fields of specialization:
A. ENGLISH/LANGUAGE ARTS: a speech course (Communication 100 recommended), an English usage course (English 336 recommended), a young adult literature and literature across cultures course (Education 206 recommended), a composition course (English 306 recommended). (Education 354 is recommended as a professional development course.)
B. MATHEMATICS: an algebra course (Mathematics 110, 111 or 112 recommended); Mathematics 109; two mathematics electives (Mathematics 108 recommended.)
C. SCIENCE: a life science course (CORE 212 recommended), a physical science course (CORE 222 recommended), an earth science course (Earth Science 151 recommended), and one additional elective from the natural sciences (astronomy, chemistry, physics, earth science, physical science, biology, environmental studies).
D. SOCIAL STUDIES: a world history course (CORE 145 recommended), an American history course (History 201 recommended), a geography course (Geography 151 recommended), a political studies course (Political Studies 201 recommended).
2. ATHLETIC COACH K-12: Endorsement 101: In the State of Iowa, you must be licensed to coach at the secondary level in the public school system. There are two forms of coaching licensure - a coaching authorization and a coaching
endorsement. Both the authorization and endorsement allow you to be employed as a head or assistant coach in any interscholastic athletic activity. Both licenses require courses in four conceptual areas: Coaching Theory, Lifespan Development, Physiology, and First Aid and Prevention of Athletic Injuries. These courses may be taken in any sequence over any length of time through Area Education Agency (AEA) workshops or for college credit.

The coaching authorization gives a non-education student the right to coach in the middle school or high school. The person is allowed to be the head or assistant coach for any sport following the completion of the course work in the previous paragraph and filing an application for the authorization through the Department of Education of the State of Iowa (see the contact information below). The coaching endorsement can be obtained by individuals who hold a teaching license and who have completed the four required classes for college credit. Coaching Theory, Lifespan Development, and Physiology must be taken for one credit hour each and First Aid and Prevention must be taken for two credit hours. The coaching endorsement is automatically renewed with your teaching license.

For information on licensure, see web site www.state.ia.us/boee/doc/faqs_cch.asp.
The following courses with an education degree qualify an applicant to be a head coach or assistant coach in all sports at the secondary level.

HPER 204 - Exercise Physiology or Biology 201 - Human Anatomy and Physiology
HPER 207 - First Aid and Athletic Injuries
HPER - Coaching Theory (one from 212-217)
Psychology 204-Lifespan Development
These courses also meet the State of Iowa's requirement for the coaching authorization available for those who have not completed an education degree. The coaching authorization allows the holder to be head coach or assistant coach in all sports at the secondary level.
3. EARLY CHILDHOOD PK-3: Endorsement 106: This endorsement may be obtained by completing the Elementary General Classroom Major (Option 1), student teaching at both the early childhood and elementary levels, and completion of the courses indicated below.

Education 226 - Teaching Health in Pre-K through Middle School
Education 228 - Teaching Art in Pre-K through Middle School
Education 229 - Teaching Music in Pre-K through Middle School
Education 254 - Collaboration and Consultation
Education 320 - Reading and Language Development in Early Childhood
Education 322 - Introduction to Early Childhood Education
Education 322L - Practicum in Early Childhood
Education 326-Organization and Administration of Early Childhood Programs
4. TEACHING ENGLISH AS A SECOND LANGUAGE K-12: Endorsement 104: The TESL endorsement may be added to either the Elementary General Classroom Major (Option I) or the Secondary Subject Area Major (Option III). Students will earn the TESL endorsement by completing the program content courses listed.

TESL-Domestic: Education 341, 349; English 336; one course from Foreign Language 101, 102, 200, 201; Linguistics 201, 301; one course from CORE 270, Foreign Language 204, 206, Sociology 216.

TESL-International: Education 239, 270, 341, 349; English 336; one course from Foreign Language 101, 102, 200, 201; Linguistics 201, 301; SPICE/SPIN 271.

\section*{Master of Education Degree}

The following program in school curriculum and instruction meets the master's degree requirement in a recognized endorsement area for a Professional Teacher's License in the State of Iowa.
- Education 501 - Current Issues in Education
- Education 502 - Advanced Educational Psychology
- Education 503 - Research Methods in Education
- Education 540 - Practicum in Curriculum and Instruction
- Education 590 - Master's Project
- 15 additional credits of graduate-level courses chosen in compliance with the Master of Education Program bulletin.

\section*{Associate of Arts Degree Options}

The education department offers the following areas of concentration for an A.A. degree. Completion of one of these options leads to paraeducator certification from the State of Iowa. See the "Academic Program" section for the core program for all A.A. programs.

Associate of Arts/Special Education Aide: Education 101, 101L, 109, 135, 201, 251, 314, 332, 333; Education 253 or 315; Mathematics 108.
Associate of Arts/Teacher Aide-Elementary: Education 101, 101L, 109, 135, 201, 251, 332, 333; Mathematics 108; six credits from Education 205, 226, 227, 228, 229, 331, 334.
Associate of Arts/Early Childhood Aide: Education 101, 101L (primary), 135, 201, 205, 251, 320, 322, 322L, 326; three credits from Education 109, 226, 228, 229.

\section*{LEVEL 1 COURSES}

101 Introduction to Education (3)..............................................................................................Fall, Spring Designed to introduce students to the domain of education and to induct them into an initial understanding of teaching and the teaching profession. Emphasis is on the development of a distinctively Christian approach to education. Topics considered include the philosophical, historical, social, and political contexts of education. Introductory attention is given to curricular and instructional issues.

101 L Pre-Student Teaching Field Experience I (1)
Fall, Spring
A field experience of at least 20 hours in a local school. Required of all elementary, middle, and secondary education students. Graded on a pass/no-record basis. Prerequisite: Concurrent enrollment in Education 101.

104 Pre-Student Teaching Field Experience I (1)......................................................................................Fall
An optional field experience of at least 20 hours in a school. This course may substitute for Education 101L. Graded on a pass/no-record basis. Prerequisite: Education 101.

109 Diversity in Education (1.5) Fall, Spring Intended to familiarize prospective teachers with issues of race, gender, social class, and culture as they relate to the educational process. Specifically, students will become familiar with historical and current practices in schools and society that reflect dehumanizing and unbiblical biases such as sexism, racism, prejudice, and discrimination. In addition, students will become aware of ways in which teachers can promote a curriculum and an educational environment that is free of such biases and will instead reflect a perspective that is pluralistic in its orientation and promote a biblical view of the person. Prerequisite: Education 101.

135 Introduction to Educational Psychology (3) ..........................................................................Fall, Spring
Introduces students to fields of educational psychology and developmental psychology as they inform the teaching and learning environment. Research in the field of educational psychology is explored as a tool for effective teaching and decision-making. This course also introduces students to developmental theories and explores in-depth learning theories that impact education today. Research methodology, developmental and learning theories are discussed and explored from a reformational perspective. [Cross-listed: CORE 255]

201 Curriculum and Instruction (3) Fall, Spring Introduces students to an understanding of curricular and instructional theory and practice. Emphasis is on the development of a distinctively Christian approach to the classroom. Various perspectives on curriculum and instruction are critically examined. Students practice curriculum construction and lesson planning. Prerequisite: Education 101 or departmental approval.

204 Pre-Student Teaching Field Experience (1.5)
Fall, Spring
An optional field experience of at least 40 hours in a school. This course does not substitute for Education 239 as a requirement in the Teacher Education Program. Graded on a pass/no-record basis. Prerequisite: Education 101.

LEVEL 2 COURSES (courses numbered below 210 can be taken prior to admission to TEP)
205 Children's Literature (3) .........................................................................................................Fall, Spring
A wide selection of children's books is read and examined for use in the preschool, elementary, and middle school curriculum. Emphasis is put on reading and responding to books from many different genres. Ways to encourage reading and interacting with texts are discussed and practiced. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

206 Adolescent Reading Interests (3)
Fall Even Examines the development of adolescent literature as a genre and exposes the student to a wide selection of writing and authors. The course emphasizes appreciation for literature that endures and that promotes Christian perspectives, and it provides the student with a background for implementing reading programs at the middle school and high school levels. Offered in alternate years. Prerequisite: Education 101.

226 Teaching Health in Pre-K through Middle School (1.5)
Fall Provides general background and information needed for formulating and teaching a suitable program in health. This class is not open to elementary education majors pursuing the physical education teaching minor or major. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

227 Teaching Physical Education in Pre-K through Middle School (1.5) Fall Provides general background and information needed for formulating and teaching a suitable program in physical education. This class is not open to elementary education majors pursuing the physical education teaching minor or major. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

228 Teaching Art in Pre-K through Middle School (1.5) Fall Provides background on methods and techniques of organizing and motivating art instruction for early childhood, elementary, and middle school children. Creative work with material for children: crayon, cut paper, watercolor, and poster paint is included. This class is not open to elementary education majors pursuing the art teaching minor or major. Prerequisite: admission to the Teacher Education Program or by permission of instructor.
229 Teaching Music in Pre-K through Middle School (1.5) Spring
Provides background skills and materials necessary for teaching music in the preschool, elementary, and middle school classroom. Not open to those majoring or minoring in music. Prerequisite: admission to the Teacher Education Program or by permission of instructor.
235 Applied Educational Psychology in Pre-K and Elementary Education (3)...............................Fall, Spring Continuation of Education 135 in that it applies the theories and issues introduced in Education 135. This course addresses the unique emotional, physical, intellectual, social, and spiritual characteristics and needs of the elementary-age student. Emphasis is on developing a biblical view of the student, developing appropriate motivation techniques, creating productive, developmentally-responsive learning environments, developing effective classroom management, demonstrating authentic and appropriate assessment and evaluation, and examining how each area influences teaching strategies. Prerequisite: admission to the Teacher Education Program or by permission of instructor.
236 Applied Educational Psychology in Middle School Education (3)
Spring
Continuation of Education 135 in that it applies the theories and issues introduced in Education 135. This course addresses the unique emotional, physical, intellectual, social, and spiritual characteristics and needs of the middle-level child. Emphasis is on developing a biblical view of the student as image-bearer and responsive disciple. Incorporates developing appropriate motivation techniques, creating productive, developmentally responsive learning environments, planning effective classroom management, demonstrating authentic and appropriate assessment and evaluation, and examining how each area influences teaching strategies. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

237 Applied Educational Psychology in Secondary Education (3) Fall Same as Education 236 for the secondary student.

239 Service Learning Field Experience (2) \(\qquad\) Fall, Spring A second teacher education field experience, designed to be taken in conjunction with Education 235/236/237 during the student's junior year. Students assist in classrooms for a total of 60 hours. Experiences gained in the field are addressed in the concurrent education courses. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

251 Introduction to the Education of Exceptional Students (3) Fall, Spring An introduction to the concepts of disabilities and exceptionalities within the school setting. Provision of special education services, characteristics of students with exceptional needs, and integration of services between general and special education will be presented.

252 Introduction to Behavior Management (3). \(\qquad\) Fall Odd An introduction to understanding and working with behavior problems commonly found in children and adolescents. Students will become familiar with the identification and assessment of problem behaviors, planning classroom interventions, monitoring progress, choosing corrective strategies, and supporting interventions beyond the classroom. This course has implications for both the regular and special education teacher. Prerequisites: Education 251; admission to the Teacher Education Program; or by permission of instructor.

253 Introduction to the Education of Children and Youth with Mild Disabilities (3) \(\qquad\) Fall Odd A survey course dealing with the provision of educational services to students with mild disabilities focusing
on the history of special education, legal issues related to the field of special education and an in-depth study of the characteristics of learners with mild to moderate disabilities.

Collaboration and Consultation in Education (3) Fall Deals with the increasing emphasis on the knowledge of family systems, dynamics, parent and student rights, advocacy, and communication among students, teachers, parents, paraprofessionals, and administrators. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

Teaching Bible in Pre-K through Middle School (1.5) \(\qquad\) Fall, Spring Designed to discuss the role of Bible teaching in the Christian school, to examine curriculum materials, to develop pedagogical skills for teaching Bible, and to involve students in the designing of their own appropriate curriculum materials. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

261 Teaching Bible to Adolescents (3) Fall Odd Discussion of a Reformed approach to the teaching of Bible. This course includes the study of the nature of faith, adolescent faith development, Reformed hermeneutics, pedagogical skills for teaching the Scriptures, and methods and content of the secondary (7-12) Bible curriculum. The course will cover theological and pedagogical foundations and the practical content of teaching Bible. Prerequisite: admission to the Teacher Education Program or by permission of instructor. [Cross-listed: Theology 254]

262 Creative Dramatics for Children (3)
Fall Odd
An introduction to informal dramatics for the classroom, especially elementary and middle school. Emphasis is on dramatic activity requiring minimal equipment and facilities. Field experience required in area schools. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

Reading in the Content Areas - Elementary (1.5). Fall Designed to enhance the use of text materials. Attention is given to organizational and study skills necessary for content learning and to the development of functional techniques for teaching content materials. The responsibility of Christian educators toward helping all students develop their potential in reading in content areas will be emphasized. Prerequisites: Education 333; admission to the Teacher Education Program; or by permission of instructor.

Middle School Curriculum and Instruction (3) Fall Introduces students to curriculum design and instruction for the middle school. Emphasis is on pedagogy and methods appropriate to the developmental needs of the middle-level child. Attention is given to traditional and emerging techniques and innovations including interdisciplinary teaming, advisor/advisee relationship, exploratory curriculum, and integrated curriculum. The course also provides a study of the middle school concept, its philosophy and the distinctive components and characteristics of exemplary middle schools. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

270 Comparative and International Education (3) \(\qquad\)
Course is currently being developed.
\(\qquad\)
283 See "Individual Studies" section of "Academic Offerings."

300 Philosophy of Education (3) .............................................................................................................Spring Why do we "do school" the way we do? Are the ways we educate the best? What does "the best" mean when we apply it to education? Most of all, what do the ways we "do school" say about our most basic commitments and beliefs? Philosophy of Education explores these questions and others like it, examining how basic commitments affect the ways we govern schools, see students, plan teaching and learning, and make curriculum. Students draw on resources, especially those from the tradition of Reformed Christian education, to construct a statement describing their own education philosophy. While this course meets a requirement in the Teacher Education Program, it does not assume a background in teacher education. Students from outside teacher education are welcome. Prerequisite: CORE 200. [Cross-listed: CORE 310]

310 Assessment and Diagnosis in Special and Remedial Education (3) Fall Introductory course in the use of assessment techniques in special and remedial education. Various formal and informal assessment techniques are examined and applied to the development of educational programs that meet the needs of the handicapped. Prerequisites: Education 251; admission to the Teacher Education Program; or by permission of instructor.

314 Diagnosis and Remediation of Language/Reading Difficulties (3) Spring A study of the causes of reading difficulties in the preschool, elementary, middle-level, and secondary school, their diagnosis and correction in both classroom and remedial setting. Prerequisite: Education 333 for elementary education students; secondary education students must see the instructor. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

315 Instructional Methods and Strategies for the Education of Students with Mild Disabilities-Preschool, Elementary, and Middle School (3). .Fall Even Deals with the instruction of students with mild disabilities such as learning disabilities, mild behavior disorders, and cognitive disabilities. Focus is on strategies directed toward the successful integration of students with mild disabilities into the regular elementary or middle level classroom. Prerequisite: admission to the Teacher Education Program or by permission of instructor.
 Same as Education 315 for regular middle level and senior high classroom. Prerequisites: Education 251; admission to the Teacher Education Program; or by permission of instructor.

317 Transitional Collaboration in Elementary and Middle Schools (1.5).
Spring
Acquaints students with sources of services, organizations, and networks that provide transitional, career, and vocational supports for students with disabilities at all levels of development with particular focus on the needs of students in elementary and middle school. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

318 Transitional Collaboration -Middle and High School (1.5)
Spring
Same as Education 317 for middle and high schools.

319 Supervised Practicum in Special Education (1.5) \(\qquad\) Fall, Spring
A supervised field experience that allows the student to aid/observe in a special education classroom. The practicum is provided in a setting appropriate for the endorsement sought. Graded pass/no-record. Prerequisites: Education 251; admission to the Teacher Education Program; or by permission of instructor.

320 Reading and Language Development in Early Childhood (3)
Spring Designed to cover the methods and materials appropriate for developing literacy in children up to age eight. Special attention is given to oral and written language development and to reading. Phonics and other beginning reading strategies are emphasized. Prerequisites: Education 333; admission to the Teacher Education Program; or by permission of instructor.

Introduction to Early Childhood (3)
Fall Odd
Designed to provide an overview of the field of early childhood education. Included are the following topics: growth and development of children from ages birth to eight; current trends in early childhood education; age appropriate lesson planning; what constitutes a supportive environment for young children; and the development of a professional Christian attitude towards children. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

322L Practicum in Early Childhood (1)
Fall Odd
This 20 hour practicum gives students practical experience in a child development center for children ages \(0-5\). This course is intended to be taken concurrently with Education 322.

326 Organization and Administration of Early Childhood Programs (3) .Fall Even
This course focuses on the administrative aspects of running a preschool. Topics include legal and licensing issues as well as the development of a facility that is safe and organized in a way that promotes child development. Issues related to assessing program quality both in terms of curriculum and personnel and ways to foster positive child-family-school relationships will be addressed. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

331 Teaching Social Studies in Pre-K through Middle School (3) \(\qquad\) Fall, Spring An introduction to a basic framework for social studies teaching with focus on methodologies, lesson and unit planning, learning resources, classroom organization, and new-tech media. Includes practical application activities for each major topic. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

332 Teaching Mathematics in Pre-K through Middle School (3) Spring Mathematics for the student who plans to teach in the elementary and middle school. Mathematics foundations, the number systems, and different methods of calculation are taught. Methods, materials, goals, and means of evaluating the teaching of mathematics are emphasized. Prerequisites: Education 201; Mathematics 108; admission to the Teacher Education Program; or by permission of instructor.

334 Teaching Science in Pre-K through Middle School (3) ...........................................................Fall, Spring
A basic course in the principles and techniques of teaching natural sciences. The primary focus is on the development of materials for use in the elementary and middle-level science classroom. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

339 Supervised Practicum in Reading (1) Spring This course gives the pre-service teacher an opportunity to work with a student who is experiencing reading difficulties. Graded on a pass/fail basis. Prerequisites: Education 333; concurrent enrollment in Education 314; admission to the Teacher Education Program; or by permission of instructor.

341 Foundations and Methods of ESL/EFL Teaching (3) Fall Even This course examines the principles, theories, and philosophy of ESL/EFL teaching that provide the foundation for classroom practice. First and second language acquisition theories will be presented and evaluated. The focus of the course is on communicative, interactive teaching strategies and how this type of teaching is implemented in the ESL/EFL and bilingual classroom. Context and learner variables, as well as teaching strategies and assessing various language skills are presented. This course should be taken concurrently with Education 349. Prerequisite: admission to the Teacher Education Program.

Supervised Practicum in Teaching English as a Second Language (1.5)
Fall, Spring
This course provides pre-service teachers who are seeking to complete the Iowa Teaching English as a Second Language (ESL) endorsement an opportunity to gain valuable experience in K-12 ESL classrooms. Students will complete a designated number of hours in a supervised practicum. They will identify learning needs of K-12 students and design and evaluate strategies appropriate for English language learners. This course should be taken concurrently with Education 341. Prerequisite: admission to the Teacher Education Program.

Methods of Teaching Art in High Schools and Middle Schools (3) Fall Even Methods and techniques of organizing and motivating art on the secondary school level. Media explored depends on the needs and interests of the class. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

351 Methods of Teaching Sciences in High Schools and Middle Schools (3) .Fall Even A review of recent trends in science teaching in middle and secondary schools. Use of audio-visual materials pertinent to the various sciences, methods of evaluation, laboratory techniques, and textbook evaluations are included. Students give several class presentations and observe actual teaching situations. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

Methods of Teaching English and Language Arts in High Schools and Middle Schools (3) .......Fall Even Discussion of a Christian approach to the teaching of English in middle and secondary schools. Methods and approaches to teaching literature, reading, language and composition, as well as micro-teaching in these areas. Attention is given to lesson, unit, course, and curriculum planning and to the use of audio visual materials. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

Methods of Teaching a Second Language in Grades K-12 (3) .Fall Even Presentation of various methods of teaching a second language in middle and secondary schools. This course includes teaching of listening, speaking, reading, and writing skills. Phonetics, morphology, syntax, meaning, vocabulary, culture, and literature are emphasized. A survey of ESL and foreign language materials is included. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

356 Methods of Teaching History and Social Studies in High Schools and Middle Schools (3).........Fall Even Discussion of a Christian approach to the teaching of history and social studies in middle and secondary schools. Emphasis is on current methods and consideration of practical suggestions in classroom procedure. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

357 Methods of Teaching Mathematics in High Schools and Middle Schools (3) \(\qquad\) Spring Methods of effective teaching of mathematics in middle and secondary schools. Prospective teachers attain understanding of the basic mathematics taught at the secondary level. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

Methods of Teaching Speech, Communication, and Theatre Arts in High Schools and Middle Schools (3)
.Occasional
A study of the concerns of the speech teacher in the middle and secondary school: developing speech courses, preparing objectives, constructing units, evaluating textbooks, and coaching and directing forensic activities. Previous experience or course work in oratory, oral interpretation, and debate is desirable. Students lacking this experience do additional study or reading. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

Methods of Teaching Business in High Schools and Middle Schools (3)
..Fall Even
Examination of the role of business education in the curriculum and current concerns in business education. Study of methods and materials for courses in business education at the secondary and higher education levels. Prerequisite: admission to the Teacher Education Program or by permission of instructor.

\section*{LEVEL III COURSES}

370 Student Teaching-Early Childhood (4-8) \(\qquad\) Fall, Spring Students work four to eight weeks with qualified cooperating teachers in pre-kindergarten classrooms.

Student Teaching-Elementary (4-16) .
Fall, Spring Students work four to sixteen weeks with qualified cooperating teachers in elementary (grades K-6) classrooms.

Student Teaching-Middle Level (4-8) Fall, Spring Students work four to eight weeks with qualified cooperating teachers in middle-level (grades 5-8) classrooms.

Student Teaching-Secondary (4-16) \(\qquad\) Fall, Spring Students work four to sixteen weeks with qualified cooperating teachers in secondary (grades 5-12) classrooms.

Student Teaching-Vertical (4-16)
.Fall, Spring
Students work four to sixteen weeks with qualified cooperating teachers in grades K-12 art, music, physical education, or Spanish classrooms.

Student Teaching-English as a Second Language (4-8) Fall, Spring Students work four to eight weeks with qualified cooperating teachers in English Language Learner classrooms.
376 Student Teaching-Reading (4-8) ..... Fall, Spring
Students work four to eight weeks with qualified cooperating teachers in reading classrooms.
377 Student Teaching-Elementary Instructional Strategist (4-8) Fall, Spring Students work four to eight weeks with qualified cooperating teachers in an elementary (grades K-6) special education/instructional strategist setting.
378
Student Teaching-Secondary Instructional Strategist (4-8) ..... Fall, Spring Students work four to eight weeks with qualified cooperating teachers in a secondary (grades 5-12) special education/instructional strategist setting.
379 Student Teaching-Multiple Endorsements (4-16) Fall, Spring Students work four to sixteen weeks with qualified teachers in more than one endorsement area.
381 Interim Seminar-Student Teaching (1) Fall, Spring Education 381 is part of the professional semester of student teaching. It debriefs students on the first ses- sion of the student teaching experience and prepares them for session II. Emphasis is on developing a co- herent biblical philosophy of education, developing appropriate motivation techniques, developing effective classroom management, and understanding legal and ethical issues applicable to the teaching profession.391- Individual Studies (1-3)
\(\qquad\) Fall, Spring, Summer393 See "Individual Studies" section of "Academic Offerings."

\section*{Graduate Courses}

The following 500-level courses are graduate education courses, closed to undergraduate students unless they have completed all degree requirements except student teaching.
501 Current Issues in Education (3) Summer
Critically examines the philosophical and historical background and context of contemporary educational practice. The focus is on the key issues currently affecting the areas of teaching, curriculum, learning, and the school as an institution. Emphasis falls on relating philosophical and historical contexts to daily classroom practice. The course is not designed for philosophers or historians, but for school teachers and advanced education students.
502 Advanced Educational Psychology (3) SummerPresents a biblical model of the student, develops a theory of learning based on this model, and extrapolatesthese into instructional practices for the classroom. Contemporary models of humankind and their theo-ries of learning are examined and evaluated against a biblical framework.
503 Research Methods in Education (3) ..... SummerThis course provides graduate students with a conceptual introduction to the philosophical foundations,essential principles, and appropriate methods of educational research so they are equipped to analyze andinterpret existing research and critique contemporary methods, techniques and trends in education. Thecourse will provide an overview of quantitative, qualitative, and mixed research designs and include a briefintroduction to statistical analysis.

\section*{521 Structuring School Curriculum (3) Summer}

Examines and develops curricular structure for the school. State or provincial standards are examined. A school-wide course of study with a scope and sequence is developed, based on a biblical orientation and creational structure. The structure of each sphere of reality and its relationship to other spheres are examined.

522 Constructing Thematic Units (3) Summer Odd Examines and develops curriculum materials as they are used within a particular classroom or grade level. Textbooks, software, and other curricular materials are evaluated against Christian pedagogical criteria. Integrated units of study are written for use in the students' classrooms.

531 Implementing Instructional Strategies (3) Summer Introduces instructional strategies that acknowledge both the biblical nature of the student and the structure of knowledge within each sphere of study. The work of the Dordt College Center for Educational Services is shared, examined, and practiced as it relates to instructional strategies in the classroom. The guiding-unfolding-enabling model serves as a framework in the development of distinctively Christian pedagogy.

532 Inclusion of Students with Special Needs (3) \(\qquad\) Summer, Occasional Designed to increase the abilities of regular classroom teachers to identify and meet the instructional and social behavioral needs of all students, including those who have mild disabilities or who may be identified as talented and gifted. Students become familiar with classroom-based procedures for identifying which students have difficulties in class, what those difficulties are, and why the difficulties persist. This course helps students discover strategies that allow all students to succeed in the general class. This course assumes that students have taken an overview of exceptionalities course previously.

Enhancing Learning with Technology (3). Summer Learning technologies can open intellectual doors, empower learners, enliven instruction and even change what and why specific content is taught. This course is designed to foster creative and divergent thinking regarding the application and integration of technology to the processes of teaching and learning. The intent is to "distinguish sharply, think critically, and judge wisely" how technology is changing the teaching/learning environment. Hands-on technology training will provide a basis upon which participants will reconstruct curriculum and instructional techniques to support the learning needs of their students.

Practicum in Curriculum and Instruction (3) \(\qquad\) Online, starts summer, ends December Deals with the practice of biblical servant leadership within professional and curriculum development in the school. Specifically, it examines how teachers may help other experienced or inexperienced teachers develop teaching skills or curriculum. It suggests ways of mentoring other teachers and helping them establish guidelines for writing and evaluating curriculum. It examines how curriculum coordinators can help teachers discover sound principles of teaching, organizing, and evaluating learning experiences. Prerequisite: Completion of (or in process of completing) the first eight courses in the program.

543 Middle School Curriculum and Instruction (3) Online, Summer Even This course is designed for in-service teachers to develop their understanding of middle school concept, especially as it pertains to curriculum development and instructional strategies and techniques. This course will emphasize the development of a distinctively Christian approach to the middle school classroom. Various perspectives, traditional and current, on teaching in the middle level grades will be critically examined. The course is intended to enable teachers to adapt teaching strategies and methodology appropriate to the
developmental needs of the middle level child. Techniques such as interdisciplinary teaming, advisor/advisee relationships, exploratory curriculum, and integrated curriculum will be examined.

\begin{abstract}
544 Literacy in K-12 Education (3)
Summer Even
Designed to explore the conditions that encourage and enhance the acquisition of literacy skills in grades K-12. Special attention will be given to current research and best practice. In addition to a common text, students will identify specific standards and select readings from a provided list of readings that best suit their particular teaching context.
\end{abstract}

545 Middle Level Child (3) Online, Summer Odd This course is designed for in-service teachers working with middle level children who desire a thorough knowledge of early adolescent development and an understanding of its implications for productive learning communities. This course addresses the unique emotional, physical, intellectual, social, and spiritual characteristics and needs of the middle level child. Emphasis is on developing a biblical view of the student, motivational techniques, classroom management, assessment and evaluation, and how each area influences teaching strategies.

Master's Thesis (3)
Fall, Spring The master's thesis is the culmination of a student's program. It includes an introduction of the issues for a particular curricular or instructional area, a thorough review of the literature, analysis and evaluation of major research findings on the topic of concern, and a discussion of the implications of the research on the student's own teaching. Prerequisites: Completion of all nine courses including 501, 502, 503, and 540.

591- Individual Studies (1-3)
Fall, Spring
593 See "Individual Studies" section of "Academic Offerings."

\section*{Engineering}

The mission of the engineering department is based on an awareness of a calling that Christian engineers have as God's covenant people to bring every area of life under the lordship of Christ. Therefore, the Dordt College Engineering Program seeks to provide serviceable insight in the field of engineering from a distinctively Christian perspective; in a manner that demonstrates the unity of creation and rejects the classic polarizations between technical and humanities, vocational and liberal arts, or natural and spiritual; while demonstrating the highest possible quality of undergraduate teaching that we understand to be, most fundamentally, the enabling for Christian discipleship. In harmony with this mission, the general program objectives are as follows:

Religious Orientation: The Dordt College Engineering program seeks to guide students as they develop a Christian worldview, so that graduates of the engineering program will recognize that they are empowered by the spirit of Christ in order to responsibly serve the Creator, fellow humans, and the entire creation through their calling as an engineer.
Creational Structure: The engineering program will seek to provide a cohesive curriculum of diverse courses, so that graduates are prepared for life-long learning in any area of the natural sciences, social sciences, and humanities. The program will also provide students with the passion and competencies necessary for successful service as engineers in either graduate school or industry.

Creational Development: The program and curriculum will highlight the various aspects of human responsibility and involvement in the process of dynamically unfolding the creation. Graduates from the Dordt College Engineering program will reflect a desire to responsibly unfold the potential of creation through science and technology in stewardly ways. Graduates will be able to articulate the historical and philosophical roots and problems associated with Western science and technology, and demonstrate the ability to critically assess how the spirits of the age impact technological direction.
Contemporary Response: The engineering program will enable students to convert their insights and competencies into committed action in service to God and their neighbor. A student of the Dordt Engineering program will acquire the tenacity and perseverance necessary for engineering service. A Dordt engineering graduate will be able to articulate a vision for a community of Kingdom-committed citizens who become a light in the world by developing normative technological models and living normative lives. Graduates will recognize the need for bringing the Gospel of redemptive healing to technology and seek to develop technology in ways that reflect a love that desires the well-being (social, economic, ecological, etc.) of all of God's creatures.

The following specific curricular outcomes serve to facilitate the achievement of the general objectives described above.
1. Educational Breadth and Worldview Development: Students will receive a broad based education that educates the whole person for life-long learning and service and enables the engineering student to develop his or her Christian worldview.
2. Obedience and Responsibility: Students will be able to articulate a vision for the communal task of building models of normative technology with respect to fiduciary, ethical, juridic, economic, social, lingual, aesthetic, cultural, and analytical aspects of the creation.
3. Teamwork: Students will develop an ability to engage in the communal task of engineering by participating in group design projects and other engineering related activities that require professional interaction beyond the classroom.
4. Problem Solving and Critical Thinking: Students will develop the capacity for critical thinking and demonstrate an ability to identify, formulate and solve problems.
5. Communication: Students will be able to effectively express ideas and information through public speaking, writing, and graphical forms of communication.
6. Societal and Historical Context: Students will have an understanding of contemporary issues within the broader context of historical, cultural, and societal development; a knowledge that will help students to know their place and task in the dynamic unfolding of creation in time, what has been called the cultural mandate.
7. Engineering Design: Students will develop the ability to holistically design systems, components, or processes, giving consideration to the fiduciary, ethical, juridic, economic, social, lingual, aesthetic, formative, and analytical norms for design.
8. Engineering, Math, and Science Fundamentals: Students will demonstrate an ability to apply foundational knowledge in mathematics, science, and engineering, and gain an appreciation for the numerical and spatial aspects of the creation.
9. Engineering Skills and Tools: Students will have the ability to use the techniques, skills, and modern engineering tools (e.g. computational tools) necessary for professional engineering practice.
10. Experimental Design and Analysis: Students will have the ability to design and conduct experiments as well as to analyze and interpret data.

Every student in the engineering major will be assigned an engineering faculty member as his or her academic advisor.

The engineering major is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. To earn an ABET accredited Bachelor of Science in Engineering degree, students must successfully complete the major requirements outlined below.

\section*{Engineering Major- Foundation: (common to all emphases) Chemistry 103; Mathematics 112, 113, 201, 204; Physics 201, 202; Engineering 103, 104, 202, 220, 299, 310, 379, 380, 390.}

Students must select one of the following emphases:
Biomedical: Foundation; Engineering 204, 210, 212, 302, 362; three engineering electives; Biology 201, 202; two biology electives.

Civil and Environmental: Foundation; Engineering 210, 212, 300, 302, 317, 318, 319, 351, 352; Chemistry 104; one math-science elective; one engineering elective.

Computer: \(\quad\) Foundation; Engineering 204, 304, 322, 323, 362, 363; Computer Science 110, 112, 202; Computer Science 311 or 305; Mathematics 212; two engineering electives.

Electrical: \(\quad\) Foundation; Physics 203; Engineering 204, 304, 322, 323, 360, 362, 363; Computer Science 110; two math-science electives; one engineering elective.

Mechanical: Foundation; Engineering 210, 212, 300, 302, 303, 315, 317, 350, 362; two math-science electives; one engineering elective.

The engineering department provides suggestions and guides for selecting required electives. Students should consult their advisor for elective recommendations. Math-science elective courses can be selected from any of the following disciplines: Agriculture, Astronomy, Biology, Biotechnology, Chemistry, Computer Science, Earth Science, Environmental Studies, Mathematics or Physics. Math-science courses required in the emphasis cannot also be used as elective options.

\section*{Engineering Science Major-}

The engineering science major shares the same mission as the engineering major but puts greater emphasis on basic science and allows more flexibility in course selection. The Engineering Science major has not been examined nor accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. To earn a Bachelor of Arts degree in Engineering Science, students must successfully complete the major requirements outlined below.

Engineering Science Major Foundation: (common to all emphases) Chemistry 103; Mathematics 112, 113, 201, 204; Physics 201, 202; Engineering 103, 104, 202, 390.

Students must select one of the following emphases:
General: Foundation; 20 credits of natural science related courses not included in the foundation requirements; 18 additional credits of engineering course electives not included in the foundation requirements.
Agriculture: Foundation; 20 credits of agriculture related courses; 18 additional credits of engineering course electives not included in the foundation requirements.
Architecture: Foundation; Engineering 210, 212, 299, 302, 310, 317; Engineering 303 or 350; one course from Engineering 318, 319, 351, 352; Environmental Studies 151; Art 201, 202, 240; three courses from Art 207, 208, 209, 210.
Biology: Foundation; 20 credits of biology related courses; 18 additional credits of engineering course electives not included in the foundation requirements.
Business: Foundation; 20 credits of business administration or economics related courses; \(18 \mathrm{ad}-\) ditional credits of engineering course electives not included in the foundation requirements.
Chemistry: Foundation; 20 credits of chemistry related courses not included in the foundation requirements; 18 additional credits of engineering course electives not included in the foundation requirements.
Computer: Foundation; 20 credits of computer science related courses; 18 additional credits of engineering course electives not included in the foundation requirements.
Physics: Foundation; 20 credits of physics related courses not included in the foundation requirements; 18 additional credits of engineering course electives not included in the foundation requirements.

To ensure a coherent course sequence, students must have all the courses in their proposed program of study approved by the engineering department before declaring an Engineering Science major.

103 Introduction to Engineering (3) .......................................................................................................Fall
An engineering foundations course that provides students with an introduction to a Christian perspective on technology and engineering. The course will provide an introduction to engineering communication, engineering mathematics, engineering design, and engineering economics. Students will learn to communicate graphically using a 3-D solid modeling computer application. Principles of graphical communication, such as orthographic projection and auxiliary views, isometric and oblique pictorials, sections, dimensioning, and tolerances are covered. The course includes group design projects. The course meets for two lectures and one design studio. [Cross-listed: CORE 226]

104 Introduction to Engineering Design (3) Spring
An introduction to engineering analysis, design, and problem solving. The course will explore engineering mechanics, electric circuit analysis, energy systems, and thermo-fluid analysis. The course includes discussions of responsible and holistic design, as well as topics relating to teamwork, engineering communication, and project planning. This course culminates in an open-ended team design exercise. The course meets for
two lectures and one design studio. Prerequisite: Engineering 103 or by permission of instructor. [Crosslisted: CORE 226]

202 Elements of Materials Science (4)
Spring
Studies the relationship between structure and properties of various materials including metals, ceramics, polymers, and semiconductors. Students will learn how atomic and molecular arrangements, as well as manufacturing processes, influence the mechanical, electrical, and thermal properties of a material. Introductory topics in metallurgy in this course include the examination of effects of processing (heat treatment and manufacturing) and service environment on microstructure and properties. Laboratory explorations in materials engineering introduce concepts in experimental design and data analysis. Prerequisites: Chemistry 103; Physics 201.

204 Introduction to Microprocessors and Digital Circuits (4) Spring
Digital circuits are covered, from simple logic gates through elementary microprocessor architecture. The course begins with elementary logic for binary systems, Boolean algebra, binary integer number formats and arithmetic and combinational design. Intermediate topics include synchronous state machine design and register level concepts. The course concludes with topics in microprocessor architecture that include elementary assembly language and interfacing. Laboratory provides hands-on experience in logic design and microprocessor interfacing, and includes two formal design projects. This course serves both computer science and engineering students. Prerequisite: Physics 116 or 202 or Engineering 103.

210 Statics and Dynamics (4) Fall A mechanics course that examines the effects of forces and moments applied to rigid and deformable bodies in equilibrium. Students will analyze concentrated and distributed force systems applied to static particles, rigid bodies, trusses, frames, and machines. The course also studies the kinematics and kinetic analysis of particle systems and rigid bodies. Prerequisite: Physics 201.

212 Mechanics of Materials (4) ...........................................................................................................Spring
A solid mechanics course that examines the stresses, strains, and deformations that develop when various loads (tension, compression, torsion, bending, or any combination of these loads) are applied to deformable bodies. Elements of structural design are introduced using safety factors and failure criteria for ductile materials. The mechanics lab provides hands-on experience applying and using strain gages and investigating beam loading. The mechanics design laboratory provides an introduction to experimental methods in structural analysis and an introduction to finite-element analysis (FEA) software. Prerequisite: Engineering 210.

\section*{220 Linear Circuits and Electronics (4)}

Fall
Assumes a prerequisite knowledge of DC electrical circuits including the definitions of electrical quantities, circuit elements (sources, resistors, capacitors, inductors), understanding of Kirchhoff's laws and basic concepts in AC circuits such as frequency and phase. Topics in this course include general linear circuit analysis including Norton's and Thevenin's theorems, superposition, nodal and loop analysis, natural and forced responses in RLC circuits, and sinusoidal steady state analysis. The course also gives introductions to operational amplifier circuits, single stage BJT transistor circuits and steady-state balanced 3-phase power calculations. The lab includes a formal design project. Prerequisite: Engineering 104 or Physics 116 or 202; Corequisite: Mathematics 204. [Cross-listed: Physics 206]

Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
299 Thermodynamics (3)...................................................................................................................Spring

An introduction to thermodynamic principles including work, heat, properties of pure substances, the first and second laws, entropy, and thermodynamic relations. Prerequisites: Physics 202; Mathematics 113.

300 Thermal-Environmental Systems (3) .................................................................................................Fall
Applied engineering thermodynamics: a study of cycles and efficiencies, mixtures and solutions, chemical reactions, combustion thermodynamics, availability analysis, and thermal-fluid systems analysis. A lab-studio component will provide opportunity to complete projects and experimentation relating to combustion, emissions measurement, efficiency assessment and indoor/outdoor air quality evaluation. Prerequisite: Engineering 299.

302 Fluid Mechanics and Hydraulics (4) Fall
A comprehensive, introductory course in fluid mechanics covering hydrostatics; control volume approach to the continuity, momentum, and energy equations; dimensional analysis, similitude, and modeling; introductory boundary layer theory; fluid drag and lift; flow through conduits, pumps and compressors; hydraulics and open channel flow. All students participate in team design projects involving design of water supply or sewage removal piping systems. The fluid systems and hydraulics laboratory will emphasize experimental design, technical communication skills, and report writing. Prerequisites: Physics 202; Mathematics 204.

303 Heat Transfer (4) Spring Even Studies of the three modes of heat transfer-conduction, convection, and radiation-with application to heat exchangers. Computer methods are used extensively for heat transfer design and analysis. A formal heat exchanger design project is included in this course. The thermo-systems and heat transfer laboratory will emphasize experimental design, technical communication skills, and report writing. Prerequisite: Engineering 302 .

304 Embedded Microcontroller Systems (4)
Spring
A course on the design of microcontroller-based systems and the associated software and hardware. Software issues such as modular design, interrupt-driven I/O, and design for reliability are covered. Hardware issues such as serial and parallel interfacing, bus structures, grounding and shielding, and D/A and \(A / D\) conversions are also studied. Lab exercises provide design experience using a particular microcontroller or a soft-processor foundation in an FPGA. Prerequisites: Engineering 204, 220; Computer Science 110 or 111; or by permission of instructor.

310 History of Science and Technology (3) Spring
Enables the student to examine from a Reformed-Biblical perspective the narrative of scientific unfolding and technological development as two human activities that are manifest in all cultures. Emphasis is on the major paradigms and events that have shaped the development of science and technology in the West and most recently in North America. The course focuses on the historical activity of engineers and artisans, while investigating the interrelationship between scientific thought and technological development. Events and ideas such as the philosophical origins of Western science, the Copernican revolution, Enlightenment rationalism, the industrial revolutions, 20th century positivism, the Einsteinian revolution, and the modern systemization ethic are discussed. Prerequisites: CORE 140, 145, 200. [Cross-listed: CORE 312]

315 Machine Kinematics and Design (4) Fall Odd This senior-level design course focuses on the analysis and design of mechanisms and machine elements. In the first half of the course, students will analyze the motion of various mechanisms, such as slider cranks, gear trains and cams. The second half of the course explores failure criteria for static and dynamic loading
of machine elements. The design and integration of elements such as shafts, bearings, gears, springs, fasteners, clutches, and brakes will be addressed. Open-ended mechanical design projects will be the focus of the design studio component. Familiarity with computer software capable of solving iterative design problems is required. Prerequisites: Engineering 210, 212.

\section*{317 Structural Analysis (3)}

A study of the analysis and design of beams, trusses, and framed structures. Students will consider loads, shear, moment, and deflected shape diagrams. Deformation calculations, approximate methods, flexibility methods, moment distribution, and stiffness methods for analysis of continuous beams and frames will be considered. Influence lines for determinate and indeterminate beams will be introduced. Prerequisite: Engineering 212.

A study of the engineering principles relating to soil properties and foundation design. The material properties of soil including structure, index properties, permeability, compressibility, and consolidation will be explored. Methods of soil testing, identification, and remediation will be covered. Principles of settlement and stresses in soils will be considered. Slope stability, retaining walls, and bearing capacity of shallow foundations will be introduced. The soils lab will provide hands-on opportunities to determine water content, perform sieve analyses, and test liquid, plastic, and shrinkage limits. Soil classification, compaction, compression, and consolidation testing will be explored. Prerequisites: Engineering 202, 212. [Cross-listed: Construction Management 318]

319 Environmental Engineering (3)
Spring Even
An introduction to water supply and wastewater treatment, solid waste management, hazardous waste disposal, pollution control equipment, and other topics relating to the engineer's role for ensuring clean air and providing clean water to communities. Methods and equipment for monitoring and testing air and water quality will be examined. Prerequisites: Chemistry 103; Mathematics 204.

322 Electronics I (4)
Fall Even
A study of the flow of electricity in, and application of semiconductor devices. Topics include operational amplifiers and frequency response, diode circuits, bipolar junction and field effect transistors, current sources, biasing, current mirrors, small signal analysis, single and multi-stage amplifiers, and feedback. The laboratory includes a number of short design problems. Prerequisite: Engineering 220.

A continuation of Engineering 322. Topics include differential and multistage amplifiers, frequency response, feedback and stability, output stages and power amplifiers. The laboratory includes electronic system design projects. Prerequisite: Engineering 322.

326 Electromagnetic Theory (4)................................................................................................. Spring Odd Review of vector calculus; divergence, curl, Gauss' and Stoke's theorems; electro- and magneto-statics; polarization, boundary conditions, Laplace and Poisson equations, magnetic vector potential, energy, Maxwell's equations for time varying fields, wave propagation, Poynting's theorem. Prerequisites: Physics 203; Mathematics 201, 204. [Cross-listed: Physics 326]

341- Special Topics in Engineering (3) Occasional
348 Elective courses designed to treat particular topics in more detail than would be done in any of the above courses. Topics will depend on the mutual interest of students and staff.

350 Sustainable Energy Systems Design (3)................................................................................. Spring Odd
A senior-level design course that focuses on designing for energy systems for conservation, sustainability, and efficiency. The course focuses on solar and renewable energy technologies for meeting residential, commercial, and industrial energy needs. An emphasis is placed on understanding energy utilization in buildings and the design of heating, ventilating, and air-conditioning systems. Topics of psychrometrics and indoor air quality will be addressed. Methods of auditing building energy loads and design principles of energy conservation are addressed. A variety of computer tools will be used extensively for system analysis. The laboratory and design studio component will involve community service projects and design projects relating to energy utilization and conservation. Prerequisites: Engineering 300, 302.

351 Reinforced Concrete Design (3)
Spring Even
Analysis and design of reinforced concrete beams, columns, one-way slabs, and frames. The design of members for axial load, flexure, shear, deflections, bond, and anchorage will be considered. Design will be based primarily on ACI strength design methods. Prerequisite: Engineering 317.

352 Structural Steel Design (3)
Spring Odd
Design and behavior of steel members and structures. The design of steel beams, columns, tension members, frames, trusses, and simple connections will be considered. Design will be based primarily on AISC specifications and manuals related to the load and resistance factor design method. Allowable stress design will be introduced. Prerequisite: Engineering 317.

357 Bioengineering (3)
Occasional
A study of the fundamental mass and energy transfer, sensory signals, and structural properties related to human physiology. Mathematical models for biological processes will be developed and applied to the design of health monitors, medical sensors, and prosthetic devices. The course will cover a broad range of biomechanical, bioelectrical, and biochemical topics as they relate to biomedical engineering applications. Prerequisites: Engineering 212, 220, 302.

360 Introduction to Power System Analysis (4)
Fall Odd
An introduction to the design, planning, and operation of electric power utilities. Includes principles of economic dispatch and politics that impact design and operating strategies. Topics include power transmission lines, transformers, generators, system modeling, load flow analysis, faults, and system stability. Prerequisites: Engineering 220; Mathematics 201.

362 Dynamic Systems and Process Control (4) Fall
A study of the dynamics and automatic control of systems. Topics include dynamic system modeling, feedback, steady-state operation, transient response, root loci, state-space representation, frequency response, stability criteria and compensation. A variety of system types are modeled and analyzed, including mechanical, electrical, hydraulic, pneumatic, thermal, and chemical systems. Structured modeling approaches using Laplace transform methods and state equations are explored. Design studio sessions provide an introduction to instrumentation and provide hands-on opportunities to apply controls theory. Prerequisites: Engineering 220; Mathematics 204; Physics 202.

363 Introduction to Communication Systems (4)
Spring Even
A study of analog and digital communication systems performance and theory with applications in radio, satellite, telephone, computer networking, and radar systems. Topics include linear modulation (AM, SSB, etc.), exponential modulation (FM and PM), sampling theory, the discrete-time and discrete-frequency domains, and basic digital modulation methods such as m-ary PSK, DPSK, OFDM, etc. The topic of noise
is considered at the most elementary level sufficient to distinguish the performance of various modulation methods in the presence of noise. Prerequisite: Engineering 220.

\begin{abstract}
371- Engineering Internship (3-9)
Fall, Spring, Summer
373 An offcampus experience that is intended to provide the engineering major with the opportunity to apply knowledge, principles, and skills gained in the classroom in an engineering workplace environment. Written and oral summary reports by participants bring reflection on the technical experience into subsequent classes. Pass/fail. Prerequisite: completion of six engineering courses or junior standing in the engineering program.
\end{abstract}

\begin{abstract}
379 Senior Design I (1) Fall
The first of two project courses providing students with the opportunity to use, in an integrated manner, the knowledge and skills that have been acquired to this point in their education. This laboratory course is devoted entirely to the research, planning, analysis, and report writing required in the first phase of the senior design project. Students work in teams of two or three on a project of their mutual interest. Prerequisites: Engineering 302 or 304 ; senior standing.
\end{abstract}

380 Senior Design II (4) ................................................................................................................................... Spring The second course devoted to senior design project activities. In-class topics will include general topics relating to engineering design such as engineering economics, technical writing, design aesthetics, project planning, engineering statistics, technical literature research, safety, and ergonomics. The lab portion of the course requires students to complete the design, experimentation, analysis, and communication components of their project. Work on the project, while culminating in this course, starts in Engineering 379 the previous semester. Teams confer weekly with members of the engineering department staff. Prerequisite: Engineering 379.

390 Technology and Society (3).............................................................................................................Spring
An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course students examine a Christian philosophy of technology and application is made to such problems as the role of the computer, technocracy, appropriate technology, and the historical twocultures dualism. During its second half, the course focuses on the question of engineering ethics, with particular emphasis on such questions as safety and risk, professional responsibility and authority, whistle blowing, normative socio-economic structures, and morality in career choice. This course requires the student to write and orally present a significant research paper and to work in a small group on the design of one aspect of a technological business enterprise. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Computer Science 390, CORE 267]

393 See "Individual Studies" section of "Academic Offerings."

\section*{Engineering Technology}

The Engineering Technology major is a cooperative arrangement with Northwest Iowa Community College (NCC). Students who have completed programs at NCC leading to an Associate of Applied Science degree in Computerized Manufacturing Technology, Electrical Technology, Industrial Instrumentation and Control, or the former NCC program in Manufacturing Engineering Technology, may enroll in the Engineering Technology program at Dordt College to obtain a Bachelor of Arts degree in Engineering Technology. (The Engineering Technology major has not been examined nor accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.)

\begin{abstract}
General Major- Foundation (common to all emphases): The Dordt College core program requirements; Mathematics 111 or 112; Engineering 103, 104, 310; Engineering Technology 279, 280.
\end{abstract}

Students must select one of the following emphases:
Computerized Manufacturing: Foundation; Physics 115 or Chemistry 101; Physics 116 or Environmental Studies 151; Engineering 204; Computer Science 131, 145.

Electrical Technology: Foundation; Chemistry 101; Environmental Studies 151; Engineering 202; Computer Science 111.

Industrial Instrumentation and Control: Foundation; Physics 115 or Chemistry 101; Physics 116 or Environmental Studies 151; two technical electives chosen with the approval of an engineering advisor.

Manufacturing Engineering: Foundation; Chemistry 101; Environmental Studies 151; Engineering 202, 204; Computer Science 111.

Engineering Technology Internship (3) \(\qquad\) Fall, Spring, Summer An off-campus experience that is intended to provide the engineering technology major with the opportunity to apply knowledge, principles, and skills gained in the classroom in an engineering technology workplace environment. Written and oral summary reports by participants bring reflection on the technical experience into subsequent classes. Graded on a pass/fail basis. Prerequisite: completion of Engineering 103 and an Associate of Applied Science degree.

Senior Design I (1)
The first of two project courses providing students with the opportunity to use, in an integrated manner, the knowledge and skills that have been acquired to this point in their education. This laboratory course is devoted entirely to the research, planning, analysis, and report writing required in the first phase of the senior design project. Students work in teams of two or three on a project of their mutual interest. Prerequisites: completion of Engineering 103 and an Associate of Applied Science degree. (Engineering Technology 279 and Engineering 379 meet together.)

Senior Design II (4)
Spring
The second course devoted to senior design project activities. In-class topics will include general topics relating to engineering design such as engineering economics, technical writing, design aesthetics, project planning, engineering statistics, technical literature research, safety, ergonomics, and practical finite element analysis. The lab portion of the course requires students to complete the design, experimentation, analysis, and communication components of their project. Work on the project, while culminating in this course, starts in Engineering Technology 279 the previous semester. Teams confer weekly with members of the engineering department staff. Prerequisite: Engineering Technology 279. (Engineering Technology 280 and Engineering 380 meet together.)

\section*{English}

General Major- \(\quad\) Foundation (common to both emphases): English 201, 202, 210, 314, 316.
Students must select one of the following emphases:
Literature Emphasis: Foundation; seven additional courses from COURSES FOR MAJORS or six additional courses from COURSES FOR MAJORS and Theatre Arts 365 or 366.

\begin{abstract}
Writing Emphasis: Foundation; two additional courses from COURSES FOR MAJORS; English 335 or 336; Communication 241, 242 or two additional courses from COURSES FOR MAJORS; four courses from English 301, 302, 303, 304, 305, 307, 393, Theatre Arts 380.
These courses are strongly recommended: for all majors-English 312 and Foreign Language study at or above 201 (whether or not the cross-cultural requirement is met in this way); for students considering graduate studies-English 333.
\end{abstract}

\section*{General Minors-}

English: \(\quad\) English 210; one course from English 220, 301, 302, 303, 304, 305, 306, 307; four additional courses from COURSES FOR MAJORS.

Writing: \(\quad\) Six courses from English 220, 301, 302, 303, 304, 305, 306, 307, 336, Communication 241, 242.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 108-130.

\section*{100 Basic Writing for College Students (4) Fall}

An intensive introduction to and review of the skills college-level writing requires, focusing on the larger issues of presenting, developing, and supporting ideas, on issues of correctness at the sentence level (grammar, usage, punctuation, and mechanics), on developing the element of voice, as well as on learning various essay styles for effective academic writing. Intended for students with special needs in written composition (i.e., for those with an ACT score below 18 on the English component of the test). Completing this course, with a grade of C or better, meets the core writing requirement.

220 Intermediate College Composition (3) Fall
This is an intermediate-level, writing-intensive course, designed to meet the core writing-intensive requirement for students who do not need Core 120. It serves students who want a medium-level writing course; students who plan to continue their education in graduate/law/medical school, etc.; students who want to improve their writing and analytical skills; and any capable freshmen as well as sophomores, juniors, and seniors who need a writing or writing-intensive course. With an emphasis on analysis, argumentation, and research, this course guides students in reading and writing critically/rhetorically, structuring and developing different kinds of rhetorical essays, finding the best secondary sources, working research into their argu-
ments, developing a lively style, and editing their writing. Students registering for this course should have taken, or be exempt from, Core 120.

\section*{COURSES FOR MAJORS}

201 American Literature (3) Fall Odd Selected prose and poetry of the Puritans and Neo-Classicals, and an extensive study of the American Romantics: Poe, Hawthorne, Emerson, Thoreau, and Whitman. English 210 recommended.

202 American Literature (3) Spring Even Surveys American writers from 1860 to the present. It aims to show the rise of realism and naturalism, the effect of world view on literature, and the way in which writers responded to historical movements or crises. Students will be expected to respond to the literature from their own Christian point of view. English 210 recommended.

203 Ethnic American Literature (3) Fall Odd
We will read, discuss, and write about literature from four different ethnic American groups: African-Americans, Native Americans, Asian-Americans, and Mexican-Americans. Major writers from the four different groups will be read, including Douglass, Ellison, Wright, Walker, Erdrich, Silko, Momaday, Cisneros, Gilb, Chavez, Yamamoto, Tan, Mura. Recommended for freshmen.

205 Canadian Literature (3) \(\qquad\) .Occasional
This course introduces students to modern and contemporary Canadian literature, that is, literature since 1945. Besides exploring poems, short stories, and novels by Canadians such as Margaret Atwood, Alice Munro, Robertson Davies, Hugh Cook, and Margaret Avison, students will have an opportunity to sample films and essays by and about Canadians. The course seeks to immerse students in the range of Canadian literary concerns for form, theme, and culture.

A survey of earlier world literature from the Classical Age through the Renaissance. Classical works include an epic of Homer; tragedies of Aeschylus, Sophocles, Euripides; and selections from Ovid or Virgil. Medieval works include romances of Marie de France and the Gawain poet, the epic Song of Roland, selections from Boccaccio or Chaucer, and Dante's Inferno. Renaissance works include Petrarch's sonnets; selections from Erasmus, Machiavelli, Rabelais, Montaigne; tragedy of Marlowe/Shakespeare; and Cervantes' Don Quixote. Students trace the evolving hero/literary form as a reflection/catalyst of worldview. [Cross-listed: Foreign Languages 207]

208 World Literature II (3) Spring Even A survey of world literature from the Enlightenment through the 20th century. Enlightenment works include Molière's Tartuffe, Voltaire's Candide, and selections from Lessing, Descartes, and Rousseau. Romanticism works include Goethe's Sorrows of Young Werther and selections from Wordsworth, Coleridge, and Hugo. Realism works include Flaubert's Madame Bovary, Chekhov's Lady with the Dog, Tolstoy's Death of Ivan Ilyich, and selections from Baudelaire, Darwin, and Dostoevsky. 20th Century works include Mann's Death in Venice, Brecht's Good Woman of Setzuan, Minco's Bitter Herbs, Achebe's Things Fall Apart, and selections from Couperus, Rilke, Lorca, Joyce, Mulisch, Keneally, and Nolan. [Cross-listed: Foreign Languages 208]

Introduction to Literary Studies (3). Spring Provides students with a foundation of knowledge and skills for work in the major. It does so by introducing
them to the subject matter, critical schools and methods, research strategies, forms of responsive and critical writing, and major contested issues of the discipline.

221 The Short Story (3)
Spring Odd Introduces students to the contemporary short story. In addition to reading broadly in the genre through anthologies, students will study specific contemporary writers such as Alice Munro, Raymond Carver, Jane Smiley, Larry Woiwode, Carol Bly, or John Gardner via collections of their work. Tests and short papers will be required.

222 Themes in Literature (3)
Fall Even
The aim of this course is to see how various writers of different cultures and eras express themselves on selected universal themes such as love, justice, evil, humans and technology, and the search for religious certainty.

225 Film and Literature (3)
Spring Even Introduces students to film art and film criticism, compares and contrasts films to novels and stories, and examines world views of the various artists. The course will examine how filmmakers and writers use film language or print to imply or express their views. It will also examine the degree to which filmmakers merely reproduce the themes of a book or make their own statements, even undercutting the source.

241 Introduction to Journalism (3) Fall
An introduction to reporting and writing news for the print and broadcast media. The course includes practice in writing several types of news stories, an overview of the historical, cultural foundations of journalism, and a critical examination of the theoretical foundations of journalism. [Cross-listed: Communication 241]

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
301 Advanced Expository Writing I (3) ....................................................................................................Fall
Designed to introduce students to types of non-fiction writing frequently sought by magazines and journals. Major assignments include the interview, the narrative essay, and the review. Especially featured is the personal narrative. In addition to writing, students will read and react to various types of non-fiction writ-ing-both essays and longer works. Significant class time is spent in workshop format, students reading and discussing their own work. Satisfies core writing-intensive requirement. [Cross-listed: Communication 301]

302 Advanced Expository Writing II (3). Spring The primary goal of this course is to help students write with clarity, grace and power. To achieve this goal, they will write expository essays, hone research skills, work style exercises, and critique one another's papers. Note: Advanced Expository Writing I emphasizes narrative prose, while Advanced Expository Writing II emphasizes argumentative and explanatory prose. Satisfies core writing-intensive requirement. [Cross-listed: Communication 302]

303 Reading and Writing of Poetry (3). Spring Odd
Students read and write various poems with fixed forms and in free verse. We will explore how other poets get started and where they get their ideas for poems. We will spend much time in class discussing each other's poems, and each student will have at least three personal conferences with the instructor. By the end of the semester, each student will have a portfolio of at least a dozen poems.

304 Fiction Writing (3)
Spring Even
Introduces students to the task of writing fiction. In addition to significant reading in the genre, the course will require several exercises in various aspects of the craft, as well as the completion of one original short story. Time will be spent in workshop format and discussing technique, as well as the ways in which one's faith affects the work of writing fiction.

Business and Technical Writing (3)
Spring
Students will study the process, application, and characteristics of business and technical writing, and the way in which writing style, strategies, content, and clarity will relate practically to one's profession. The course will concentrate on developing competence in a variety of writing tasks commonly performed in business, law, industry, social work, engineering, agriculture, and medicine. Satisfies core writing-intensive requirement.

Writing Workshop for Teachers (3). Fall
Designed to help pre-service teachers from across the disciplines to improve their writing and understanding of writing. Using an inquiry based approach, students will seek to answer questions like, Why do teachers write? What is successful writing? How do we improve our writing? Through reading and writing assignments, students will practice a variety of writing tasks. Satisfies core writing-intensive requirement.

Screenwriting (3) Spring Odd
Students will gain insight into the process and the techniques involved in scriptwriting by studying film scripts and creating their own. Students will receive hands-on instruction in concept development, character development, plot structures, dialogue, and visualization.

Shakespeare and Elizabethan Drama (3)
Fall Odd
Primary emphasis on a study of Shakespeare's plays: comedies, histories, and tragedies. Some attention to Shakespeare's sonnets, to other Elizabethan playwrights, and to background. One paper. English 210 recommended.

Earlier British Literature (3)
.Fall Even
A survey of earlier British literature from the beginnings through the 17th century, including Beowulf, Chaucer, Sidney, Spenser, Shakespeare (his poems), Donne, Herbert, Jonson, and Bunyan. Special attention will be paid to the Scriptural tradition that this literature evokes. Throughout, the course focuses on how the literature of these eras addresses fundamental questions about human nature. English 210 recommended.

316 Later British Literature (3)
Spring Odd
A survey of later British literature from the beginning of the 18th century through the 20th century. The course will trace and critique the subsequent developments of Neo-classicism, Romanticism, and the Victorian age in the poetry, essays, and fiction of such writers as Pope, Goldsmith, Gray, Blake, Wordsworth, Coleridge, Keats, the Shelleys, Tennyson, the Brownings, Austen, Dickens, the Brontes, and Hopkins. English 210 recommended.

318 Modern British Literature (3). .Occasional
A study of the different ideas and techniques characteristic of 20th century British writers such as Hardy, Conrad, Housman, the War poets, Yeats, Forster, Joyce, Lawrence, Woolf, Mansfield, Waugh, Spender, Orwell, Auden, Thomas, and Lessing. English 210 recommended.
321 The American Novel (3) OccasionalA study of the American novel beginning with Charles Brockden Brown and extending through the 19thand 20th centuries. Such authors as Hawthorne, Melville, Crane, Lewis, Hemingway, Faulkner, and Stein-beck will be studied. Lectures, discussions, papers are required. English 210 recommended.
(3)Spring EvenA study of the English novel, this course traces the novel's beginning with Defoe, Richardson, and Fielding,then follows the evolution of the novel through the 19th and 20th centuries with novelists such as Burney,Austen, the Brontes, Thackeray, Dickens, Trollop, Eliot, Hardy, and Conrad.. English 210 recommended.
323 Modern and Contemporary English and American Novels (3) Fall EvenThe study of selected contemporary novels, American and English. Novelists include Bellow, Malamud,Potok, Updike, Burgess, and O'Conner. English 210 recommended.
333 History and Theory of Literary Criticism (3) Spring EvenWe will analyze major works of literary criticism and theory of criticism, both classic works from Platothrough Eliot and key works drawn from the ferment of contemporary theory, with the aim of formulatingclearer Christian theories of literature. English 210 recommended.
335 History of the English Language (3). ..... Spring Odd
Surveys the Indo-European languages; the emergence, development, and flowering of the Anglo-Saxon language; the seven English dialects; the Chaucerian dialect; and the contributions of the Greek, Latin, and French language and cognate words.
336 English Grammar (3) ..... Fall
A study of grammatical choices and their rhetorical effects. We will approach English grammar not only as a technical subject but also as a craft, a field for research and scholarship, and a domain with socio-cultural, political, and ethical dimensions. Course topics will be explored through readings and discussions, practice exercises, research projects, and writing activities that require students to apply grammar knowledge in context.
341- Special Topics (3) Occasional
348 These literature courses cover a different topic each year and are designed to be a special interest coursemaximizing individual instructor strengths, interests, and competencies. Usually courses will study in-depth the works of two or three literary figures normally not covered as intensively.

\section*{English for Academic Purposes}

For information on an ESL teaching endorsement, see the "Teacher Education Program," Teaching English as a Second Language K-12, page 119.

101 Academic Interaction (3) .................................................................................................................Fall
This course develops academic speaking and listening skills, enabling students to participate to the best
of their ability in the college classroom and in independent study. Listening, note taking, discussion, and presentation skills are practiced. Vocabulary is expanded throughout the course.
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102 Academic Writing (3) Fall While engaging in a review of academic English grammar and usage, students learn to properly incorporate ideas from academic sources into their own writing. Skills such as critical reading, effective note taking, proper summarizing, paraphrasing, and citation are presented and practiced.

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\section*{Environmental Studies}

The major in environmental studies seeks to cultivate stewardship of the creation as a lifestyle and profession through an interdisciplinary program of study. This program asks (1) how does the world work, (2) what is right for us as Christians in our relationship to the rest of creation, and (3) how should we then live and work to be obedient stewards?

General Major- Foundation (common to both emphases): Environmental Studies 151, 152, 161, 303, 396; Biology 115, 122, 200; Economics 200 or 202; Mathematics 107 or 111.

Students must select one of the following emphases:
Environmental Science: Foundation; Chemistry 103, 104; Environmental Studies 251; one course from Chemistry 122, 212, 221, 312; two courses from Biology 316, Environmental Studies 270, 320; two courses from Agriculture 201, Environmental Studies 201, 202; one course from Biology 213, 302, 310; two courses from Environmental Studies 333, 334, Political Studies 333. Students must also complete one of the following: The Environmental Studies 358 and 380 sequence, a departmentally approved summer internship (Environmental Studies 393) or a departmentally approved off-campus course that complements their program.

Policy and Management: Foundation; Chemistry 101, 122; Environmental Studies 333, 334; Political Studies 245, 312, 333; Engineering 390; Political Studies 202 or 214; Political Studies 210 or 370; Agriculture 290 or Economics 321; Communication 311 or 314. Students must also complete one of the following: the Environmental Studies 358 and 380 sequence, a departmentally approved summer internship (Environmental Studies 393) or a departmentally approved off-campus course that complements their program.

Courses in the following off-campus programs may substitute for up to four of the above with approval of the chair of environmental studies. For both emphases: Latin American Studies Program, Au Sable Institute of Environmental Studies, Creation Care Studies Program, or other approved off-campus study.

\section*{General Minors-}

Environmental Science: Environmental Studies 151, 152, 161, 396; Biology 200 or Agriculture 370; Chemistry 251; one from Agriculture 201, Environmental Studies 201, 202, 303; one from Biology 316, Environmental Studies 270, 320.

Environmental Studies: Environmental Studies 151, 152, 161, 303, 396; one from Agriculture 201, Environmental Studies 201, 202; one from Biology 316, Environmental Studies 270, 320; one from Environmental Studies 333, 334, Political Studies 333.

151 Introduction to Environmental Studies (3) ......................................................................................Fall An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. [Cross-listed: CORE 211, Earth Science 151.]

152 Introduction to Environmental Studies II (4) Spring Further exploration of the foundations of contemporary environmental studies. Particular attention is given to the physical dimensions of creation care including energy sources and consumption, use of materials, and environmental pollution. The human social aspects of creation stewardship are also explored. Environmental Studies 151 is not a prerequisite. Three lectures and one laboratory period of three hours per week. [Cross-listed: CORE 222]

161 Laboratory and Field Investigations in Environmental Studies (1) .....................................................Fal
A field and laboratory exploration of fundamental issues, concepts, and techniques of contemporary environmental studies. Includes visits to sites of natural history and stewardship concern, such as water and wastewater treatment facilities and public natural areas. Also includes an introduction to important technological tools in environmental studies and analysis of physical parameters of the environment, including water, atmosphere and soil. Corequisite: Environmental Studies 151.

201 Introductory Geology and Physical Geography (4) ...........................................................................Fall A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week and one or two field trips. [Cross-listed: CORE 223, Earth Science 201, Geography 201]

202 Meteorology, Climate Change, and Aquatic Ecosystems (3) Spring Even Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular attention given to the impact of these changes on the structure and function of aquatic ecosystems. [Cross-listed: Earth Science 202, Geography 202]

251 Environmental Chemistry (4) Spring Odd
A study of the nature and transport of chemical species-both natural and human-introduced-in the natural environment (atmosphere, hydrosphere, geosphere, and biosphere). The lab will include methods of sampling and analysis of samples from natural and/or human influenced environments. Three lectures
and one three-hour lab per week. Prerequisites: Chemistry 101, 122 or Chemistry 103, 104. Prior completion of Chemistry 221 recommended but not required. [Cross-listed: Chemistry 251]

\begin{abstract}
270 Avian Biology and Conservation (3) Spring Even
The identification, natural history, ecology, and stewardship of birds. Topics include morphological and physiological ecology of birds, habitat selection, communication, migration, reproductive ecology, territoriality, taxonomy, and conservation. The connections between avian ecology and creation stewardship will be explored. Recognition of a diverse set of birds by sight and sound is an important component of the course. Two lecture/discussion sessions and one three-hour lab per week. Field work will concentrate on local birds, but at least one trip to a distant site will be included. Prerequisite: one of Agriculture 101, Biology 122, CORE 211, CORE 212. [Cross-listed: CORE 217]
\end{abstract}

281- Service-Learning (1-3)
Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
303 Geographic Information Systems (3) ........................................................................................Fall Even
An introduction to the acquisition, display, manipulation and management of geographic information. Topics include geographical data input, storage, maintenance, analysis and retrieval. Students will utilize common GIS software and associated hardware. Lectures will place an emphasis on the concepts that underlie GIS technology. Application of GIS to agriculture, business, environmental management and other disciplines will be a significant component of the course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Business Administration 303, Construction Management 207]

Wildlife Ecology and Stewardship (3).
Spring Odd
Advanced examination of animal (especially terrestrial vertebrate) populations, communities, and habitats, particularly as such analysis is applied to the manipulation and exploitation of animal populations and communities to regulate their abundance and distribution and/or to restore them. Considerable exploration and critique of the development and practice of wildlife management, particularly as it compares to biblical principles for creation stewardship. Two lecture/discussion sessions and one three-hour lab per week. Prerequisites: Agriculture 370 or Biology 200. [Cross-listed: Biology 320]

Philosophy of the Environment (3)
.Fall Even
A historical and systematic study of the structure and normed character of the various relationships between human beings and their environment. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Philosophy 333]

334 Economics of Natural Resources and the Environment (3) Fall Odd A study of economic aspects of Christian stewardship in relation to the environment and use of natural resources. Major topics include biblical norms on creation, property rights, economic justice, the economic dimensions of current environmental problems and trends in resource use, institutions and social structures that affect environmental policy, economic theories related to resource use and environmental quality, and evaluation of current and proposed policies from a Christian point of view. Prerequisite: Economics 200 or 202 or 203. [Cross-listed: Economics 334]

341- Special Topics (3)
Occasional
348 Courses on topics of special interest and importance in creation stewardship, depending on student demand and instructor availability. These courses address topics that are not treated in depth in established courses.
358 Introduction to Biological Research (1)

\(\qquad\)
 Fall, Spring This is a mini-course designed to prepare students for directed senior research. The course will introduce the idea and practice of biological research. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The class will meet weekly in seminar or tutorial format. Students will be expected to make two short presentations, finalize their proposal for Environmental Studies 380, and (if appropriate) begin the work for the directed research project. Graded on a pass/no credit basis. Prerequisites: Environmental Studies 151, 152; Biology 115, 122, 200. [Cross-listed: Biology 358]

\begin{abstract}
380 Directed Senior Research (3) \(\qquad\) Fall, Spring Focuses on identifying a stewardship problem and bringing rigorous analytical and critical thinking to bear in examining the problem, reporting on it, and making recommendations for its resolution. The research project will be chosen and conducted under the guidance of a faculty mentor and may investigate a problem from a natural science perspective in the field and/or laboratory or from a social science perspective. With approval, the research may be conducted at an offcampus location. Prerequisite: Environmental Studies 358. [Cross-listed: Biology 380]
\end{abstract}
391- Individual Studies (1-3)
.Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."
396 Seminar on Creation Stewardship (3) \(\qquad\) Spring Odd
An interdisciplinary, capstone seminar designed to explore current research, thought, and issues in environmental stewardship. The seminar will emphasize holistic thinking that seeks connections; that desires sustainable, just living; and that moves participants from understanding and commitment toward stewardly living in a place. A significant portion of the course will comprise hands-on, group analysis of a campus or community stewardship issue involving human-designed systems and leading to recommendations for stewardly design and life. Prerequisites: Environmental Studies 151; junior or senior standing.

\section*{French}

General Minor- French 201, 202, 206; one course from French 102, 341-348; French 204 or 208; three semesters of French conversation 251-258. Study-abroad courses are required.

101 Elementary French I (4) ..............................................................................................................Fall Even
An introductory study of the language and culture of French-speaking people. Emphasis is on the acquisition of oral and written language skills in a communicative context combined with the study of cultural etiquette and social customs.

102 Elementary French II (3) ......................................................................................................Spring Odd
Continuation of French 101. Prerequisite: one year of high school French or French 101.
201 Intermediate French I (3)
Fall Odd
An intermediate course that continues the study of the language in a communicative context with considerable emphasis upon precision and expansion of linguistic skills. Emphasis on the development of cultural understanding and sensitivity, with a study of the people's values and beliefs as expressed in their economic,
political, and religious systems. Comparison of this culture with our culture in the light of the cultural mandate. Prerequisite: two years of high school French or French 102.
202 Intermediate French II (3).....................................................................................................Spring Even

204 Literary and Cultural Readings (3)..........................................................................................Occasional
This course continues the development of French language skills, and an understanding and appreciation
of Francophone cultures through literary readings, with an emphasis on contemporary literature. Prerequi-
site: French 202 or its equivalent. This course will be taken in an off-campus program; please consult the
foreign language department for a list of possibilities. Pre-requisite: French 202 or its equivalent.
206 French Culture (3)
Occasional
Designed to cover many aspects of the French way of life. Listening and speaking skills will be developed through the classroom activities. Prerequisite: French 201 or its equivalent. This course will be taken in an off-campus program; consult the foreign language department for a list of possibilities.

207 World Literature I (3)................................................................................................................ Fall Odd
208 World Literature II (3) .........................................................................................................Spring Even
See English 208.
251. Conversation (1)

Fall, Spring
258 These courses are designed to give the student practice in listening and speaking. The content of the courses will be altered each year. The class will meet two times each week. Graded on a pass/no-record basis. Prerequisite: French 201.

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
341- Special Topics (3)
Occasional
348 The topics for these courses will be chosen from the areas of literature, advanced language studies, culture, or teaching methods. The offering of the courses as well as the content will reflect student interest and need. Prerequisite: department approval.

391- Individual Studies (1-3)
.Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{General Studies}

Associate of Arts Degree Options See the "Academic Program" section for the core program for all A.A. programs.

\section*{Area of Concentration (Associate of Arts in General Studies)}

Option A: Any six courses from a single department.
Option B: Any three courses from one department plus any three courses from a second depart-
ment in the same division.
Option C: Any four courses from one department plus three courses from a department in another division.
Option D: An individualized concentration of eight courses that has been designed in consultation with and approved by the registrar to meet specific education goals of the student.

NOTE: In all options (A-D), courses taken to meet core program requirements may also be used to meet the requirements of the concentration option.

\section*{Geography}

151 World Regional Geography (3) .........................................................................................................Fall
A geographic survey of major world regions. Emphasis is placed on both human and physical geography as each region is surveyed as to location, component countries, world role, distinctive physical and cultural characteristics, and major problems. [Cross-listed: CORE 265]

201 Introductory Geology and Physical Geography (4) ...........................................................................Fall A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week and one or two field trips. [Cross-listed: CORE 223, Earth Science 201, Environmental Studies 201]

202 Meteorology, Climate Change, and Aquatic Ecosystems (3) Spring Even Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular attention given to the impact of these changes on the structure and function of aquatic ecosystems. [Cross-listed: Earth Science 202, Environmental Studies 202]

\section*{Greek}

111 Elementary Greek (4)................................................................................................................Fall Odd
Students are introduced to the basics of biblical Greek. Students learn the basic forms of the Greek language, a foundational vocabulary, and elementary grammar. The focus of this course is on Greek nouns.

112 Elementary Greek (4) ..........................................................................................................Spring Even Continues Greek 111. Students continue to work on the basic forms of the Greek language, a foundational vocabulary, and elementary grammar. The focus of this course is on Greek verbs.

211 New Testament Greek (3) .............................................................................................................Fall Even \(\quad \begin{aligned} & \text { Building on the language learned in the first year, students read from a variety of texts and are taught inter- } \\ & \text { mediate grammar. Prerequisite: Greek 112. }\end{aligned}\)
212 New Testament Greek (3)
Spring Odd
This course is a continuation of Greek 211. Students continue to work on reading Greek texts, developing their knowledge of grammar, and engaging in elementary exegesis.
241- Readings in New Testament Greek (1) \(\qquad\) Fall, Spring
244 Students read Greek texts and work on building vocabulary and grammar skills to retain and develop skills learned in Greek 212. Prerequisite: Greek 212.
\(\qquad\)281- Service-Learning (1-3)Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
341- Special Topics (3)

\(\qquad\)
 Occasional
348 Courses under this title are designed by the department from year to year to reflect student demand and need. The content of the course will be from the areas of literature, philosophy, theology, archaeology, language, and art.
Individual Studies (1-3)Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."
Health, Physical Education, Recreation
\begin{tabular}{ll} 
General Major- & Foundation (common to all emphases): Health, Physical Education, Recreation \\
(HPER) 101, 203, 204, 207, 208.
\end{tabular}

Students must select one of the following emphases:
\begin{tabular}{ll} 
Exercise Science: & \begin{tabular}{l} 
Foundation; HPER 211, 325 or Psychology 382; one from HPER 361, 362, 371, \\
393; Biology 201, 202. (Chemistry 101 and 122 are strongly recommended.)
\end{tabular} \\
Physical Education: & \begin{tabular}{l} 
Foundation; HPER 325; four elective courses from HPER 202, 205, 206, 209, \\
\(210,211,212,213,214, ~ 215, ~ 216, ~ 217, ~ 305, ~ 306, ~ 371, ~ 393 . ~(N o t e: ~ 212-217 ~ a r e ~ h a l f ~\)
\end{tabular} \\
courses.)
\end{tabular}

Recreation: Foundation; HPER 206, 210, 325, 362 or 371; Business Administration 205.

\section*{General Minors-}

HPER: Six approved courses within the HPER course offerings. Courses may be tailored to meet individual goals. The HPER department chairperson must approve the six courses.

Recreation: HPER 206, 207, 210, 362; Business Administration 205; two courses from Business Administration 206, Communication 222, 228, Political Studies 214, Psychology 210.

Coaching Authorization-Licensure to Coach in the State of Iowa - see pages 118-119. For information on licensure, see web site www.state.ia.us/boee/doc/faqs_cch.asp.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 108-130.

\section*{I. ACTIVITIES AND INTERCOLLEGIATE SPORTS PARTICIPATION}

As part of the core program requirements every student must complete an activity component that may include one of the following activities. Graded on a pass/no-record basis.

11 Intercollegiate Athletics (.5) ...................................................................................................Fall, Spring
Arrangements must be made through the athletic director.
12 Tumbling/Gymnastics (.5) ....................................................................................................Fall, Spring Development of beginning and intermediate skills and techniques in gymnastics and tumbling, including work in free exercise.

13 Step Aerobics (.5)
Fall, Spring
An opportunity for students to work on a personal fitness program through vigorous exercises to music.
14 Voice and Body Warm-ups (.5)
Fall, Spring
A program of regularly repeated exercises designed to improve the performer's physical flexibility and vocal strength and range.

15 Adaptive Program (.5)...........................................................................................................Fall, Spring Restricted activity for students with physical disabilities. Prerequisite: recommendation by a medical doctor.

19 Other Activity (.5)
Occasional
The HPER department may offer additional activities based on staffing, facilities, and student interest.

\section*{II. CLASSROOM COURSES}

101 Introduction to Health, Physical Education, and Recreation (3) Fall Designed to be the entry-level course for those interested in exploring the areas of health, physical education, and recreation. The course will provide the student with an overview of the body of knowledge, the historical background, and career opportunities in each of the areas. The student will also develop and articulate a Christian perspective on health, physical education, and recreation.

202 Substance Abuse and Consumer Health (3)
Spring
The first half of the course is devoted to introducing the student to the use, misuse, and abuse of drugs. Emphasis is placed on the psychological and physiological effects of drugs. The second half of the course will provide the student with basic health-related information that will aid the student in making sound decisions regarding personal health.

203 Anatomy, Kinesiology, and Biomechanics (3)
Fall
A study of the anatomical and mechanical phenomena that underlie human movement. Particular attention is given to bone, joint, muscle, and connective structures; and to the application of physical laws of motion to the human body and specific sports skills.

A study of how normal body functions (homeostasis) are altered and subsequently restored in response to the stress of exercise. Emphasis will be placed on the respiratory, cardiovascular and muscular systems. The practical application of physiological concepts and principles to physical education and sport are included.

Curriculum in Physical Education and Health (3) Spring Provides the student with the necessary background in organizing and administering a desirable curriculum in physical education and health (elementary and high school) including intramurals and adaptive programs.

A study of leadership principles and their relationship to the field of recreation. The course is intended to give the necessary background and experience to enable the student to work in a variety of recreational settings.

207 First Aid and Athletic Injuries (3)
Fall, Spring
A study of accepted methods used to prevent athletic injuries. Instruction in administering first aid practices in emergencies. Fall semester emphasizes the elementary school child; spring semester focuses on participants in interscholastic sports. This course is not open to freshmen.

208 Assessment in Physical Education and Health (3) Fall
A study of elementary statistical procedures, the preparation and administration of physical fitness tests, health assessment procedures, and various athletic skills. A grading system in physical education and health is formulated.

209 Personal and Community Health (3).
Spring
This course examines the physical, mental, social, emotional, spiritual and occupational dimensions of health. Emphasis is placed on the utilization of health information in making good health choices.

210 Community Recreation (3) Spring The development of the principles, history, and philosophy governing recreation in the community along with the place of the agencies that are involved in community recreation will be studied.

211 Nutrition (3) Fall This course will focus on the basic science of foods and their components including relationships to health and disease. The implications of personal decision making and behavior change as well as social, economic, and cultural influences will be discussed. Fall course open to all majors; Spring course offered to nursing students or by permission of instructor. Does not count toward the biology major. [Cross-listed: Biology 210]

212 Coaching Theory of Basketball (1.5)
Spring
Seven-week course with emphasis on coaching skills, philosophies, and techniques of basketball. Not open to freshmen.

213 Coaching Theory of Track and Field (1.5). Spring Even Seven-week course with emphasis on coaching skills, philosophies, and techniques of track and field. Not open to freshmen.
214 Coaching Theory of Volleyball (1.5) Spring Odd Seven-week course with emphasis on coaching skills, philosophies, and techniques of volleyball. Not open to freshmen.
215 Coaching Theory of Baseball/Softball (1.5)
Spring Even
Seven-week course with emphasis on coaching skills, philosophies, and techniques of baseball and softball. Not open to freshmen.
216 Coaching Theory of Soccer (1.5)...........................................................................................Spring Odd
Seven-week course with emphasis on coaching skills, philosophies, and techniques of soccer. Not open to freshmen.
217 Coaching Theory of Football (1.5) Spring
Seven-week course with emphasis on coaching skills, philosophies, and techniques of football. Not open to freshmen.
281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
304 Middle School Physical Education and Health Methods (3) \(\qquad\) Occasional Provides the student with effective teaching skills and methods in physical education and health instruction. Four weeks of the course is devoted to teaching middle school physical education classes at a local Christian school.

305 Peer Teaching in Physical Education and Health (3). Fall Provides an opportunity to apply the teaching skills and methods of Physical Education and Health in a high school and peer-teaching setting. The focus is how to teach activities and health concepts to high school students.

306 Elementary Physical Education Skills and Methods (3)
Fall
Provides background for teaching physical education to elementary school children. Emphasis given to adaptive physical education. This course is only open to professional physical education students.

325 Psychosocial Dimensions of Physical Activity (3) Fall This course has a twofold purpose. The first is to add to the students' understanding of physical activity by exploring the psychological and sociological aspects of human physical activity. Second, the student will demonstrate a Reformed Christian understanding of human movement in discussion of a variety of issues related to health, physical education and recreation. Prerequisites: Psychology 201 or 204 or Sociology 201 or Education 135; junior or senior standing.

361 Field Experience in Physical Therapy (3)
Fall, Spring
Designed to give students enrolled in the prephysical therapy program a field experience in physical therapy. The student will work with a registered physical therapist for three hours each week of the semester. This course is open to junior and senior students enrolled in the prephysical therapy program.

362 Field Experience in Recreation (3)
Fall, Spring
Designed to give students the opportunity to do a practicum in a recreation setting. The student will work under the supervision of a professional recreation leader for three hours each week of the semester. This
course is open to junior and senior students who are enrolled in the recreation minor program and who have completed two of the following courses: HPER 206, 207, 210.

371- Health, Physical Education, Recreation Internships (3-9) .Fall, Spring, Summer
373 Intended to provide the HPER major the opportunity to apply knowledge principles and skills gained from the classroom into a workplace environment. Prerequisite: Completion of no less than seven courses in the major. See HPER internship coordinator for approval.

391- Individual Studies (1-3)
..Fall, Spring, Summer

\section*{History}

> General Major-
> Foundation (common to both emphases): History 201 or 230; one course from History 212, 213, 214; History 280, 380, 388 or 389.

Students must select one of the following emphases:
\begin{tabular}{ll} 
General: & \begin{tabular}{l} 
Foundation; seven history courses beyond 200 (options include Economics 309 \\
and Engineering 310), at least three of which must be at the 300 -level.
\end{tabular} \\
Museum Studies: \(\quad\)\begin{tabular}{l} 
Foundation; History 260, 365; five history courses beyond 200 with at least two \\
at the 300 level; Communication 228 or 260 ; one course from Art 207, 208, 209; \\
Art 240 or Theatre Arts 103; Business Administration 100, 206; Political Studies \\
214 or 245. Education 101 or 135 recommended, but not required.
\end{tabular} \\
For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching \\
endorsements, see the "Teacher Education Program" section on pages 108-130.
\end{tabular}
201 Survey of American History (3) ..... Fall
A survey of the main contours of American history from 1750 to the present. Prerequisite: CORE 140 recommended.
212 History of the Muslim World (3) Spring Even
A survey of the history of the Muslim world focusing on the Middle East, North Africa, and Southwest Asia. Primary emphasis is on the development and features of Muslim society and culture, the relations between Muslim and Western civilizations, and the sources of tension in the modern Muslim world. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: CORE 272]
213 Latin America (3) ..... Fall
A selective survey of the history of Latin America from pre-Columbian times to the present. Attention will be given to the indigenous and colonial origins of Latin American culture and society. Twentieth-century developments will be explored through a series of case studies. Not open to first-semester freshmen. Prereq- uisite: CORE 140. [Cross-listed: CORE 273]

214 East Asia (3)
Spring Odd
The history of East Asia, paying special attention to China, Japan, and Indonesia in the early-modern and late-modern periods. The primary emphasis will be on east Asian responses to the challenges represented by western ideas, commerce and imperialism in its various expressions. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: CORE 274]

220 Ancient History (3)
Fall Even This course surveys the development of ancient western civilization from Egypt and Mesopotamia, through Greek and Roman civilizations, to the decline of the Roman empire. Among the themes focused on in the course are the diversification of culture and the migration of people, the development and diffusion of ideas, arts and technology, resources, and the formation of a "western culture" up to the fall of Rome. Prerequisite: CORE 140.

221 Medieval Europe (3)
Fall Odd
Surveys Medieval Europe from the decline of the Roman empire circa 400 A.D. to the emergence of the Renaissance circa 1350 A.D. This survey focuses on the development of European civilization, particularly the formation of political, economic, ecclesiastical, and intellectual structures, and the relations between these. Prerequisite: CORE 140.

222 Renaissance and Reformation (3)
Fall Odd
Europe from the late medieval origins of the Reformation to the Treaty of Westphalia (1648). Themes such as humanism, the Renaissance, the Reformation and Counter-reformation, and the emergence of the secular state, will be included. Prerequisite: CORE 140.

223 Early Modern Europe (3)
Spring Even
The history of Europe from the close of the Reformation period to the French revolution and Napoleonic wars, with particular reference to the rise of modern science, the emergence of the European states system, and the thought of the enlightenment. Prerequisite: CORE 140.

224 Nineteenth Century Europe (3)................................................................................................Fall Even
The history of Europe from the Congress of Vienna to the outbreak of the First World War in 1914. The primary emphasis will be on the cultural, political, social, and economic developments in this period, with particular reference to the relations between the great powers and between Europe and other parts of the world. Not open to freshmen except by permission of the instructor. Prerequisite: CORE 140.

225 Twentieth Century Europe (3)
Spring Odd
The history of Europe from the immediate pre-First World War period to the end of the post-Second World War period as marked by the reunification of Germany and the 1991 Maastricht Treaty on European Union. The primary emphasis will be on the cultural, political, social, and economic developments in this period, with particular reference to the destructiveness of nationalism, the cold war, and the processes of European integration. Prerequisite: CORE 140.

230 Survey of Canadian History (3)
Spring Odd
A survey of Canada's history from the age of discovery and exploration to the present. The various forces and individuals that contribute to the making of Canadian nationhood will be stressed, but due time will also be devoted to the racial and sectional issues that have worked against national unity. Prerequisite: CORE 140 or by permission of instructor.

260 Introduction to Museum Studies (3)......................................................................................Occasional
This course will provide introductory exposure to the main aspects of museum work. Topics will include structure and administration, funding and government relations, function, and exhibit design and display. Students will also address ethical, moral, and legal issues within the field from the perspective of a Christian historian. Prerequisites: CORE 140; History 280.

280 Introduction to Historical Studies (3) Spring An introduction to the basic skills, methods, and resources of historical scholarship; the types of historical literature and scholarship; Biblical foundations for historical interpretation; historiographical schools of interpretation; and the uses of historical scholarship. Satisfies core writing-intensive requirement. Prerequisite: CORE 140 or by permission of instructor.

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
301 Colonial North America (3). Fall Odd An exploration of sixteenth- and seventeenth-century European colonial endeavors with particular attention to comparative cross-cultural encounters between Native Americans, Africans, and Spanish, French, Dutch, English, and Swedish colonists. Prerequisite: CORE 140. Some early modern European history recommended.

306 History of American Evangelicalism (3). Spring Odd Studies the development of evangelical Protestantism in the context of American history. More specifically, it examines how evangelicalism was developed through its main institutions, ideas, and assumptions, and beyond these, how evangelicals participated in forming American social, political, and intellectual culture. A special theme will be the relationship between the Reformed tradition and American evangelicalism. Previous study of American history is advised. Prerequisite: CORE 140. History 201 recommended.

307 American Civil War and Reconstruction Era (3)
.Fall Even This course examines the period in United States history from the 1820s through 1880 focusing upon the causes and significance of the Civil War and its aftermath, Reconstruction. The course will examine the social, political, military, economic and diplomatic issues of the period. Prerequisite: CORE 140. History 201 recommended.

308 Media and Power: A History of Modern American Culture (3) Spring Even Examines the influence of mass media on the development of modern American culture. Typical topics include the role of the media in the resurgence of the Ku Klux Klan, the FDR administration, the civil rights movement, the 1960 presidential election, the counter culture movement, Vietnam, and the Gulf War. Prerequisite: CORE 140. History 201 recommended.

319 Modern Middle East (3)
Spring Odd
An in-depth study focusing especially on developments in the Middle East during the twentieth century. Topics to be examined include de-colonization; "modernization" and the tension between western ideologies and Islam; Palestine, Israel, and the peace process; regional and global relations during and after the Cold War; the impact of the oil economy; urbanization; gender and family relations; and contemporary issues like water resources, ethnic conflict, human rights, and leadership change. Prerequisites: CORE 140; History 212; or by permission of instructor. [Cross-listed: Political Studies 319]

326 Thought and Society in Modern Europe (3) Fall Odd
This course examines the main trends in the development of Western (i.e. European and North American) thought from the French Revolution to the rise of post-modernism. The course focuses on the general theme of changing views about the relationships between God, humanity, and nature, with special attention given to developments in, and the interaction between, philosophy, theology, social theory, and natural sciences. These themes are examined in relation to changing religious commitments (especially secularization) and social structures (especially industrialization). Prerequisites: CORE 140. Previous study of modern European or U.S. history or modern philosophy is recommended.

Topics in the History of the British Isles (3)
Fall Even
Special attention is given to the distinctive histories and national cultures of England, Ireland, Scotland, and Wales, the origins of Great Britain, the British experience of American independence, the acquisition and loss of empire, the crisis of 1940, and the historical origins of contemporary constitutional problems. Prerequisite: CORE 140.

History of Calvinism (3) Spring Even A study of historic Calvinism as it was expressed by John Calvin and those who followed in his name. Explores the permutations and applications of Calvinism through time including, but not limited to, Counter Remonstrants, English and American Puritans, Hungarian Calvinists, Afrikaners, and the modern Dutch Calvinist movement. Prerequisite: CORE 140. Some European history recommended. [Crosslisted: CORE 325]

Special Topics (3)
Occasional
348 Each of these courses is devoted to a different topic, and each is designed to be a special-interest course utilizing individual instructor strengths, interests, and competencies. Each course will be concerned with a topic or period of history not usually treated to any great extent in regularly scheduled courses.

History Internship (3) Occasional This course is designed to give students the opportunity to practically apply the concepts, theories, and knowledge they have acquired in the classroom in a professional setting. Students will be supervised by a faculty monitor and on-site supervisor. Prerequisites: junior or senior standing and approval of the department; Business Administration 100.

Historiography (3) Spring This course concerns itself with the nature and meaning of history and the nature of the historian's task and responsibilities. There will be an emphasis upon review and evaluation of the various schools of history and of the philosophies of leading historians. Prerequisite: CORE 140. History 280 and advanced academic standing recommended.

388 History Seminar-United States History Emphasis (3). Fall Focuses on the writing of a research paper about some aspect of the history of the United States. Students will select a topic for in-depth study in order to implement and develop the various skills learned in previous history courses. Emphasis will be upon mature evaluation of evidence, developing a historical interpretation in light of a Biblical understanding of history, and constructing a narrative depicting the results of research. Open only to juniors and seniors. Prerequisites: CORE 140; History 280, 380.
requirements are the same as for History 388. Open only to juniors and seniors. Prerequisites: CORE 140; History 280, 380.

391- Individual Studies (1-3)
Fall, Spring, Summer
See "Individual Studies" section of "Academic Offerings."

\section*{Individual Studies}

The individual studies major provides an opportunity for specially qualified students to plan a specific program in an area of study not formally developed by the college as a major. The individual studies major is intended for a limited number of students who are broadly matured and possess the ability to articulate their goals clearly and specifically; the ability to work independently; self-motivation; and the ability to carry a project to completion.

A student desiring to complete an individual studies major must submit a proposal to the registrar no later than the end of the junior year. The proposal must include a rational for why an individual studies major meets the educational goals of the student, and a sequence of courses that meet those goals and will make up the student's major. This major should be no less than 45 credits that ensure depth and breadth of understanding in the area(s) selected.

Students who wish to plan an individual studies major should see the registrar to discuss the specific requirements and policies (students must have a 2.5 GPA with a minimum of 30 credits to be eligible). The registrar will work with the student to find a faculty member to assist the student in writing the proposal and to serve as faculty advisor for the student. If at any time it becomes apparent that the student is not qualified to continue or is not carrying out the program as approved, the faculty advisor and/or the registrar can terminate the individual studies major.

281 Service-Learning (1)
Open to qualified students with permission from the department, director of Service-Learning, and the registrar. See catalog section "Individual Studies" on pages 57 for application procedures and policies governing service-learning courses. Graded on a pass/no-record basis.
.Fall, Spring, Summer Open to qualified second semester freshmen, sophomores, juniors and seniors with permission from the department, director of Service-Learning, and the registrar. See catalog section "Individual Studies" for application procedures and policies governing service-learning courses. Graded on an A-F scale.

283 Service-Learning (3) \(\qquad\) .Fall, Spring, Summer Same as Service-Learning 282.

391 Individual Studies (1) \(\qquad\) .Fall, Spring, Summer Open to qualified students with permission from the department and the registrar. See catalog section "Individual Studies" on page 57 for application procedures and policies governing individual studies. The student will study a topic not normally included in regular course offerings, that is interdepartmental in nature, or that has a service-learning component. Graded on a pass/no-record basis.

Individual Studies (2)
.Fall, Spring, Summer
Open to qualified juniors and seniors with permission from the department and the registrar. See catalog section "Individual Studies" for application procedures and policies governing individual studies. The student will study a topic not normally included in regular course offerings, that is interdepartmental in nature, or that has a service-learning component. Graded on an A-F scale.

Individual Studies (3)
.Fall, Spring, Summer Same as Individual Studies 392.

\section*{Kuyper Scholars Program}

The Kuyper Scholars Program (KSP) is a program for highly motivated and academically gifted students who are seeking scholarly challenges beyond and throughout the regular curriculum. A program in Christian scholarship, it emphasizes interdisciplinary work and seminar participation and leadership. The Kuyper Scholars Program seeks not only to prepare, for Kingdom service, those students who are gifted as potential leaders in the Christian community and the rest of the world, but also to advance the academic atmosphere for all students and faculty at Dordt College. The Kuyper Scholars Program is codirected by Dr. Mary Dengler and Dr. Carl Fictorie in consultation with a committee.

Admission to the Program Student admission into the Kuyper Scholars Program depends on an entrance essay, letters of recommendation, and demonstrated academic ability. (For new freshmen, academic ability is demonstrated by letters of recommendation, a composite ACT score of 28 or higher, and a cumulative high school GPA of at least 3.5; for students with at least one semester of college work, requirements include two letters of recommendation from college faculty, a committee-approved academic record, and a GPA of at least 3.25.) Of primary importance are the entrance essay and letters of recommendation; these must demonstrate the student's character and potential for academic excellence in the pursuit of serviceable insight in the area of Christian scholarship. Interested freshman students should apply through the college admissions office; students with a semester of college work should contact a Kuyper Scholars Program co-director.

Retention Retention in the program is based on the following criteria:
- Maintaining a minimum cumulative grade point average of 3.25
- Enrollment each semester in KSP 110, 120, or 220
- Completion of KSP 151 by the end of the freshman year. Completion of at least one Scholars Contract or Project by the end of the sophomore year. Completion of at least three Scholars Contracts or Projects by the end of the junior year.

\section*{Course Requirements - Kuyper Scholars Program General Minor-}

At least one laboratory-based science course as part of the natural science core requirement. Mathematics 107 or a mathematics course numbered 111 or higher.
A minimum of 18 KSP credits as follows:
- KSP 151 (4 credits)
- One credit each from KSP \(110,120,220\), plus one additional credit from 110, 120 , or \(220(4\) credits)
- Eight credits from KSP 291-293 (Scholars Contracts). For contracts, both the additional credits for the contract (two credits minimum) and the credits from the course tied to the contract are considered KSP credits.
- Two credits from KSP 381-386 or KSP 391-396 (Group and Individual Scholars Projects).

Designated scholars courses and projects are open to all students in good academic standing on a credit-by-credit basis when prerequisites have been met. Students may submit a project proposal to a KSP codirector (generally from one to three credits). The proposal must include a recommendation from the faculty member who would supervise the project.

110 Scholars Events (.25)..............................................................................................................Fall, Spring
Students must attend and report on (in writing) two on- or off-campus events such as guest lectures. Attendance includes both the actual event and any arranged scholars activities (dinners, small group discussions, etc.) related to the event. May be repeated for credit. Prerequisite: admission to the KSP.

120 Scholars Seminar I (.25)
Fall, Spring
Students must participate in two scholars seminars, where students present their group and individual projects (see KSP \(381-386\) and KSP 391-396) to the campus community. Participation includes attending the presentation and the related small-group discussions and reflection. May be repeated for credit. Prerequisite: admission to the KSP.

151 Rhetoric and Christian Scholarship (4) Fall
An accelerated introduction to college writing, research, and speaking and listening skills, and an introduction to the requirements and expectations of the KSP. Substitutes for English 101 and Communication 110 in the GEP. Prerequisite: admission to the KSP or an English ACT of 30 and permission of instructor.

220 Scholars Seminar II (.5)
Fall, Spring
Students must lead one small-group discussion of scholars events (KSP 110) or scholars seminars (KSP 120). Students must read the speaker's presentation in advance, do background research, prepare a written response to the presentation to be shared at the seminar, and lead a small-group discussion following the presentation. May be repeated for credit. Prerequisite: KSP 110 or 120; admission to the KSP.

291- Scholars Contracts (1-3)..........................................................................................................Fall, Spring
293 Connected to a regularly offered course, this course allows more in-depth researching, writing, performance, etc. assigned by the instructor. Students must meet all the objectives of the regularly scheduled course as well as the work associated with the additional credit.

381- Group Scholars Projects (1-6)
Fall, Spring
386 Open to students in the KSP or by permission of the KSP director and instructor. Scholars projects include a presentation to the college community at a scholar's seminar (KSP 120). Group scholars projects are not tied to existing courses.

391-Individual Scholars Projects (1-6) ...........................................................................................Fall, Spring
396 Open to students in the KSP or by permission of the KSP director and instructor. Scholars projects include a presentation to the college community at a scholars seminar (KSP 120.) Individual scholars projects are not tied to existing courses.

\section*{Latin}

> 101 Elementary Latin I (4)........................................................................................................................................... Even An introductory study of the language through which students are taught how to understand and translate Latin prose and poetry, while becoming familiar with Latin grammar and syntax. The course will also focus on vocabulary acquisition, features of Roman history, life, and culture, as well as the nature of the impact of Latin on the English language.

102 Elementary Latin II (3)
Spring Odd
Continuation of Latin 101. Prerequisite: Latin 101 or one year of high school Latin with permission from the instructor.

201 Intermediate Latin I (3)
Fall Odd
Students will further a foundational understanding of verb conjugations and noun and adjective declensions, expand their Latin vocabulary, develop an understanding of Latin grammar, and sharpen Latin reading skills in the areas of classical prose and poetry. Prerequisite: Latin 102 or two years of high school Latin with permission from the instructor.

391- Individual Studies (1-3)
.Fall, Spring, Summer

\section*{Linguistics}

Interdisciplinary Minor- Linguistics 201, 301, 393; two courses from Dutch 201, 202, English 335, 336, French 201, 202, Greek 112, 211, Latin 102, 201, Spanish 200/201, 204; two courses from Communication 314, CORE 270, 283, Education 341, Philosophy 202, 350, Psychology 218, 362, Theology 221.

201 Introduction to Linguistics (3)......................................................................................................Spring
An introduction to the basic principles of linguistics, including phonetics (the sounds of language), morphology (the words of language), syntax (the sentence patterns of language), sociolinguistics (how language functions in society). Data from different dialects of English and a variety of other languages will be used. Special attention will be given to a biblical view on language. No previous knowledge of linguistics is required.

301 Applied Linguistics and Phonology (3). Fall Odd
A more in-depth study of specific areas of linguistics, such as psycholinguistics (brain and language), semantics (the meanings of language), language acquisition (how children learn one or more languages), and language processing (the human mind and the computer). One third of the course is geared at the special interests of the students. ESL students will study the phonology (the study of sound patterns) of English and learn how to teach English pronunciation. Other students will be doing research in a linguistic area of their interest, culminating in a research paper. It is advisable, but not mandatory, to take Linguistics 201 first.

Individual Studies (1-3)
.Fall, Spring, Summer
See "Individual Studies" section of "Academic Offerings."

\section*{Mathematics}

\begin{abstract}
General Major- Mathematics 112, 113, 201, 203, 212, 304, 311, 315, 390, 392; one mathematics course numbered above 201; two courses from Mathematics 291-294; one course from Mathematics 341-8; Computer Science 111.

\author{
Mathematics/Computer Science Major-Mathematics 112, 113, 203, 207, 209, 212, 304; one course from Mathematics 201, 204, 206; Computer Science 111, 112, 120, 131, 145, 202, 305; one course from Computer Science 220, 231, 308, 311; Mathematics 390 or Computer Science 390.
}

General Minor- Mathematics 112, 113, 203, 212, 390; one course from Mathematics 304, 311, 315 ; one mathematics course numbered above 200.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 108-130.
\end{abstract}
100 Mathematics for College (3) ............................................................................................................................ Spring
The primary goal of the course is to prepare students for college-level use of mathematics through the study
of the topics of algebra, probability, statistics and geometry. The use of mathematical models will be woven
throughout the course, providing students with the opportunity to see, understand, and use mathematics
in a variety of applications. Also woven throughout is the understanding that mathematics is a creation of
God, and must be used appropriately and responsibly. Corequisite: Mathematics 100L.

100L Mathematics Tutorial Sessions (1) Fall, Spring Two hours per week tutorial session required for students in Mathematics 100. Students do not earn graduation credit for the tutorial session. Corequisite: Mathematics 100.

106 Elements of Mathematics (3). Fall
An introduction to the concepts, methods, and applications of mathematics; specific topics and applications such as graph theory, linear programming, probability, statistics, voting methods, and game theory will be investigated. Topics will be studied in the context of their proper use in today's society.

107 Elementary Statistics (3).
Fall, Spring
An elementary course in statistical techniques and methods and their application to a variety of fields. Topics include data analysis, design of experiments, and statistical inference including confidence intervals and hypothesis testing. Spreadsheet knowledge is suggested.

108 Mathematics for the Elementary Teacher (3)
Fall
An introduction to the role of numbers, basic computational techniques, operations, properties and uses of numbers. A variety of tools, physical models, and appropriate technologies will be used. Students will trace historical developments, formulate and solve problems, study patterns, and develop the use of variable. Some attention will be given to the methods of teaching these topics at the elementary school level. Prerequisite: open to elementary education students; others by permission of instructor.
109 Theory and Context of Middle School Mathematics (3) ..... SpringA study of key concepts, techniques, and applications of mathematics for middle grades. Topics are drawnfrom arithmetic (numeration systems, calculation procedures, number concepts), geometry (measurement,geometric constructions, deductive reasoning), and algebra (proportionality, problem-solving, theory ofequations, graphing) and are intended to deepen, extend, and supplement those found in Mathematics 108and Education 332. The historical development of mathematics is used extensively to investigate multicul-tural connections and gain curricular and pedagogical insight on the material. Prerequisite: Mathematics108; Co- or prerequisite: Education 332; or by permission of instructor.
110 College Algebra (3) ..... SpringA study of standard pre-calculus topics in algebra and trigonometry. Elementary functions and functionalnotation are emphasized in preparation for calculus. Prerequisite: three semesters of high school algebra.
111 Calculus for Business, Social, and Life Sciences (4) ..... Fall
A study of the basic concepts and techniques of calculus for students majoring in business, social sciences,or life sciences. Topics include limits, differentiation, integration, exponential and logarithmic functions,partial derivatives, multiple integrals, and applications. Credit will not be given for both Mathematics 111and 112. Prerequisite: Mathematics 110 or equivalent.
112 Calculus I (4) ..... FallA study of the basic concepts and techniques of calculus for students majoring in mathematics, computerscience, engineering, or the physical sciences. Topics include limits, differentiation, integration, and appli-cations. This course is intended for students without any previous calculus credit. Credit will not be givenfor both Mathematics 111 and 112. Prerequisite: Mathematics 110 or equivalent.
113 Calculus II (4) Fall, SpringContinuation of Mathematics 112; a study of transcendental functions, integration techniques, sequences,series, polar graphing, parametric equations, and applications. Students with one semester of calculuscredit should take this course instead of Mathematics 112. Prerequisite: Mathematics 112 or equivalent.
201 Multivariable Calculus (3) ..... SpringA study of the algebra and calculus of vector-valued functions, three-dimensional analytic geometry, dif-ferential and integral calculus of functions of several variables, line and surface integrals. Prerequisite:Mathematics 113.
203 Elementary Linear Algebra (3) ..... FallAn introductory study of vectors, matrices, linear transformations, vector spaces, determinants, and their ap-plications, with particular emphasis upon solving systems of linear equations. Prerequisite: Mathematics 113.
(3)FallAn introduction to the theory and techniques of solving elementary differential equations and the use ofthese techniques in applied problems. Prerequisite: Mathematics 113.and continuous distributions, estimation, and statistical hypothesis testing. Prerequisite: Mathematics 113or by permission of instructor.
207 Number Theory (3) .............................................................................................................Spring Even
An introduction to the main topics of elementary number theory, including divisibility, prime numbers, factorization congruences, number theoretic functions and number theoretic equations. Prerequisite: Mathematics 111 or 112 or by permission of instructor.
208 Modern Geometry (3) ...................................................................................................................Fall Even
209 Numerical Analysis (3).........................................................................................................Spring Even
A study of numerical methods for integration, differentiation, calculus of finite differences, and applications, using the computer. Prerequisites: Mathematics 113; Computer Science 111.
212 Discrete Structures (3)
Spring
A study of topics in discrete mathematics that are relevant both to computer science and mathematics, including logic and proof, induction and recursion, elementary set theory, combinatorics, relations and functions, Boolean algebra, and introductory graph theory. Prerequisite: Mathematics 111 or 112 or by permission of instructor.
281- Service-Learning (1-3)
Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
291. Problem-solving Seminar (1) Fall
294 A study of various mathematical problem-solving techniques. Weekly sessions will be devoted primarily to presenting and solving Putnam Examination problems. Open to qualified freshmen and sophomores with permission of instructor. Graded on a pass/no-record basis. Prerequisite: Mathematics 112 or by permission of instructor.

304 Abstract Algebra I (3)
Fall Even
An introduction to algebraic structures focused mainly on groups, but with brief attention given to rings, integral domains, and fields. Prerequisite: Mathematics 203 or 212 or by permission of instructor.

305 Abstract Algebra II (3)
Occasional
Continuation of Mathematics 304. A more extensive study of algebraic structures, focused primarily on fields. Prerequisite: Mathematics 304.

311 Real Analysis I (3)
Fall Odd
An introduction to the content and methods of single-variable real analysis: infinite sets, the real number system, sequences, limits, series, continuity, differentiation, and integration. Prerequisite: Mathematics 212 or by permission of instructor.

315 Complex Analysis (3).
Spring Even
A study of the complex number system, functions of complex numbers, integration, differentiation, power series, residues and poles, and conformal mappings. Prerequisite: Mathematics 201 or by permission of instructor.

341- Special Topics (3)
Occasional
348 These mathematics courses cover different topics that maximize individual instructor strengths, interests,
and competencies. Each course will deal with a topic in mathematics not usually treated to any great extent in regularly scheduled courses.

390 History of Mathematics (3) \(\qquad\) Fall Odd
A survey of the history of mathematical thought, in cultural context, with attention given to how the philosophy of mathematics relates to the development of mathematics. Prerequisite: Mathematics 111 or 112 or by permission of instructor.

391- Individual Studies (1-3) \(\qquad\) .Fall, Spring, Summer

\section*{Medical Technology}

The Medical Technology major consists of three years of preparatory courses in Biology, Chemistry, and Mathematics, with a fourth clinical year at an institution with an accredited Medical Technology program. During the beginning of the third year students will apply for acceptance to this program. After successful completion of the final year, students will graduate with a Bachelor of Science degree from Dordt College.

General Major- Chemistry 103, 104, 221, 222; Biology 122, 201, 202, 213, 310, 357; one course from Biology 304, 322, Chemistry 212, 312; Mathematics 107; completion of the one year clinical program at a COMTE-certified college. Chemistry 325 and English 305 strongly recommended.
Students are advised to consult with the Medical Technology program advisor to help choose other suit able courses in their area of interest.

\section*{Music}

General Major- Foundation (common to all emphases): Music 103, 103L, 104, 104L, 203, 203L, 204, 207, 208, 215, 315; Music 19; six semesters of Music 09; six semesters of large ensembles.

Students must select one of the following emphases:
\begin{tabular}{ll} 
General: & \begin{tabular}{l} 
Foundation; 6 credits of electives in music; six semesters of Music 240, 250, 260, \\
or 270 selected in consultation with an advisor.
\end{tabular} \\
Music Management: & \begin{tabular}{l} 
Foundation; Business Administration 201 or Business Education 203; Business \\
Administration 205, 206, 207; Business Administration 304 or Political Studies
\end{tabular} \\
245; Communication 260; Music 373. Recommended: Business Administration \\
100, English 305, and private music lessons.
\end{tabular}

Performance and Pedagogy: Foundation; Music 209; Music 305 or 308; Philosophy 206; Education 135 or Psychology 204 (fulfills core Persons in Community requirement); and all of the courses in one of the following performance categories:
1. Organ: Six semesters of Music 260; Music 360 and 361; Music 393.
2. Piano: Six semesters of Music 250; Music 350 and 351; Music 326, 393.
3. Voice: Six semesters of Music 240; Music 340 and 341; Music 323, 393.
4. Instruments: Six semesters of Music 270; 370 and \(371 ; 305\); one course in performance area selected from 316, 317, 318, 319; Music 391.
Note: Students in performance and pedagogy must audition for acceptance into the program by the end of the sophomore year. Students in performance and pedagogy are required to present a half junior recital and a full senior recital. They must audition for the recital during the semester or the year prior to the recital.

\section*{General Minors-}

Music: \(\quad\) Music 103, 103L, 104, 104L; Music 207 or 208; Music 215; four semesters of Music 09 ; two courses from Music 207, 208, 209, 222, 305, 308; any combination of private lessons and ensembles adding up to a minimum of four credits.

Music Performance: Music 103, 103L, 104, 104L; one course from Music 207, 208, 308; one course from 323, 326, or three from 316-319; four semesters of Music 09 ; five semesters of lessons in one performance area (240, 250, 260, or 270); Music 340, 350, 360, or 370 ; six semesters of large ensembles.
Note: Music performance minors must audition for acceptance into the minor program not later than their junior year. Music performance minors are required to present a half recital. They must audition for the recital during the semester or the year prior to the recital.

For descriptions of the SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 108-130.

\section*{Ensembles (Graded on a pass/no-record basis)}
\(10 \quad\) Chorale (1) Fall, Spring
\(\qquad\)
\(\qquad\)13 Small Instrumental Ensemble (.5)Fall, SpringA variety of small instrumental ensembles, including Jazz Band.
18 Small Vocal Ensemble (.5) Fall, Spring
A variety of small vocal ensembles, including Kantorei and Women's Chorus.20 Orchestra (1)
\(\qquad\) Fall, Spring

\section*{Classroom Courses}
09 Performance Class (0) Fall, Spring
Concert and recital attendance; presentations of special topics related to music.
103 Music Theory I (3) ..........................................................................................................................................Fall
A course in basic music theory that lays the foundation for musicianship and further study in music through
the study of rudiments and development of skills in notation, analysis, and writing music.
103L Aural Skills I (1) ..... Fall
Basic skills in music-reading, keyboard harmony, and aural skills in hearing and identifying melody, har- mony, and rhythm. Corequisite: Music 103.
104 Music Theory II (3) ..... Spring
Continuation of Music 103 through all aspects of diatonic harmony. Prerequisite: Music 103.
104L Aural Skills II (1) ..... Spring
Intermediate-level skills in music-reading, keyboard harmony, and aural skills in hearing and identifying melody, harmony, and rhythm. Prerequisite: Music 103L.
203 Music Theory III (3) ..... Fall
Continuation of Music 103-104, with focus on advanced and chromatic harmony. Prerequisite: Music 10 ..... 104.
203L Aural Skills III (1) ..... Fall
Advanced skills in music-reading, keyboard harmony, and aural skills in hearing and identifying melody, harmony, and rhythm. Prerequisite: Music 104L.
204 Music Theory IV (3) ..... Spring Odd
A study of the dissolution of the major-minor tonal system and the resulting new theoretical bases and com- positional techniques of music of the 20th and 21st centuries. Prerequisite: Music 203.
207 Music History (3) Fall Even
The historical development of the art of music, showing the development of music through the great eras in history and the relationship of music to the political, economic, and cultural conditions of these eras.
208 Music History (3) Spring Odd
Continuation of Music 207.
209 Music in Worship (3) ..... 
Spring Even
An overview of the role of music in worship, of worship music repertoire, and of information and skills needed to plan music for worship.
215 Basic Conducting (2) ..... Fall OddAn introduction to conducting technique.222 Music of Non-Western Cultures (3)peoples view and use music, and what the music and its use can tell about the cultural context from which it
emerges. In particular, the course will examine such issues as the following: how does music fit into a culture's world view (What is music? Does music have the potential for both good and harm?), what is the culture's aesthetic concept of music (What defines 'beauty' in music?), what are the contexts for music-making and 'consumption' (When and in what manner is music performed?), and what is the culture's concept of its own music history (How does an oral/aural tradition differ from our own 'institutionalized' music tradition?).

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
305 Orchestration (3).................................................................................................................. Spring Odd
A study of transposition, instrumental ranges, and balance by arranging keyboard and choral works for instrumental ensembles.

306 Music and Digital Technology (3) Occasional The course surveys modern uses of digital technology relating to sound and develops skills relating to the most common types of the manipulation of digital sound. Each student will complete a major project that demonstrates a useful application of the skills learned in the course. The course is useful to anyone who plans to be engaged in composition, arranging, sound engineering, or music education.

308 Music Literature (3).
Fall Odd
A survey of the basic repertoire and of masterpieces in several genre (art songs, symphonies, concerti, major choral works, etc.), involving extensive and intensive listening, score study, and study of style and form. The course is designed for music majors and minors but is also open to others by consent of the instructor.

312 Teaching Music in the Elementary School (3)
Fall Even
Teaching techniques and materials for the prospective elementary school music educator. Intended for music majors and minors. Prerequisite: Education 201 or by permission of instructor.

313 Choral Music Education (3)
Fall Odd
Teaching techniques and materials for the prospective vocal music educator. While designed for those preparing to teach choral music in the secondary school, this course also deals with repertoire selection and rehearsal planning and would therefore be of benefit to those preparing to enter the field of church music. Prerequisite: Education 201 or by permission of instructor.

314 Instrumental Music Education (3) .Fall Even Teaching techniques and materials for those planning to teach elementary and/or secondary instrumental music. Prerequisite: Education 201 or by permission of instructor.

315 Advanced Conducting (2)....................................................................................................Spring Even
Continued study of conducting with attention to specific choral and instrumental techniques. Prerequisite: Music 215.

341- Special Topics (3) Occasional
348 These courses will vary from year to year and are designed to meet special student interests and to utilize staff strengths and the talents of experts in the community. Each course will cover material not usually treated in regularly scheduled courses.
373 Music Management Internship (1-3) Fall, Spring
Intended to provide the music management major the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual music management environment. Prerequisite: junior or senior status and 2.0 minimum grade point average.
391- Individual Studies (1-3) Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."
Pedagogy
316 Brass Pedagogy (1) Fall Even
Methods of teaching brass instruments.
317 Woodwind Pedagogy (1) ..... Spring Odd
Methods of teaching woodwind instruments.
318 String Pedagogy (1) Spring Even
Methods of teaching string instruments.
319 Percussion Pedagogy (1) Fall Odd
Methods of teaching percussion instruments.
323 Vocal Pedagogy (2) Spring Even Methods of teaching voice.
326 Piano Pedagogy and Literature (3)
\(\qquad\)OccasionalStudy of techniques and methods of teaching piano and survey of literature for the piano.
Private Instruction
Private instruction is available to both music majors and non-majors in the following areas. Instrumental lessons will be tran-scripted indicating the specific instrument (e.g., trumpet or violin). All lessons are graded on an A-F basis and can be repeatedfor credit each semester.
04 Group Voice Lessons (1) Fall, Spring
05 Group Piano Lessons (1) Fall, Spring
07 Group Instrumental Lessons (1) Fall, Spring
19 Piano Proficiency (O credit) Fall, Spring
Passing the piano proficiency requirement is necessary for certain majors and minors in music. Piano pro- ficiency is demonstrated by passing a test administered by the music department. Preparation for this test may be gained through the taking of piano lessons.
240 Private Voice Lessons (1) Fall, Spring
250 Private Piano Lessons (1) Fall, Spring
260 Private Organ Lessons (1). Fall, Spring
270 Private Instrument Lessons (1) ..... Fall, Spring
The following advanced study courses are open only to students in major or minor programs of study requiring them. ..... Admissionis by audition; dates of the qualifying juries are posted in the music building.
340 Advanced Voice Study (3) Fall, Spring
Advanced voice literature and preparation of a half junior or senior recital.
341 Advanced Voice Study (3) ..... Fall, Spring
Advanced voice literature and preparation of a full senior recital. Prerequisite: Music 340
350 Advanced Piano Study (3) ..... Fall, Spring
Advanced piano literature and preparation of a half junior or senior recital.
351 Advanced Piano Study (3) ..... Fall, Spring
Advanced piano literature and preparation of a full senior recital. Prerequisite: Music 350
360 Advanced Organ Study (3) Fall, Spring
Advanced organ literature and preparation of a half junior or senior recital.
361 Advanced Organ Study (3) ..... Fall, Spring
Advanced organ literature and preparation of a full senior recital. Prerequisite: Music 360
370 Advanced Instrument Study (3) ..... Fall, Spring
Advanced instrumental literature and preparation of a half junior or senior recital.
371 Advanced Instrument Study (3) Fall, Spring
Advanced instrumental literature and preparation of a full senior recital. Prerequisite: Music 370

\section*{Nursing}

The Bachelor of Science in Nursing is a four year program of study. Within the unique collaborative curriculum students complete a course of study that combines a traditional associate's degree in nursing with a bachelor of science degree in nursing. This program is possible through an ongoing partnership with St. Luke's College in Sioux City, Iowa. All students must complete Dordt's core program requirements as well as all of St. Luke's requirements for the associate's degree. Students spend all four years (eight semesters) as full time residents on Dordt's campus; however, during four semesters are considered to be enrolled full-time through St. Luke's. Primarily all the course work is done from Dordt's campus with clinical rotations during the four semesters with St. Luke's College completed at St. Luke's Regional Medical Center and surrounding geographic areas.

Students are eligible for NCLEX-RN state board licensure examination upon successful completion of the associate in nursing degree portion of the coursework, typically at the end of the third year. Year four focuses on upper division nursing courses for the completion of the BSN degree. The St. Luke's A.S.N. program is approved by the lowa Board of Nursing and fully accredited by the National League for Nursing Accrediting Commission. The Dordt BSN program is approved by the Iowa Board of Nursing.

Accreditation was granted by the Commission on Collegiate Nursing Education in 2007. (CCNE, One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, (202) 887-6791)

General Major - Courses taken at Dordt College: Chemistry 101 or 103; Mathematics 107; Psychology 201, 204; Sociology 201; Nursing 200-300, 310, 320, 325, 330, 351, 352, 390. Courses from St. Luke's: Biology 201, 202 (Anatomy and Physiology), 302 (Microbiology); Nutrition 212; Nursing 110, 112, 115/116, 220, 222, 225/226, 230, 232, 235/236, 240, 245, 246.

110 Professional Development I (1 credit, Offered by St. Luke's)
This course is the first in a series of four professional development courses. Nursing 110 introduces the concepts of roles of student nurse and health care team members, regulatory guidelines of nursing, therapeutic communication, evidenced-based practice, theory based decision-making, and cultural sensitivity. Prerequisite for Nursing 220, 225, 226, 230.

112 Pharmacology in Nursing Practice I (1 credit, Offered by St. Luke's)
This course is the first in a series of three pharmacology courses. Nursing 112 introduces pharmacological concepts with a focus on developing beginning competency in medication administration via percutaneous, enteral, intradermal, subcutaneous, and intramuscular routes. Prerequisite for Nursing 116, 222, 225, 226, 232.

115 Foundations of Nursing I (2 credits, Offered by St. Luke's)
This course is the first in a series of two nursing foundation courses. Nursing 115 introduces concepts that are fundamental to professional nursing. The concepts include terminology, safety, basic skills, principles of teaching and learning, health assessment, documentation, and the nursing process. Prerequisite for Nursing 116, 222, 225, 226.

116 Foundations of Nursing II (2 credits, Offered by St. Luke's)
This course is the second in a series of two nursing foundation courses. Nursing 116 builds on the concepts introduced in Nursing 112-Pharmacology in Nursing Practice and Nursing 115-Foundations of Nursing I. This course introduces the student to clinical nursing practice and focuses on the basic concepts of protective mechanisms, pain and sensation, mobility, sleep and rest, nutrition, elimination, oxygenation, circulation, and perioperative care. Prerequisite for Nursing 222, 225, 226.

220 Professional Development II (1 credit, Offered by St. Luke's)
This course is the second in a series of four professional development courses. Nursing 220 builds on the basic concepts of the health care team member, regulatory guidelines of nursing, therapeutic communication, evidenced-based practice, theory based decision-making, and cultural sensitivity. Prerequisite for Nursing 230, 235, 236.

222 Pharmacology in Nursing Practice II (1 credit, Offered by St. Luke's)
This course is the second in a series of three pharmacology courses. Nursing 222 introduces the principles of intravenous therapy, and focuses on nursing responsibilities associated with the administration of antimicrobials, and drugs affecting the neurological and reproductive systems. The course builds on the concepts of pharmacodynamics and safe medication administration introduced in Nursing 112-Pharmacology in Nursing Practice I. Prerequisite for Nursing 232, 235, 236.

225 Reproductive and Childbearing Nursing ( 5 credits, Offered by St. Luke's)
This second level course focuses on the care of families throughout the childbearing process from conception through the postpartum and neonatal period. Nursing 225 also addresses concepts related to the reproductive health of men and women, building on the principles of professional development, pharmacology, and foundations of nursing care introduced in prerequisite courses. Prerequisite for Nursing 235, 236.

Neurological and Psychiatric Nursing ( 5 credits, Offered by St. Luke's)
This second level course focuses on the care of adults and families experiencing neurological, psychiatric, and sensory alterations. Nursing 226 builds on the principles of professional development, pharmacology, and foundations of nursing care introduced in prerequisite courses. Prerequisite for Nursing 235, 236.

Professional Development III (1 credit, Offered by St. Luke's)
This course is the third in a series of four professional development courses. Nursing 230 builds on the concepts of the nursing roles, regulatory guidelines, therapeutic communication, evidence-based practice, critical thinking, and cultural sensitivity introduced in Nursing 110 and 220-Professional Development I and II, respectively. The course focuses on nursing leadership skills, assertiveness, professional competency, and managing client care. Prerequisite for Nursing 240, 245.

Pharmacology in Nursing Practice III (1 credit, Offered by St. Luke's)
This course is the third in a series of three pharmacology courses. Nursing 232 focuses on nursing responsibilities associated with the administration of antineoplastic agents and drugs affecting the gastrointestinal, urinary, cardiovascular, respiratory, and endocrine systems, and the body's response to toxins. The course builds on the concepts of pharmacodynamics, safe medication administration, and intravenous therapy introduced in Nursing 112 and 222-Pharmacology in Nursing Practice I and II, respectively. Prerequisite for Nursing 245.

Nursing Care Across the Lifespan (5 credits, Offered by St. Luke's)
This third level course focuses on the care of children, adults, and their families throughout the lifespan from childhood through death. Nursing 235 addresses concepts related to growth and development, pediatric and geriatric health alterations, death and dying, and basic community health nursing. This course builds on the principles of professional development, pharmacology, foundations of nursing care, and reproductive, childbearing, neurological, psychiatric, and sensory concepts introduced in prerequisite courses. Prerequisite for Nursing 245

Medical-Surgical Nursing ( 5 credits, Offered by St. Luke's)
This third level course focuses on the care of adults experiencing gastrointestinal, musculoskeletal, urological, renal, hepatic, and homeostatic alterations and surgical intervention. Nursing 236 builds on the principles of professional development, pharmacology, foundations of nursing care, and reproductive, childbearing, neurological, psychiatric, and sensory concepts introduced in prerequisite courses. Prerequisite for Nursing 245.

Professional Development IV (1 credit, Offered by St. Luke's)
This course is the fourth in a series of four professional development courses. Nursing 240 builds on the concepts of nursing roles, regulatory guidelines, communication, evidenced-based practice, critical thinking, leadership, management, and cultural sensitivity introduced in Nursing 110, 220, and 230-Professional Development I, II, and III, respectively. This course focuses on current issues in nursing, advanced communication skills, clinical decision, and cultural competency.

245 Advanced Nursing Care (9 credits, Offered by St. Luke's)
This fourth level course focuses on the care of individuals experiencing oxygenation, circulation, protective mechanism, metabolic and oncological alterations, and traumatic injury. Nursing 245 builds on the concepts of the prerequisite courses including: professional development, pharmacology, foundations of nursing care, maternal-child, psychiatric, pediatric, geriatric, and select medical-surgical nursing. Prerequisite for Nursing 246

246 Transition to Practice (2 credits, Offered by St. Luke's)
This fourth level course is the final nursing course of the ASN curriculum. Nursing 246 includes summative review of nursing theory and practice aimed at facilitating the transition from student to novice nurse generalist. The course includes a clinical preceptorship with a registered nurse in clinical practice.

This course will provide the groundwork from which ethical issues can be analyzed and then considered in light of current ethical theories as well as a Reformed framework. Nursing ethics and ethical decision making are explored. Ethics in professional nursing practice will be emphasized. Nursing ethics across the lifespan will be explored, with emphasis on reproductive issues, infant/child, adolescent nursing ethics and psychiatric/mental health.

300 Healthcare Ethics II (1)
Spring
This course builds upon the groundwork provided in Nursing 200 (Healthcare Ethics I) wherein ethical issues were analyzed and considered in light of current ethical theories as well as a Reformed framework. Nursing ethics inquiry continues across the lifespan with ethics pertinent to psychiatric/mental health, care of elders, community/public health, and issues in end-oflife care. Ethics in professional Christian nursing practice will be emphasized. Prerequisite: Nursing 200.

310 Faith and Cultural Aspects in Health Care (3). Fall
Students will engage in an introductory study of culture and its influence on behavior. Specific crosscultural issues that affect health care delivery are discussed. Students will consider the worldviews of modern cultures and the implications for Christian discipleship; define health and illness as Christian individuals and part of the community as a whole; and comprehend traditional and alternative health care practices, incorporating religious beliefs, practices, and rituals. A phenomenological assessment is applied to the populations studied. Prerequisites: BSN major or junior standing; permission of instructor. [Cross-listed: CORE 275]

320 Foundations of Nursing Theory (2) Fall Foundation concepts and nursing theories are explored as they apply to professional nursing practice. Nursing philosophies, theories and historical influences are examined. Nursing philosophies and theories will be explored for their consistency/inconsistency with a Christian view of nursing. Prerequisite: enrollment in BSN program or by permission of instructor.

Health Assessment (3) Fall
The knowledge and skills for professional assessment and health promotion across the lifespan are covered along with related physiologic concepts. Students will develop skills related to comprehensive health assessment of the individual client which will be used as the basis for decision making and intervention. Theory and laboratory practice provide guidance in assessing physical, psychological, sociocultural and faith dimensions of the individual. Two lecture hours and one laboratory period of three hours per week. Prerequisites: enrollment in BSN program; evidence of valid RN license to practice in Iowa; or by permission of instructor.

330 Research and Scientific Inquiry (3)..............................................................................................Spring
The research process is introduced. A basic overview of research design, evidence-based practice and research utilization is presented. Students critique professional literature. Students develop a nursing research utilization proposal that provides for application of research principles to nursing practice. Prerequisites: enrollment in BSN program; Nursing 320; or by permission of instructor.

351 Family, Community, and Public Health I (3)...................................................................................Fall This course focuses on the analysis of the family within the context of community-oriented nursing practice utilizing public health nursing and community health nursing strategies. It utilizes the study of the promotion of health along with the primary, secondary, and tertiary prevention of health problems of a population. The course focus is on the family as the client with nursing care of individuals, families and groups. The clinical component focuses upon utilizing a community-based nursing approach to health care delivery in the home setting. Two lecture hours per week and forty-five clinical hours per semester. Prerequisites: senior status in BSN nursing program; evidence of valid RN license to practice in Iowa.

352 Family, Community, and Public Health II (4)
Spring
Concepts and theories of public and community health and relational influences are addressed. Students will incorporate knowledge of nursing research, process, and decision-making in assessing the community as the client; explore epidemiology, community empowerment, and community-nursing partnering for the health of the community; and collaborate with members of other disciplines and with consumers in planning for community health when applied to the community setting. The clinical experience emphasizes community based service learning within the context of a Christian perspective in professional nursing practice. Opportunities are provided to actively participate in various community settings and areas of service. Prerequisites: enrollment in BSN program; evidence of valid RN license to practice in Iowa.

Practicum in Nursing (3).
.Fall, Spring
An intensive clinical practicum in which the student will manage a client workload with all of its duties and responsibilities with the guidance of a professional nursing mentor. Students will work in a local area health care system, with an emphasis on learning while serving. Prerequisite: permission of instructor.

390 Professional Practice Development (3) Spring Theories and concepts in leadership and management are examined which impact the professional practice setting. Political, economic, and psychosocial issues and trends affecting nursing and health care are analyzed along with issues in professional practice and education. The ability to conceptualize issues and apply critical thinking, theoretical reflection, and serviceable insight into the life of contemporary society is facilitated. Prerequisite: enrollment in BSN program. [Cross-listed: CORE 317]

\section*{Philosophy}

General Major-

General Minor- CORE 200; five elective courses in philosophy. Studies 310 or 312.

CORE 200; Philosophy 301, 302, 303, 304, 309; five elective courses in philosophy; electives may include Engineering 390 and/or one course from Political

An introduction to the study of logic, both deductive and inductive, focusing on its systematic, philosophical, and historical development.
\(\qquad\)
A study of the aesthetic dimension of creation, the nature and qualifying function of artistic activity, and artifacts, and an introduction to general aesthetic theory and its history. Prerequisite: CORE 200.

281- Service-Learning (1-3)
Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."

301 Ancient Philosophy: The Dawn of Western Thought (3)
Fall Odd
A study of the pagan roots of the thought patterns that shape our contemporary world. Designed for students interested in the philosophical and historical origins of our modern scientific culture. Readings in primary sources and a paper.

302 Medieval Philosophy: Medieval Roots of Modern and Contemporary Thought (3)...... \(\qquad\) Spring Even A study of the medieval thought patterns that shaped our contemporary world. Designed for students interested in the history of philosophy, theology, and science. Readings in primary sources and a paper.

303 History of Modern Philosophy (3) Fall Even
A survey of philosophical problems and movements in the Western world from the end of the 15 th century to the middle of the 19th century. Readings in primary sources.

304 History of Contemporary Philosophy (3)
Spring Odd
A survey of philosophical problems and movements in the Western world from the middle of the 19th century to the present. Readings mainly in primary sources.

309 History of Christian Philosophy (3)
Fall Even
An analysis of the origin and development of Christian philosophy since the Reformation, in the context of Western thought. Prerequisite: CORE 200. Philosophy majors are advised to complete the history of philosophy sequence before taking Philosophy 309.

310 Systematics of Christian Philosophy (3)
Spring Odd
In-depth study of selected topics in the systematic philosophy of 20th century Christian philosophers. Specific attention will usually be given to the conceptions of such people as Dooyeweerd, Stoker, Vollenhoven and/or those who follow in their line. Prerequisite: CORE 200.

320 Philosophy of the Social Sciences (3)
Fall
A study of contemporary views of society (e.g., behaviorism, symbolic interactionism, neo-Marxism), of the philosophical foundations of the social sciences and their methods, and of current attempts on the part of Christians to address these matters. Prerequisites: CORE 200; preferably junior or senior standing, with at least one course in economics, psychology, sociology, or political studies.

Philosophy of the Environment (3)
Fall Even
A historical and systematic study of the structure and normed character of the various relationships between human beings and their environment. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Environmental Studies 333]
341- Special Topics (3)

\(\qquad\)
 Occasional
348 Each of these courses is designed to be a special interest course utilizing individual instructor strengths, interests, and competencies. Each topic will be concerned with material not usually treated to any great extent in regularly scheduled courses.
350 Philosophical Anthropology (3) \(\qquad\) Fall Even A survey of different non-Christian views about the nature, place, and task of man, and a study of the main themes of a Christian theory of man. Prerequisite: CORE 200. Open to juniors and seniors in all disciplines.

\section*{Physical Science}

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" on pages 108-130.

\footnotetext{
201 Perspectives in Physical Science (3) Spring Even Historical, philosophical, and theological perspectives on the physical sciences are discussed and developed. The historical and contemporary roles of Christianity and other influential forces in science are considered. Prominent positions in the philosophy of science are examined. Aspects of the complex interactions between Christian faith and the physical sciences are discussed. Prerequisites: CORE 200; completion of the Natural Science requirement that must include at least one physical science (Astronomy, Chemistry, Physics, or CORE 220-229) course. [Cross-listed: CORE 315]
}

\section*{Physics}

General Major- Physics 201, 202, 203, 325, 326, 331, 335, 336; Physical Science 201; Chemistry 103, 104; Mathematics 112, 113, 201, 204; two courses (including at most one 200-level Mathematics course) chosen from the following list: Physics 206, Chemistry 333 , Engineering 202, Mathematics 203, 206, 209, 212, 304, 311, 315.

> General Minor-
> Physics 201, 202, 203; one course from Physics 325, 326, 331, 335. (Note: Mathematics 112, 113 are pre- or corequisites for Physics 201, 202, 203; Mathematics 201, 204 are prerequisites for Physics \(325,326,335\); Chemistry 103, 104 are prerequisites for Physics 331.)

For descriptions of SECONDARY majors, minors, and teaching endorsements, see the "Teacher Education Program" section on pages 108-130.

115 General Physics I (4)..........................................................................................................................Fall
An introduction to the study of the physical aspect of reality. Topics covered include mechanics, kinetic theory, heat, and thermodynamics. Three lectures and one laboratory per week.
116 General Physics II (4) ......................................................................................................................Spring

201 Introductory Physics I (4)
Fall
An introduction to the study of the physical aspect of reality for students intending to continue in the physical sciences and engineering. Linear and rotational kinematics and dynamics, statics, and gravitation will be covered. Three lectures and one laboratory period per week. Pre- or corequisite: Mathematics 112 .

202 Introductory Physics II (4)
Spring
Continuation of Physics 201. Topics covered include fluid, oscillations, waves, heat and thermodynamics, and electricity. Three lectures and one laboratory per week. Prerequisite: Physics 201. Pre- or corequisite: Mathematics 113.

203 Introductory Physics III (4) Fall
Continuation of Physics 202. Topics covered include magnetism, Maxwell's equations, optics, quantum physics, and topics in modern physics. Three lectures and one laboratory per week. Prerequisite: Physics 202.

206 Linear Circuits and Electronics (4) Fall
Assumes a prerequisite knowledge of DC electrical circuits including the definitions of electrical quantities, circuit elements (sources, resistors, capacitors, inductors), understanding of Kirchhoff's laws and basic concepts in AC circuits such as frequency and phase. Topics in this course include general linear circuit analysis including Norton's and Thevenin's theorems, superposition, nodal and loop analysis, natural and forced responses in RLC circuits, and sinusoidal steady state analysis. The course also gives introductions to operational amplifier circuits, single stage BJT transistor circuits and steady-state balanced 3-phase power calculations. The lab includes a formal design project. Prerequisite: Engineering 104 or Physics 116 or 202; Corequisite: Mathematics 204. [Cross-listed: Engineering 220]

281- Service-Learning (1-3)
.Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
325 Classical Mechanics (4)
..Fall Even
Lagrangian and Hamiltonian dynamics, general rigid body motion, theory of vibrations and waves, planetary motion, and chaos are studied. Prerequisites: Physics 202; Mathematics 201, 204.

Electromagnetic Theory (4)
Spring Odd
Review of vector calculus; divergence, curl, Gauss' and Stoke's theorems; electro- and magneto-statics; polarization, boundary conditions, Laplace and Poisson equations, magnetic vector potential, energy, Maxwell's equations for time-varying fields, wave propagation, Poynting's theorem. Prerequisites: Physics 203; Mathematics 201, 204. [Cross-listed: Engineering 326]
331 Thermodynamics and Statistical Mechanics (3) ..... Fall OddHeat, the laws of thermodynamics, thermodynamic generating functions, Maxwell's relations, kinetic theo-ry, partition functions, and classical and quantum statistics. Prerequisites: Chemistry 103, 104; Mathemat-ics 112, 113; Physics 115, 116 or Physics 201, 202, 203. [Cross-listed: Chemistry 331]
335 Modern Physics I (4) ..... Fall Odd
Developments in modern physics: special relativity, atomic nature of matter and electricity, wave and par- ticle aspects of electrons and light, quantum theory and applications. Three lectures and one laboratory period per week. Prerequisites: Physics 203; Mathematics 201, 204.
(3)Spring EvenContinuation of Physics 335. A continuation of quantum theory and applications to the study of atomicand molecular structure, condensed matter physics, particle and nuclear physics. Three lectures per week.Prerequisites: Physics 335; Mathematics 201, 204.341- Special Topics (3)
\(\qquad\) Occasional348 These courses cover areas in physics not already discussed in other courses. They are special interest coursesoffered on the basis of student demand and instructor background and availability. The prerequisite(s) willdepend on the topics covered.
391- Individual Studies (1-3) \(\qquad\) .Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Political Studies}

\author{
General Major- \(\quad\) Political Studies 201, 202, 210, 214, 245 or 333, 310 or 312, 319, 370; Political Studies 322 or Criminal Justice 323; Political Studies 373 or 393. A preapproved off-campus program can substitute for Political Studies 373 or 393.
}

\section*{General Minors-}

Political Studies: Political Studies 201, 202, 210, 310 or 312, 333, 370; one from Criminal Justice 305, Economics 321, Political Studies 373, Sociology 216.

International Politics: Political Studies 201, 210, 312, 370; Economics 321 or Theology 322; History 225 or 319 or an off-campus international program pre-approved by department. [Note necessary prerequisites for non-departmental courses.]

Public Policy and Administration: Political Studies 201, 202, 214, 245, 333; one from Agriculture 290, Biotechnology 213, Communication 228, Criminal Justice 302, Economics 315, Political Studies 373, Sociology 216, depending on vocational goals/interests. [Note necessary prerequisites for non-departmental courses.]

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" on pages 108-130.

201 Introduction to Politics (3)
Spring
An introduction to the political dimension of life from a biblically-oriented perspective. Examines the components (political culture, ideology, institutions, etc.) that shape and direct the principles and practice of politics in the contemporary world. Special attention is given to a major world issue (e.g., nuclear arms) to stimulate students to develop a Christian political consciousness. [Cross-listed: CORE 262]

202 American National Politics (3) Fall
A general introduction to the American political process-its foundations, external influences, institutions, political actors, and policymaking. [Cross-listed: CORE 264]

210 International Relations (3) ..................................................................................................................Fall
An introduction to the contemporary relations among states with a consideration of the issues of war and peace, international organizations, law, integration, political economy, interdependence, and relations among the superpowers.

214 Community Politics (3)
Spring Even
Provides a basic introduction to the political process at the state and municipal level, examining the role of the individual citizen, various groups, and governmental institutions. Attention is given to the special policy needs at the state and community level, their links with the federal government, and the particular character of local politics.

245 Introduction to Public Administration (3) Fall Odd Provides an introduction to the interdisciplinary field of Public Administration. Subjects to be considered include the role of the public service in society, public service values and ethics, accountability and political control of the public service, the budgetary process, organizational forms in government, human resources, principles of public management, and new forms of delivering government services.

281- Service-Learning (1-3)
Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
310 Foundations of Political Thought (3)........................................................................................Fall Even
A study of the emergence and development of political thought, examining the contributions of Plato, Aristotle, Augustine, Aquinas, and others through the use of both primary and secondary sources.

312 Contemporary Political Ideologies (3) ........................................................................................ Fall Odd
Explores the competing views of the social order embodied in the major ideologies and movements of the 20th century; topics such as liberalism, conservatism, democratic socialism, feminism, environmentalism, and other contemporary variations are discussed.

319 Modern Middle East (3) Spring Odd
An in-depth study focusing especially on developments in the Middle East during the twentieth century. Topics to be examined include de-colonization; "modernization" and the tension between western ideologies and Islam; Palestine, Israel, and the peace process; regional and global relations during and after the Cold War; the impact of the oil economy; urbanization; gender and family relations; and contemporary issues like water resources, ethnic conflict, human rights, and leadership change. Prerequisites: CORE 140; History 212; or by permission of instructor. [Cross-listed: History 319]
322 American Constitutional Law (3). Spring
The American Constitution as interpreted by the Supreme Court. An analysis of leading cases contributing to an understanding of both the historical development of constitutional law and the recent developments in constitutional law in reference to civil liberties. Prerequisite: junior standing or by permission of instructor. [Cross-listed: Criminal Justice 322]

333 Public Policy (3)
Spring
Provides a general introduction to the public policy process in the United States, including an exploration of the socioeconomic and cultural context, the defining characteristics of the political system, and various phases in the policy process. Special attention is given to selected policy issues such as energy and the environment, criminal justice, poverty, health care, and immigration.

341- Special Topics (3)
Occasional
348 Each of these courses is designed to be of special interest and value to students utilizing strengths and skills of individual instructors. Each topic is concerned with material not normally treated in depth in regularly scheduled courses.

370 Global Security Issues (3)
Spring Odd This seminar course examines the challenges facing world security in the twenty-first century, including arms proliferation, ecological threats, economic globalization, ethnic conflict, resource scarcity, political economy, and human rights.

Field Experience in Politics (3) Fall, Spring Students complete a limited field experience in a politics-related area. The experience is aimed at providing exposure to the type of activities in which political studies graduates are likely to be involved as professionals. Three hours of course credit is to be based on the completion of 8-10 hours on the site per week plus one hour of work determined in consultation with the supervising member of the political studies department for 14 weeks. Deadline for application for the spring semester is November 1; deadline for the fall and summer semester is April 1. Prerequisites: political studies minor or major; junior or senior standing; approval of the department.

391- Individual Studies (1-3) \(\qquad\) .Fall, Spring, Summer See "Individual Studies" section of "Academic Offerings."

\section*{Psychology}

General Major- Foundation (common to both emphases): Psychology 201, 202, 230, 366, 384; Mathematics 107.

Students must select one of the following emphases:
General: Foundation; six psychology electives (17 or more credits), at least two of which must be at the 300 -level.

Clinical: Foundation; Psychology 224, 370, 371, 376, 378; one 3- or 4-credit psychology elective.
The department encourages students to either plan an off-campus semester or double major in another program (e.g., Spanish, Business, Communication, Criminal Justice, Youth Ministry).
General Minor- \(\quad\) Psychology 201, 202, 204, 224; three psychology electives ( 9 or more credits).
For descriptions of the ELEMENTARY fields of specialization, see the "Teacher Education Program" section on pages 108-130.

\begin{abstract}
201 Introduction to Psychology (3) \(\qquad\) Fall, Spring This course introduces major subfields within psychology including consciousness, memory, development, social influences, personality, mood disorders, therapy, schizophrenia, and homosexuality. As the study of individual humans, psychology reveals a great deal about the grace and sin at work in our thoughts, feelings, behaviors, and relationships. Consideration is given to various philosophical presuppositions underlying contemporary psychology, and an attempt is made to understand various problems in terms of a biblical view of humans.
\end{abstract}

202 Psychological Studies (3)...............................................................................................................Spring This course is designed to deepen students' appreciation for the field of psychology as a means to learn about human beings, to develop students' selfinsight and professional skills, and to strengthen their desire for service in God's Kingdom. Major topics include career preparation and planning, clinical interviews and testing, psychology research, and service learning. Pre- or corequisite: Psychology 201.

204 Lifespan Development (3)
Fall, Spring
This course studies the growth and maturation of persons throughout the entire lifespan, including examination of physical, cognitive, personality, social changes, faith development, and other developmental tasks. This course will also focus on evaluating the theoretical issues and descriptive information portraying the growth of an individual from conception through late adulthood. Students will develop a Biblicallyinformed vision of who we are as image-bearers of God and what it means to be humans living in God's creation. [Cross-listed: CORE 251]

210 The Social Psychology of Persons (3)
Fall, Spring
We influence and are influenced by culture, social structures, groups, personality, family, and the media, just to name a few. Studying the situational and personal/interpretive factors that influence an individual's social behavior can reveal new insights about the grace and sin at work in our relationships and social situations. Utilizing a Biblical perspective on the social psychology of persons, this class will explore how we can function as faithful Christians within all of these situations. [Cross-listed: CORE 252, Sociology 210]

218 Biopsychology (3).................................................................................................................................Fall emphasis will be on relating brain and nervous system functioning with basic psychological processes, such as motivation, emotion, sleeping, learning, memory, and abnormal behavior. In addition, several topical areas will be addressed, including alcohol dependence, drug addiction, homosexuality, physiology of sexual differences, and a Christian perspective on the mind-body-soul dilemma. Prerequisite: Psychology 201 or Biology 201.

224 Psychopathology (3) \(\qquad\) Fall, Spring
This course examines the development and symptoms of emotional and behavioral problems. Topics covered include the clinical assessment of affective disorders, schizophrenia, personality disorders, psychosomatic disorders, anxiety disorders, and the process of adjustment to stress. Attention will be given to personality, social, and religious factors, and their role in mental health. Prerequisite: Psychology 201 or 204 or 210.

230 Research Methods (3)...................................................................................................................Spring
This course introduces students to the research process, including formulation of hypotheses, design, interpretation, and communication of results. The course will include a review of statistical procedures with an emphasis on selection and interpretation of analyses and an introduction to computer data analysis with SPSS. Methods of research are discussed from a reformed, Christian perspective. Students complete research proposals. Pre- or corequisites: Psychology 202; Mathematics 107.

Ethics (1)
Spring
This seminar course considers the American Psychological Association's published "Ethical Principles of Psychology" and the practical application of those standards in reallife situations. Students also wrestle with how those standards fit with Christian ethics and the complexities of practice in a diverse social context. Prerequisites: Psychology 201, 202.

281- Service-Learning (1-3) Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."

341- Special Topics (3) ..................................................................................................................Occasional
348 Each of these courses is designed to be a special interest course utilizing individual instructor strengths and interests. Each topic will be concerned with material not usually treated to any great extent in regularly scheduled courses.

362 Cognitive Psychology (4)
Spring Even
A survey of contemporary research and theory on human cognition and higher mental functioning approached from an information-processing perspective. Topics include attention, concept formation, perception, language, mental representation, and problem solving. Students will be challenged to critique both theory and research methods from a reformed, Christian perspective. Two lectures and a two-hour lab each week. Prerequisite: junior or senior standing.

364 Learning: Theory and Application (4)
Spring Odd
The study of the basic processes of conditioning and learning and the major theories, research, and applications associated with learning issues. The main areas to be examined include both human and animal models of learning. Activities, discussions, and lab work will be directed to the application of these concepts to behavioral research with animals, as well as clinical, educational, and other applied settings for humans. Students will be challenged to critique both theory and application from a reformed, Christian perspective. Two lectures and a two-hour lab each week. Prerequisite: junior or senior standing.

366 Senior Research Project (4) Fall This highly interactive course develops students' collaborative, cognitive, and communication skills as they design, conduct, and present psychological research as a service to campus or community groups. We also consider tensions that face Christian psychologists as they conduct research and enter the profession of psychology. Our weekly labs involve opportunities to practice new learning in a justin-time approach that prepares students for the next step in their own research.. Satisfies core writing-intensive requirement. Prerequisite: Psychology 230.

Helping Skills (3) Spring Class focus is on developing the foundational interpersonal and helping skills required for psychology students interested in human service practice. Topics include active listening, attending, problem-solving, challenging, brainstorming, and group counseling skills. The course is organized around an experiential
learning model and students are given feedback on their helping skills. Prerequisites: Psychology 224; junior or senior psychology major or minor.

371- Field Experience in Psychology (3)
Fall, Spring
372 The field experience is designed to provide a sample of the type of activities in which psychologists and other human service professionals are engaged; it is not intended to develop competence to the level of a beginning practitioner. Requirements include the completion of eight hours on site per week plus one hour of consultation with psychology department supervisor. Deadline for application for the spring semester is November 1 ; deadline for the fall (and summer) semester is April 1. Prerequisites: Psychology 224; junior or senior standing; approval of department. Psychology 370 strongly recommended

374 Counseling Theories (3).
Fall Odd
This introductory course in counseling theory emphasizes the dynamics of the counseling process and characteristics of the counseling relationship in the light of biblical directives concerning human nature, purpose, responsibility, and conduct. Prerequisites: Psychology 224; junior or senior standing.

376 Personality Theories (3) \(\qquad\) .Fall Even A comparative analysis of the major theoretical perspectives on personality in the field of psychology, including psychoanalytic, trait, learning, cognitive, humanistic, and existential views. Significant topic areas include disorders of personality, the principles and methods used to assess personality, and a reformed anthropological model of personality. Prerequisites: Psychology 224; junior or senior standing.

Tests and Measurement (2). Spring
Course covers basic psychometric theories, principles of test construction, and a survey of common personality, achievement, and intelligence tests. Prerequisite: Psychology 224.

382 Health Psychology (3) \(\qquad\) Spring Even Survey course examines the contributions of psychology to the understanding, prevention, and treatment of a variety of health concerns. Topics include stress, pain management, cancer, eating disorders, exercise, and health promotion. Prerequisites: Psychology 218 or 224; junior or senior standing; or by permission of instructor.

384 History of Psychology and Worldview (3) Fall
A brief study of the historical development of psychological theories from the ancient world to the present, with extended treatment given to major contemporary movements or perspectives in psychology (such as psychoanalysis, behaviorism, and humanism) and to recent attempts by Christians to "integrate" theology and psychology. Prerequisites: CORE 200; Psychology 201; senior standing. [Cross-listed: CORE 324]

\section*{Social Work}

The social work program is built upon a strong liberal-arts base and foundational courses in the social sciences. The program is designed to equip students with the requisite knowledge and skills for beginning social work practice. The program is fully accredited by the Council on Social Work Education (1986). Admission to the social work program and completion of the major will require a formal two-part application process. Graduates will receive the bachelor of social work degree.

Admission to the Program Application for admission to the program is required and should be filed during the spring semester of the sophomore year prior to spring break. Forms may be obtained from the chairperson of the Social Work Program Committee. The Social Work Program Committee reviews completed application forms, and admission to the program is based on the following criteria:
- A minimum cumulative grade point average of 2.20 ; completion of at least 39 credits; completion of or current enrollment in CORE 120 or English 100, CORE 140, 150, 160, 180, 212, Psychology 201, Sociology 201, Mathematics 107, CORE 200, Communication 100, Economics 200 or Political Studies 201, Social Work 215, 216, 200, and 226.
- A written statement of personal interest that indicates an ability to communicate effectively and a commitment to social work as a vocation.
- A letter of reference indicating acceptable physical and psychological health.
- Enrollment in practice courses is limited to students who have been admitted to the program.

Upon review of the application, the committee will take one of the following actions:
- Accepted-meets all criteria
- Accepted conditionally-some criteria require further attention.
- Denied - some or all criteria inadequate.

The student will receive written notice of status.
Admission to the Professional Semester The second part of the application process is an application to participate in the professional semester that includes an intensive field work experience. This application should be filed during the spring semester of the junior year, prior to spring break. Forms may be obtained from the chairperson of the Social Work Program Committee. The Social Work Program Committee will review the application, and admission to the professional semester will be based on the student's meeting the following criteria:
- A minimum cumulative grade point average of 2.50 .
- Completion of the required courses as listed under the major.
- Senior standing (anticipated).
- Two letters of reference (one academic, one professional) indicating acceptable physical, intellectual, and psychological suitability.
- A written statement that demonstrates acceptable communication skills and a mature and knowledgeable interest in social work.
- An interview that demonstrates the student's suitability to social work in terms of interest, knowledge, maturity, personality, and physical and mental health.

Upon review of the application, the committee will take one of the following actions:
- Accepted-meets all criteria.
- Accepted conditionally-some criteria require further attention.
- Denied - some or all criteria inadequate.

The student will receive written notice of status.

The Social Work Program Committee reserves the right to refuse admission or continuation in the program, to any student who does not maintain a 2.50 grade point average, or who, in the judgment of
the committee, has physical, mental, or personality handicaps that would be detrimental to the student and/or to the welfare of the clients to be served.

Academic credit for life experience or previous work experience shall not be given, in whole or in part, in lieu of the field practicum or of the courses in the professional foundation areas.
Course Requirements, B.S.W. - Social Work ProgramCore Program (see page 34) Social Work majors must complete all of the core program requirementsfor students seeking a bachelor's degree, with the following guidelines:- Social Work majors must take CORE 212 as part of the natural science requirement.- Mathematics 107 (Elementary Statistics) meets the mathematics requirement.- Spanish is the recommended foreign language.
Major (54 credits)
Social Work 200 (3) ..... Freshman
Social Work 215 (3) Freshman or Sophomore
Social Work 216 (3) Freshman or Sophomore
Social Work 226 (3) Sophomore
Mathematics 107 (3) Junior
Social Work 303 (3) ..... Junior
Social Work 309 (3) ..... Junior
Social Work 310 (3) ..... Junior
Social Work 311 (3) ..... Junior
Social Work 315 (3) ..... Junior
Social Work 307 (3) ..... Senior
Social Work 304 (3) ..... Senior
Social Work 312 (3) ..... Senior
Social Work 325 (3) ..... Senior
Social Work 374 (12) ..... Senior

Note: Social Work 374 (Field Work Experience) must be taken at Dordt College to receive graduation credit toward the social work major.

200 Introduction to Social Work (3) ........................................................................................................Fall
A survey of the major fields of social work practice and of the problems with which they deal. It will include agency field visits. Overarching this survey will be a concern for the Christian's individual and collective responsibility for the health and welfare of his neighbor and community.
\[
215 \text { Vulnerable Populations (3)................................................................................................................Spring } \text {. }{ }^{\text {A historical and contemporary analysis of groups considered vulnerable by economic and social standards }} \text { in American society. Causes, consequences, and implications for society are examined from a biblical view } \quad \text { of humankind with an emphasis on social work practice. [Cross-listed: Sociology 215] }
\]

216 Diversity and Inequality (3) Fall Students examine the historical and contemporary factors related to diversity and inequality in North

America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and we explore how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: CORE 276, Sociology 216]

The History and Philosophy of Social Welfare and Social Work (3). Spring Examines the history and development of social welfare and the philosophy, theory, and practice of social work as a response to the health and welfare needs of society.

Service-Learning (1-3)
.Fall, Spring, Summer
See "Individual Studies" section of "Academic Offerings."
303 Child and Family Welfare Policy (3)
Spring
A study of child and family welfare policy and practice including an analysis of how society's ideological, political, and economic concerns affect agency organization and practice. Prerequisite: junior standing or by permission of instructor.

304 Aging and Social Work (3)
Fall
An in-depth examination of the myths and realities of aging in Western culture. Combining sociological theory and practice, this course introduces the student to ageism, physiological and psychological change over time, and theories of social gerontology as well as current issues such as health policy, retirement, the extent of family support, institutionalization, and the aged in the political arena. Will include field work assignments with older persons, guest speakers, and site visits to programs for the aging. Prerequisite: senior standing or by permission of instructor.

307 Methods of Social Science Research (3) Fall
An introduction to the research process as applied to the study of problems/issues in social science. Problem selection, research design, measurement, methods of observation and data collection, data analysis and interpretation, and report writing will be emphasized. A module on microcomputer utilization and the application of descriptive statistics is presented for application in student projects. Prerequisites: Mathematics 107; junior or senior standing. [Cross-listed: Sociology 307]

309 Human Behavior and the Social Environment (3) Spring Presentation of a theoretical and conceptual framework for understanding socio-psycho-biological factors in human development across the life cycle. The focus is on the interrelationship between the individual, family, small groups, and society. Prerequisites: CORE 212, 261; Psychology 201.

310 Fundamentals of Social Work Practice (3)
Fall
The focus is on acquiring the foundation interpersonal and problem-solving skills for social work practice. Development of self-awareness and self-knowledge related to growth in skills and a beginning identity as a social work professional will also be emphasized. The course is organized around experiential learning models. Prerequisites: Social Work 200, 215; English 100 or CORE 120; Communication 100.

311 Practice Methods I: Social Work with Groups (3)
Spring
An overview of general systems theory as a basis for developing an integrated social work practice model. Special emphasis will be given to the development of problem-solving skills related to groups found within social work practice with a variety of intervention strategies presented. Prerequisite: Social Work 310.

312 Practice Methods II: Social Work with Organizations and Communities (3) ....................................Fall This course explores social change and organizational theories along with an emphasis on practice at the organizational and community level. A continuation of Social Work 310 and 311 with an emphasis on practice at the agency and community levels. Prerequisites: Social Work 310, 311.

315 Social Welfare Policy (3)
Fall Students work within a social welfare policy analysis framework that allows their critique and development of recommendations for current and past social welfare policies. The course explores both faith-based and secular attempts at addressing social problems through policy. Two special features within this are the analysis of welfare reform within the United States and political advocacy. Prerequisites: Social Work 226; Political Studies 201.

325 Integrative Seminar in Social Work (3) Spring
An opportunity for students to reflect on and integrate the academic and field work experience with a special emphasis on ethical and value dilemmas confronted by the student in the field. (Open only to senior social work majors who have completed the professional semester admission process.) Prerequisite: concurrent enrollment in Social Work 374.

374 Field Work Experience (12)
Spring
The field work course is designed to provide the student with the opportunity to apply classroom knowledge, principles, and skills in a community agency under the supervision of a professional social worker. (Open only to senior social work majors who have completed the professional semester admission process.) Prerequisite: concurrent enrollment in Social Work 325.

391- Individual Studies (1-3)
.Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Sociology}

General Minor- Sociology 201, 210, 215, 216; two courses from Criminal Justice 101, Mathematics 107, Philosophy 320, Social Work 200, 226, Sociology 302, 305, 307.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" on pages 108-130.

201 Sociology and Social Justice (3)
Fall, Spring
Includes an examination of culture, socialization, social structure, group behavior, and inequalities (of class, race, and gender), as well as identifying and analyzing the pressing problems in our world that requires an understanding of social change that occurs through collective action and social movements. Through an exploration of predominant sociological theories, students are able to contrast those with a biblical worldview that challenges them to articulate how a reformed Christian understanding of creation (and norms) sin, redemption, and consummation may be used to positively affect social interaction, organizations, and institutions. [Cross-listed: CORE 261]
202 Criminology (3) ..... FallA theory-based course that studies crime causation, typologies of crime, and crime control. It looks at bothhistorical and modern theories, including those that look to individual, social, and structural causes. It alsobroadly analyzes the guardianship and enforcement functions of the criminal justice system. Students willbe able to identify criminology theories in modern media and engage in theory-building exercises. Prereq-uisite: Criminal Justice 101 or by permission of instructor. [Cross-listed: Criminal Justice 202]
210 The Social Psychology of Persons (3) ..... Fall, SpringWe influence and are influenced by culture, social structures, groups, personality, family, and the media,just to name a few. Studying the situational and personal/interpretive factors that influence an individual'ssocial behavior can reveal new insights about the grace and sin at work in our relationships and social situ-ations. Utilizing a Biblical perspective on the social psychology of persons, this class will explore how wecan function as faithful Christians within all of these situations. [Cross-listed: CORE 252, Psychology 210]
215 Vulnerable Populations (3) ..... Spring
A historical and contemporary analysis of groups considered vulnerable by economic and social standardsin American society. Causes, consequences, and implications for society are examined from a biblical viewof humankind with an emphasis on social work practice. [Cross-listed: Social Work 215]
216 Diversity and Inequality (3) ..... FallStudents examine the historical and contemporary factors related to diversity and inequality in NorthAmerica and increase their appreciation for the contributions of diverse groups in culturally-pluralistic so-cieties. The course assumes that human diversity is created good and we explore how to discern that good-ness after the Fall. Students assess their own biases in light of course material and increase their sensitivityto diversity. [Cross-listed: CORE 276, Social Work 216]A sociological study of contemporary marriage and family within a Christian sociological perspective thatincludes an analysis of how society affects family and marriage. The course actively seeks to place currentissues and themes within a Christian perspective (sex roles, sexuality, work and marriage, divorce, remar-riage). Prerequisite: junior or senior standing or by permission of instructor.
305 Victimology and Family Violence (3) ..... SpringThe victimology section will look at the various harms suffered due to crime, how victims interact with vari-ous agencies and players, public reaction to victims, the victims' rights movement, and how to better servethe victims of crime through our criminal justice system. We will also identify and describe the problem,measure its true dimensions, and review evidence and hypotheses of victimologists. In the Family Violenceportion, theories on family violence will be analyzed, the consequences of family victimization will be con-sidered, as well as how to recognize child abuse and understand the dynamics of partner violence. We willanalyze legal and enforcement responses, consider how institutional responses can prevent or lessen revic-timization, and look to how a Restorative Justice model can alleviate some of the harms of victimization.Prerequisite: junior standing or by permission of instructor.. [Cross-listed: Criminal Justice 305]
lem selection, research design, measurement, methods of observation and data collection, data analysis and interpretation, and report writing will be emphasized. A module on microcomputer utilization and the application of descriptive statistics is presented for application in student projects. Prerequisites: Mathematics 107; junior or senior standing. [Cross-listed: Social Work 307]

341- Special Topics (3)
Occasional
348 Each of these courses is designed to be a special interest course utilizing individual instructor strengths and interests. Each topic will be concerned with material not usually treated to any great extent in regularly scheduled courses.

391- Individual Studies (1-3) \(\qquad\) .Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Spanish}

General Major-

General Minor-

Spanish 200/201, 204, 206, 300, 301, 302, 304; Linguistics 201; two courses from Spanish 102, 208, 341-348, 393; four semesters of Spanish conversation 251258; six credits in study-abroad courses are required. (Total number of credits: 40-41)

Spanish 200/201, 204, 206, 300, 301, 302; three semesters of Spanish conversation 251-258. Three credits in study-abroad courses are required. (Total number of credits: 24-25)

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 108-130.

101 Elementary Spanish I (4) .......................................................................................................................Fall of oral and written language skills in a communicative context combined with the study of Hispanic cultures. The course includes a weekly session with advanced students or native speakers to practice oral skills.

102 Elementary Spanish II (3). Spring
Continuation of Spanish 101. The course includes a weekly session with advanced students or native speakers to practice oral skills. Prerequisite: Spanish 101 or our on-line placement test score of 296-360.

200 Accelerated Spanish (4).........................................................................................................................Fall ing skills, and an understanding of Hispanic cultures. Besides the language learning, emphasis is placed on the blessing of cultural diversity, through cultural understanding and sensitivity to other people's values and beliefs and a comparison of other cultures with our own culture in light of the cultural mandate. This course will fulfill the cross-cultural requirement as it moves from Spanish 101-102-201. Prerequisite: two or more years of high school Spanish; a placement score of 0-295.
201 Intermediate Spanish (3) ..... FallAn intermediate course that continues the study of the language in a communicative context with con-siderable emphasis upon precision and expansion of linguistic skills. Some attention given to the natureof language. Emphasis on the development of cultural understanding and sensitivity, with a study of thepeople's values and beliefs as expressed in their economic, political, and religious systems. Comparison ofthis culture with our culture in the light of the cultural mandate. Prerequisite: Spanish 102 or our on-lineplacement test score of 361-439.
204 Literary and Cultural Readings (3) ..... Spring
Designed to strengthen speaking, listening, reading and writing skills in Spanish through a variety of read- ings, to develop the ability to value diverse communities and an appreciation for Hispanic cultures and literature. This course will be conducted in Spanish. Prerequisite: Spanish 200 or 201.
206 Hispanic Cultures and Civilizations (3) Spring
Designed to give insight into Hispanic cultures and civilizations, and a more global understanding of the issues and challenges that the Spanish-speaking world has faced and is facing. Listening and speaking abili- ties will be enhanced through classroom activities. The course will be conducted in Spanish. Prerequisite: Spanish 204 or equivalent or by permission of instructor.
207 World Literature I (3) ..... Fall Odd
See English 207.
208 World Literature II (3) Spring EvenSee English 208.
251- Conversation (1) ..... Fall, Spring
258 Designed to give the student practice in listening and speaking. The content of the courses will be altered eachyear. The class will meet two times each week. (Graded on a pass/no record basis.) Prerequisite: Spanish 200or 201 or by permission of instructor.
281- Service-Learning (1-3) Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."300 Advanced Spanish Grammar and Composition I (3)Fall OddThis course includes an in-depth study and practice of Spanish grammar and a rigorous component in writ-ing. Emphasis is given to more complex grammatical structures that tend to present difficulties for learnersof Spanish as a foreign or second language. The course will be conducted in Spanish. Prerequisite: Spanish204 or 206 or by permission of instructor.
301 Spanish Phonology (3) ..... SpringAn application of the principles of general phonology to the sound system of Spanish. The course will beconducted in Spanish. Prerequisites: Spanish 204 or 206; Linguistics 201.
302 Advanced Spanish Grammar and Composition II (3) ..... Fall EvenContinues an in-depth study and practice of Spanish grammar and a rigorous component in writing. Pre-requisite: Spanish 204 or 206 or by permission of instructor.
304 Hispanic Literature (3) Spring EvenAn understanding and a historical introduction to Hispanic narrative, poetry, and drama. A study of eachgenre's origins, major developments, and figurative language will engage students in analytical exercises.An overview of periods, movements, significant authors, and literary currents in Spain and Latin America.This course will be conducted in Spanish. Prerequisites: Spanish 300, 302.
341- Special Topics (3) Occasional
348 The topics for these courses will be chosen from areas of literature, advanced language studies, culture, orteaching methods. The offering of the course as well as the content will reflect student interest and need.Prerequisite: departmental approval.
391- Individual Studies (1-3) \(\qquad\) .Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Theatre Arts}

General Major- Foundation (common to all emphases): Theatre Arts 101, 102, 103, 203, 210, 212, 365, 366, 380; two enrollments in Health, Physical Education, Recreation 34; at least one enrollment in each of Theatre Arts 001, 002, and 003; 100 hours of technical theatre work; (Costume shop and scene shop work study hours and scholarship requirement hours do apply.) Theatre Arts 371-379 recommended. Prerequisite for 001 is senior status. Students should enroll in the course in the fall of their senior year.

Students must select one of the following emphases:
Acting/Directing: Foundation; Theatre Arts 204, 205; English 210, 312; three additional credits from Theatre Arts 001, 002, 003.

Design and Scenic Art:Foundation; Art 201, 202, 225; one from Art 207, 208, 209, 210; two semesters of work in the scene shop; Individual study in design or scenic art recommended.

Drama Ministry: Foundation; Theology 231, 331, 351; Education 262; Theology 254 or 332.
Dramaturgy: Foundation; Philosophy 206; English 312; English 301 or 302; one course from History 280, English 333, Art 207, 208, 209, 210.

Technical Theatre: Foundation; Music 306; Art 202; Theatre Arts 377 in stage lighting; three semesters of work in the scene and/or costume shop; Music 308 or one course from Art 207, 208, 209, 210. Art 225 recommended.

Theatre Management: Foundation; Business Administration 201, 205, 206, 207; Communication 260; Economics 200 or 202. Business Administration 100, English 305, and Theatre Arts 391-393 recommended.

\section*{General Minor- Theatre Arts 101, 102, 103, 210; one course from Theatre Arts 365, 366, English 312; one course from Theatre Arts 204, 205, 212; Theatre Arts 203 or Education 262. \\ For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" on pages 108-130.}

001 Professional Practices (1).................................................................................................................Fall
This course introduces majors to such things as resume writing, portfolio creation, interviewing and auditioning skills. Senior status required.

002- Theatre Production (2-3) .....................................................................................................Fall, Spring
003 Students may apply for two or three hours of academic credit for work on a co-curricular theatre production. Registration for credit is required in the semester in which the project is to be produced. In addition to rehearsal, performance, or technical work, some written work is required.

101 Introduction to Theatre (3).......................................................................................................Fall Even This course will prepare students to study, participate in, and respond to the art of theatre. Students will study a Christian view of the theatre, learn script analysis and interpretation, and also acquire some basic theatrical skills.

102 Fundamentals of Acting (3) Fall Odd
Experience with the fundamental principles of acting-victory, obstacle, tactic, and expectation-as well as development of the skills of relaxation, concentration, physicalization, and character analysis. May not be taken on a pass/fail basis.

103 Stagecraft (3)............................................................................................................................Fall Even An introduction to the theory and practice of stage lighting and set construction techniques, including introductory electrical and color theory.

203 Scenic Design (3).
Spring Odd
An introduction to scenic design that includes design theory, design process, and the technical skills related to scenic design. May not be taken on a pass/fail basis. Prerequisite: Theatre Arts 103.

204 Mask and Movement (3)
Spring Odd
An introduction to stage performance skills that require a focus on the actor's body. Characterization and physical expressivity will be taught by means of training in mask. The course will also introduce stage violence, both armed and unarmed. Training will include regular relaxation and stretching exercises. Prerequisite: Theatre Arts 102.

205 Acting for the Camera (3).
Spring Even
The basic techniques of acting for the camera and strategies for adapting stage-acting methods for the camera. Students will perform on-camera in class and have the opportunity to perfect their craft through critical analysis of their taped performances. Prerequisite: Theatre Arts 102.
210 Directing (3) Fall Odd
A study of some of the problems that are part of the directing process and of the techniques for shaping that process. Students will focus on staging techniques and apply their learning in the direction of a short one-act play. May not be taken on a pass/fail basis. Prerequisite: Theatre Arts 101 or 102 or 103 or by permission of instructor.

212 Voice and Performance Studies (3)
Fall Even
An introduction to performance and voice production as a means of analyzing, appreciating, and celebrating literature. This course expands students' understanding of the relationships between text and performance, voice and performance, literature and human action, and written and oral forms of discourse. Extensive student participation in vocal workouts and individual and group performances is expected. May not be taken on a pass/fail basis.

281- Service-Learning (1-3).............................................................................................Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."

341- Special Topics (3) ....................................................................................................................Occasional
348 Each of these courses is designed to be a special-interest course utilizing individual instructor strengths and interests. Each topic will be concerned with material not usually treated to any great extent in regularly scheduled courses.

365 Theatre History and Literature I: Greek through Neo-Classicism (3)
Spring Even History and representative literature of the theatre, from Sophocles to Moliere. An introduction to the rise, decline, and rebirth of Western drama as well as some forms of Eastern drama. May not be taken on a pass/fail basis. Not recommended for freshman students. Satisfies core writing-intensive requirement.

366 Theatre History and Literature II: Restoration through Present Day (3) \(\qquad\) Spring Odd History and representative literature of the theatre, from Behn to Pinter and Parks. An examination of the birth of modernism, anti-realism, and various forms of postmodernism. May not be taken on a pass/fail basis. Not recommended for freshman students.

371 Applied Theatre-Directing (3)
Fall, Spring
The course content in directing will be designed for each individual in consultation with a departmental supervisor. Work on the project will be done in two or three semesters with enrollment in the final semester. May not be taken on a pass/fail basis. Open only to majors and minors.

Applied Theatre-Acting (3)
.Fall, Spring
The course content in acting will be designed for each individual in consultation with a departmental supervisor. Work on the project will be done in two or three semesters with enrollment in the final semester. May not be taken on a pass/fail basis. Open only to majors and minors.

Applied Theatre-Design (3)
Fall, Spring
The course content in design will be designed for each individual in consultation with a departmental supervisor. Work on the project will be done in two or three semesters with enrollment in the final semester. May not be taken on a pass/fail basis. Open only to majors and minors.

377 Applied Theatre-Technical Theatre (3) \(\qquad\) Fall, Spring The course content in technical theatre will be designed for each individual in consultation with a departmental supervisor. Work on the project will be done in two or three semesters with enrollment in the final semester. May not be taken on a pass/fail basis. Open only to majors and minors.

\begin{abstract}
379 Applied Theatre-Playwriting (3). \(\qquad\) Fall, Spring The course content in playwriting will be designed for each individual in consultation with a departmental supervisor. The course requirements will be met by two or three enrollments, normally in two or three consecutive semesters. May not be taken on a pass/fail basis. Open only to majors and minors.

380 Playwriting and Playscript Analysis (3) .Fall Even This course provides basic instruction in writing dramatic scenes and a one-act play. It also provides advanced instruction in script analysis: theories, genre, style, methods of construction, and the implications for performance. We will read what working playwrights say about their craft, read and discuss the writing of plays of different styles, and workshop our scripts in community.
\end{abstract}

391- Individual Studies (1-3)
.Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{Theology}

General Major- Foundation (common to all emphases): CORE 150; Theology 221, 324, 361.
Students must select one of the following emphases:

Biblical Studies: Foundation; Theology 210, 231; one course from Theology 211-214; one course from Theology 215-217; three additional courses from Theology 211-217 (at least one Old Testament and one New Testament); two courses from Theology 251, \(254,322,323,324,393\), Greek 211; strongly suggested for those hoping to pursue further studies: Greek 111, 112, 211, 212, 241-244; Theology 253; 300-level philosophy courses; History 220; modern foreign languages. (39 credits)

Historical/Systematic: Foundation; Theology 222, 231, 321, 323; one course from Theology 211-214; one course from Theology 215-217; three courses from History 222, 306, 335, Philosophy 301-304, 309, 310, 350 (preferably one from History, one from Philosophy 301-304, one from Philosophy 309, 310, and 350); strongly suggested for those hoping to pursue further studies: Greek 211, 212, Latin 201, modern foreign languages. (39 credits)

Missions and Evangelism: Foundation; Theology 210, 231, 331, 332; two courses from Theology 211-214; two courses from Theology 215-217; one course from Theology 322, 323, 336, 375, History 306. (39 credits)

Youth Ministry: Foundation; Theology 251, 252, 253, 254, 351, 352; Psychology 204; two courses from Theology 211-214; two courses from Theology 215-217; Theology 371, 372, 373 Practicum (nine credit hours); two cognates, chosen from Communication 220, 222, 311, Education 262, History 335, HPER 206, Psychology 210, 224, 370, 374, Theatre Arts 101, 212, Theology 222, 322. (60 credits)

\section*{General Minors-}

Bible Education: Theology 222, 254, 322 or 323; two courses from Theology 211-214; two courses from Theology 215-217. (21 credits)

Biblical Studies: Theology 210; two courses from Theology 211-214; two courses from Theology 215-217; Theology 221 or 324; one additional course from Theology 211-217, 254, 361, 393, Greek 111, 112, 211. (21 credits)

Historic/Systematic: Theology 221, 222; one course from Theology 211-217; two courses from Theology 321, 323, 324; two courses from Philosophy 301-304, 309. (21 credits)

Missions and Evangelism: Theology 221, 231, 331, 332; three courses from Theology 322, 323, 324, 336, 375, History 306. (21 credits)

Admission to the Youth Ministries Program: Formal application for admission to the Youth Ministries program is required. Application should be made to the Theology Department at the end of the Discernment of Ministry (Theology 251) course, which should be taken in the freshman or sophomore year. Application will be based on the various statements developed in this course.

The following are requirements for admission to the youth ministry program:
- Completed application form
- Minimum grade point average of 2.0 in all Theology courses to date
- Students may apply to the Youth Ministry program after their first academic year and must apply before their final academic year.

Once each year the members of the department will discuss each student's fitness to continue in the Youth Ministry program. A majority of the department members must approve a student to graduate with a Youth Ministry degree.

If a student's initial application is not accepted, the student may take additional courses for the major and reapply after each semester or may appeal to the division dean to have three professors outside of the Theology department evaluate his/her application and supporting materials.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" on pages 108-130. foundational course in the theology program to develop Biblical studies and theological writing. Open to all students seeking to develop their reading, understanding, and application of Scripture.

211 Biblical Theology: Old Testament Pentateuch (3) \(\qquad\) Fall, every fourth year This course is an in-depth study of the Torah, the first five books of the Bible, in terms of literature, history, crucial themes, and hermeneutical issues from a literary-historical-redemptive approach to Scripture.

212 Biblical Theology: Old Testament Prophets (3) \(\qquad\) Fall, every fourth year This course is an in-depth study of the Prophets in terms of literature, history, crucial themes, and hermeneutical issues from a literary-historical-redemptive approach to Scripture.

213 Biblical Theology: Old Testament Wisdom and Writings (3) \(\qquad\) Fall, every fourth year This course is an in-depth study of the Old Testament Wisdom books and Writings, in terms of literature, history, crucial themes, and hermeneutical issues from a literary-historical-redemptive approach to Scripture.

214 Biblical Theology: Old Testament and Inter-Testamentary History (3) \(\qquad\) Fall, every fourth year This course is an in-depth study of the Old Testament Historical Writings in terms of literature, history, crucial themes, and hermeneutical issues from a literary-historical-redemptive approach to Scripture and the Inter-testamentary history and writings.

215 Biblical Theology: New Testament Gospels (3) \(\qquad\) Spring, every third year This course is an in-depth study of the Gospels in terms of literature, history, crucial themes, and hermeneutical issues from a literary-historical-redemptive approach to Scripture.

216 Biblical Theology: New Testament Epistles (3) \(\qquad\) Spring, every third year This course is an in-depth study of the New Testament Epistles in terms of literature, history, crucial themes, and hermeneutical issues from a literary-historical-redemptive approach to Scripture.

217 Biblical Theology: New Testament Church History-Acts, Revelation (3) ......... Spring, every third year This course is an in-depth study of the New Testament historical setting and developments in terms of literature, history, crucial themes, and hermeneutical issues from a literacy-historical-redemptive approach to Scripture.

221 History of Christian Confessions (3) Spring A study of the history of the Church's response to God's Word as this response comes to expression in the significant ecclesiastical confessions. Emphasis is placed on the historical context in which the confessions, particularly those of the Reformed churches, were made.

222 Calvin's Institutes (3). Fall
A study and discussion of the mature thought of John Calvin as found in the 1559 edition of his Institutes of the Christian Religion.
231 Foundations of Missions and Evangelism (3) ..... FallA study of the biblical basis for missions and evangelism with a view to developing a theology of mission andrelating this to contemporary problems of missions today.
251 Spiritual Formation (3) ..... Spring
An exploration of how God works in our lives. Through discussion, readings, assessment testing, small group interaction, and spiritual disciplines students will explore how God has been developing their lives for his purpose and mission in the world. Students will analyze their history, personality, gifts, and passions to develop a personal vision and mission statement. This is the foundational course for the Youth Ministry program and open to all seeking God's guidance for their lives.
252 Foundations of Worship (3) Fall Even
A study of the Scriptural foundation for worship and of the components of worship. There will be a brief study of historic patterns of worship, leading to the preparation of liturgies and the practice of worship-leading skills.
253 Engaging Culture (3) ..... Spring Odd
A study of the tools needed to understand the impact of cultural dynamics upon communities of faith and the character of a biblically informed response to this impact in ministry.
254 Teaching Bible to Adolescents (3) ..... Fall OddDiscussion of a Reformed approach to the teaching of Bible. This course includes the study of the nature offaith, adolescent faith development, Reformed hermeneutics, pedagogical skills for teaching the Scriptures,and methods and content of the secondary ( \(7-12\) ) Bible curriculum. The course will cover theological andpedagogical foundations and the practical content of teaching Bible. Prerequisite: admission to the TeacherEducation Program or by permission of instructor. [Cross-listed: Education 261]281- Service-Learning (1-3).Fall, Spring, Summer
283 See "Individual Studies" section of "Academic Offerings."
321 Twentieth Century Theology (3) Fall EvenThis course will survey several important theologians and theological trends from the 20th century, includ-ing liberation theology and other significant schools of thought. Prerequisite: CORE 150.
322 Major World Religions (3) Spring EvenA study of major non-Christian religions of the world including Animism, Hinduism, Shinto, Buddhism,and Islam. Of special concern is the world and life view advanced by each religion and its manifestationsin culture and society.
323 Heresies and Sects (3) ..... Spring OddA survey of various confessional aberrations and consequent rise of different sects. Special attention will begiven to the connections between all of this and the implied anthropologies and views of reality in general,and culture and society in particular.
324 Reformed Theology (3) ..... Fall Odd
This course introduces major thinkers, creeds, and theological trends of the historical Reformed theology. It begins with basic themes of John Calvin, discusses its late 19th century development in the Netherlands and its modern expressions in North America and other places in the world. Students will understand basic themes of the Reformed theology against historical background and reflect them in their cultural setting.

331 History of Missions and Evangelism (3) ............................................................................... Spring Odd
A study of the historical development of missions in the church with a view to understanding the complexity of missions in our times. Consideration will be given to different ecclesiastical traditions and historical paradigms the church has employed in its missionary endeavors. Prerequisite: Theology 231.

332 Current Issues and Strategies in Missions and Evangelism (3). .Spring Even An in-depth study of selected contemporary issues that the church faces in understanding and carrying out her mission in the 20th century. A selection of current issues will be made according to student need and interest. Selection will be made from such topics as contextualization; gospel and Western culture; urban missions; relation of verbal proclamation to social involvement; foundation for missions; unreached resistant and nominally Christian peoples; and tentmaking ministries. Prerequisite: Theology 231.

336 Overseas Ministries Studies Center Seminars on World Mission (1-3) Spring A series of fourteen seminars on world mission held during the first two weeks in January in Madison, Connecticut, sponsored by The Overseas Ministries Study Center in New Haven, Connecticut. These seminars are taught by leading mission scholars from around the world. Limited enrollment and additional fees apply.

337 ECHO Agricultural Missions Conference (1)
Spring
Participation in the major agricultural mission conference held the second week in November in Fort Myers, Florida. The Educational Concerns Hunger Organization hosts this international conference, which focuses on agricultural missions, cross-cultural issues, and community development. Prerequisite: sophomore standing. [Cross-listed: Agriculture 337]

341- Special Topics (3) Occasional
348 These courses will cover a different topic each semester and each is designed to be a special interest course utilizing individual instructor strengths, interests, and competencies. Each course will cover a topic in theology not usually treated in-depth in regularly scheduled courses.

351 Ecclesiology (3)
Fall Odd
Study of a Reformed approach to youth ministry in the context of the congregation. The course includes the study of a Reformed philosophy of youth ministry, the nature of the church, cultural dynamics that affect both youth ministry and the church, and the character of leadership that takes all these factors into account.

Practical Issues in Youth Ministry (3). .Spring Even A study of many youth ministry issues and skills such as vision-building, team-building, small group ministry, evangelism, administration, family ministry, discipleship, and programming.

361 Senior Seminar (3) Spring
This is the capstone course for Theology majors, but it is open to minors also. This course is to help those who have studied in theology consolidate their theological education to focus on contemporary issues in the church and develop the biblical message to address contemporary life in effective public address.

Practicum in Youth Ministry (3-9). .Fall, Spring, Summer
Students will engage in field experience in a youth-ministry-related area under the guidance of both a site and a departmental supervisor. The experience will sample the types of activities included within the parameters of youth ministry. Three hours of course credit will be based on 126 hours of involvement. This course requires instructor permission PRIOR to pre-registration. Deadlines: April 15 for the summer and fall semester, November 15 for the spring semester.
375 Practicum in Mission/Evangelism (1-3) Fall, Spring, SummerA department-approved practicum in the field of missions or evangelism. This may take place during theacademic year or during the summer break. Work equivalent to a three-hour course is required.
391- Individual Studies (1-3)
.Fall, Spring, Summer
393 See "Individual Studies" section of "Academic Offerings."

\section*{College Personnel}

\section*{Board of Trustees}

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Outdoor Athletic Spaces
\begin{tabular}{llll} 
Outdoor Track & 22 & Softball Diamond & 21 \\
& 35 & Tennis Courts & 23 \\
\cline { 4 - 6 } & & &
\end{tabular}
\begin{tabular}{llll} 
Outdoor Track & 22 & Softball Diamond & 21 \\
& 35 & Tennis Courts & 23 \\
\cline { 4 - 6 } & & &
\end{tabular}


\begin{tabular}{ll}
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\hline Football Field & 22 \\
\hline Open Space Park & 25 \\
\hline
\end{tabular}
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\hline All Seasons Center & 6 \\
\hline Alumni House & 33 \\
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\hline Business Office & \hline 1 \\
\hline Campus Center & 11 \\
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\hline Central Heating Plant & 18,37 \\
\hline Computer Services & 14 \\
\hline College Housing & 30 \\
\hline Commons (Dining Hall) & \\
\hline Covenant Residence Hall & \\
\hline
\end{tabular}

\section*{Telephone Directory}
All correspondence may be addressed to:
Dordt College498 Fourth Ave. NE
Sioux Center, Iowa 51250-1606Telephone: 712-722-6000
For specific information contact:
Office of the President......................722-6002........General policies and interests of the college
Office of Admissions ........................722-6080 .......Admissions, catalogs, application forms
Office of Business Affairs.................722-6010........Payment of accounts, general business matters
Office of College Advancement.......722-6020........Alumni relations, church relations, development, grants, news bureau, publications, public relations
Dean of Chapel .722-6079........Pastoral counseling, spiritual activities
Office of Financial Aid.....................722-6087........Scholarships, grants, loans, work-study
Office of Human Resources.............722-6011 ........Hiring, benefits, government compliance, immigration
Office of the Provost .722-6333 ........Academic matters, curriculum, and instruction
Office of the Registrar 722-6030........Student records, GPA
Office of Student Services ................722-6070........ Housing, personal counseling, career services, placement
Campus Health Services...................722-6990........Student health issues, immunizations
Department Chairpersons
Academic Skills Center. P. De Jong. ..... 722-6488
Agriculture C. Goedhart ..... 722-6276
Art J. Van Wyk ..... 722-6201
Biology. T. Jelsma ..... 722-6278
Business Administration A. Attema. ..... 722-6353
Chemistry C. Fictorie ..... 722-6283
Communication C. Veenstra ..... 722-6257
Computer Science/Mathematics D. De Jong ..... 722-6297
Criminal Justice T. Rylaarsdam ..... 722-6255
Education D. Vander Plaats/T. Van Soelen ..... 722-6331/722-6228
Engineering. E. Brue ..... 722-6034
English. B. De Smith ..... 722-6296
Environmental Studies. R. De Haan ..... 722-6220
Foreign Language S. Woodbury ..... 722-6260
Health/Physical Education/Recreation C. Stiemsma ..... 722-6309
History. P. Fessler ..... 722-6254
Music. K. De Mol ..... 722-6205
Nursing. P. Hulstein ..... 722-6689
Philosophy M. Tazelaar. ..... 722-6366
Physics/Astronomy .J. Zwart. ..... 722-6288
Political Studies D. King. ..... 722-6371
Psychology N. Sandbulte ..... 722-6363
Social Work A. Foreman ..... 722-6365
Theatre Arts A. Hubbard ..... 722-6212
Theology. W. Kobes. ..... 722-6332```

