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# Dordt College 1993-94 Catalog 

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## DORDT

## Catalog 1993-94



## Academic Calendar

1993.94
1994.95 Day

Activity

Aug. 25
Aug. 26
Aug. 26
Oct. 7, 8
Aug. 31 Wed.
Orientation and Registration
Sept. 1 Thurs.
Convocation - 8:00 A.M.
Classes begin - 9:00 A.M.
Oct. 7, $8 \quad$ Oct. 6, $7 \quad$ Thurs., Fri.

Oct. 15
Oct. 21
Fri.
Oct. 18
Oct. 24 Mon.
Nov. 24
Nov. 30
Nov. 23 Wed.
Reading days - Tri-State Institute
No classes
End of first set of half-courses .

Dec. 10
Nov. 29 Tues.
Dec. 16
Fri.
Dec. 11
Dec. 17
Sat.
Dec. 13
Dec. 19 Mon.
Beginning of second set of half-courses
Thanksgiving recess - 12:00 noon

Dec. 14, 15
Jan. 12
Dec. 20, 21 Tues., Wed.

Mar. 1
Jan. 18 Wed.

Mar. 2 Mar. 8 Wed.
Mar. 17 Mar. 23 Thurs.
Mar. 29 Apr. 4 Tues.
$\begin{array}{lll}\text { May } 2 & \text { May } 8 & \text { Mon. } \\ \text { May } 2 & \text { May } 8 & \text { Mon. }\end{array}$
Classes resume - 8:00 A.M.
Review day
Testing - A.M. \& P.M.
Testing - P.M.
Testing - A.M. \& P.M.
Second semester begins - 8:00 A.M.
End of first set of half-courses
Beginning of second set of half-courses
Spring vacation - 12:00 noon
Classes resume - 8:00 A.M.
Review day - A.M.
Testing - P.M.
May 3.5 May 9.11 Tues. Thurs.
May 6 May 12 Fri. Commencement - 10:00 A.M.

## DORDT COLLEGE <br> 

## Catalog 1993-1994

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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.

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, which 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.

So, 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, the basic means for 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 core curriculum of various academic disciplines, such as language, natural science, and social science, make up the foundation of every student's education at Dordt College.

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. So majors and pre-professional programs form another essential part of the curriculum.

And, 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 noncurricular 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 extracurricular 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 extracurricular 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 a peak enrollment of 1218 by 1978. In the same period the campus grew from one to more than a dozen buildings. Today Dordt enrolls close to 1100 students and occupies a well-equipped, 45 -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, and social work. The current curriculum includes more than 40 programs, taught by more than 70 faculty members.

## Accreditation

Dordt College is accredited by the North Central Association of Colleges and Secondary Schools as a four-year, bachelor-degree-granting institution.

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 certification granted by the state of Iowa.

The Dordt College social work program is accredited by the Council on Social Work Education.

The Dordt College engineering program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

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 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.

## The Campus

## Location

The Dordt College campus is located in Sioux Center, Iowa, a prosperous, rapidly growing community in northwest Iowa. Sioux Center is situated on Highway 75, 45 miles north of Sioux City, Iowa, and 55 miles southeast of Sioux Falls, South Dakota.

## Facilities

The Classroom Building As indicated by its name, the classroom building is home to many of the facilities for the academic program: a 200 -seat lecture hall, several classrooms of various sizes, a language lab, the New World Theatre and theatre arts shop, business machine labs, and faculty offices. The newest section of the building is the computer center, housing faculty offices, several classrooms, and over 60 of the college's computer terminals.
The classroom building also accommodates the offices of the president, college advancement, and business affairs, the media center, and the print shop.

Chapel/Music Center The chapel/music center was completed in 1979. It consists of two sections, a music building and a chapel-auditorium. The music building houses rehearsal rooms and studios for all of the musical organizations on campus, as well as vocal and instrumental practice rooms and music faculty offices. The chapel-auditorium, which is used for chapel services, concerts, organ recitals, and other events, seats approximately 1500 people and contains a large, beautiful Casavant pipe organ. The mezzanine of the chapel-auditorium accommodates the offices of the Studies Institute, the vice president for academic affairs, the associate academic dean, the registrar, and an art gallery.

The Art/Admissions Building The art/admissions building was built in 1962. The art facilities include two large studios and offices for the art department. Other offices accommodate the directors of admissions and financial aid and the admissions counselors for the college. The building also houses the offices of the foreign language department.

The Library The library, completed in the fall of 1966 with an addition completed in 1978, provides space for over 130,000 holdings, seating for 350 students, librarians' office, reference section, periodicals section including microforms, learning resources center, reading areas, and conference rooms. The building also houses a Dutch archives
collection. The library features a variety of computer applications, including the OCLC system for cataloging materials, database searching, and inter-library loan; an on-line catalog replacing the card catalog; on-line periodical indices; and CD-ROM reference sources.

Science and Technology Center The original natural sciences building was completed in 1968 with additions in 1978, 1982, and 1990 more than doubling the available space. The building incorporates a greenhouse, 120 - and 180 -seat lecture halls, generaluse classrooms, faculty offices, and special facilities for the agriculture, biology, engineering, and physical science departments. Agriculture facilities include animal science and agronomy labs, a surgery, and a live animal room. The biology department has at its disposal numerous laboratories of varying sizes, including an electron microscope lab. The engineering wing incorporates labs for mechanical engineering, electronics, electrical engineering, and computer-aided design. Large and small laboratories for organic and physical chemistry, and two physics laboratories are available to students in the physical sciences.

The Commons The first section of the Commons was completed in 1964. Wings were added in 1966, 1969, and 1979. The building has complete facilities for serving all meals to students living in the dormitories, in the residence halls, and in college-approved private housing.

Radio/Communications Center The facilities of radio station KDCR-FM include a master control room, a production studio, a classroom-studio, an announcer's booth, administrative offices, an engineer's workroom, record and tape library, a transmitter, and newswire services.

The Physical Education Building The physical education building was completed in September 1968, with an addition completed in 1979. This building has a gymnasium that can be divided into three sections for physical education classes. When used for athletic events, the gymnasium will seat 2500 people. The building also contains six offices, a classroom, locker rooms, a weight-training room, an intramural equipment room, a racquetball/handball court, and the necessary service areas.

The Student Union Building The SUB serves as a social and recreational center for the college community. The ground level contains a student loungelart gallery area. In addition, the main floor contains a coffee shop, the college bookstore, mail facilities, the office of the campus pastor, and the college switchboard.

On the lower level is a four-lane bowling alley, billiard and ping-pong tables, a darkroom, student publications offices, the vice president for student affairs' office, and the counseling and placement offices.

Astronomical Observatories Two astronomical observatories, located off-campus, are freely available to Dordt students. The principal telescopes are 8 -inch, $12 \frac{1}{2}$-inch, and 16 -inch aperture Newtonian reflectors (the latter the largest in western Iowa), and a 5 -inch
aperture wide angle refractor. Smaller, portable telescopes are also available. In addition to educational programs, research on planets, satellites, and variable stars is undertaken at these facilities.

## The Residence Halls

West Hall was built in 1964 and houses 160 students.
North Hall, completed in 1966, serves male students and is equipped to accommodate 200.
East Hall was completed in 1970 to provide housing for 200 women.
East Campus Apartments The apartment complex includes six buildings housing 276 students. Four of the buildings each have eight three-bedroom apartments that are equipped to facilitate light housekeeping and two of the buildings have eight threebedroom apartments with no light housekeeping facilities. Each apartment building is equipped with laundry facilities.

Agriculture Stewardship Center Two miles north of the college, the ASC includes 160 acres of farmland used for production, crop testing, and research. Present facilities at the center include a free-stall and tie-stall barn, research barn, milking parlor, and replacement barn. In addition, agriculture students have access to facilities for swine and cattle production and research.

Recreational Facilities In addition to on-campus recreational facilities, students have access to municipal facilities, including the Sandy Hollow nine-hole golf course and swimming area, a football/track stadium, parks, and an indoor swimming pool adjacent to campus.

## Notice of Accessibility

Although certain facilities are not fully physically accessible to handicapped persons, Dordt College will take such means as are necessary to ensure that no qualified handicapped person is denied the benefits of or excluded from participation in the programs of Dordt College. The accessibility standard required by federal law for "existing facilities" is that the recipient's program or activity, when reviewed in its entirety, must be readily accessible to handicapped persons. Dordt College may meet this standard through such means as reassignment of classes or other services to accessible locations, redesign of equipment, assignment of aides, alteration of existing facilities, and construction of new accessible facilities. Dordt College is not required to make structural changes in existing facilities where other methods are sufficient to comply with the accessibility standard described above.

Because scheduling classes and arranging housing in accessible facilities may require reasonable advance planning, handicapped students accepted for admissions should identify themselves within six months of the start of the semester of admission and indicate the nature of accommodation that they need.


## 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, 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 twice each Sunday. Students who are not able to attend their home church must select one of the local churches as their church home.

Chapel exercises are held twice each week to provide opportunity for students and faculty to join in meditation upon the Word of God. All students are expected to attend chapel exercises regularly, not out of compulsion, but out of recognition of the need for spiritual refreshment and sharing. The chapel exercises play a vital role in the life of the college community.

Each school year begins with the college retreat at Lake Okoboji. This is followed throughout the year by Bible study groups, lecture series, 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 regarding 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 Forum is the student government organization on the Dordt College campus. It represents the student body and helps all students fulfill their office. Student Forum consists of 20 students-five from each class. Each of these
students serves on a faculty/student committee and participates in the major decisionmaking processes of Dordt College. Student Forum meets bi-weekly to discuss issues of concern to the Dordt College community.

Athletics Dordt College is a member of the National Association of Inter-collegiate Athletics and the IOKOTA Women's 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, Minnesota, South Dakota, and Nebraska. Intercollegiate competition for men is scheduled in baseball, basketball, cross country, golf, soccer, tennis, and track. Competition for women is scheduled in basketball, cross country, softball, tennis, 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, table tennis, volleyball, flag football, swimming, cycling, racquetball, soccer, golf, and floor hockey.

Club Sports Students have also organized a number of sports clubs that supplement the regular program; some allow for intercollegiate competition. These club sports include:

> Hockey Club
> Indoor Soccer Club
> Swimming Club
> Volleyball Club

Additional clubs may be organized as student interest demands. The club sports program is supervised by the Student Activity Committee.

Clubs A number of clubs are organized to provide outlets for students with special interests. All clubs must receive Student Activity Committee approval.

| Agriculture Club | International Club |
| :--- | :--- |
| Archery Club | Inter Varsity |
| ASME Student Chapter | Mu Kappa Student Chapter |
| Dordt Defenders of Life | Ping Pong Club |
| Future Active Christian Teachers | Political Science Club |
| Future Business Executives | Radio Club |
| Horticulture Club | Tolkien Club |
| Hunting Club | Varsity Club |
| IEEE Student Chapter | Video Club |

Social Activities The college schedules many social activities throughout the year. Students are encouraged to participate in campus activities as an important part of college life.

In addition to club activities, athletics, and musical activities, a number of social events are planned by various groups. Students are encouraged to attend the fine arts festivals, the college sponsored travelogue series, the annual music festival, the all-college banquet, and all other school activities organized by the student representatives.

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 are maintained at Dordt College to contribute to the social and cultural life of the individual and to offer opportunity for professional training and credit toward graduation.

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

Concert Band-The Concert Band studies representative symphonic band literature and performs at athletic games and other student activities. Local concerts are performed and a tour is made periodically.

Concert Choir-Each year, the Concert Choir presents a number of local concerts and makes an extended tour. Membership in the choir is open by audition.

Ensembles-Ensembles and small groups are organized each year to study ensemble literature, and adequate opportunity is provided for performance.

Orchestra-Students may audition for membership in the Orchestra at the beginning of the school year. The Orchestra performs local concerts each year and makes periodic tours.

## 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.
The Defender, a booklet with information for students-distributed in the summer.
Dordt College Catalog, an annual publication of academic announcements for students and faculty members.


## 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.

The career development staff provides assistance for students searching for careers by helping them recognize their own resources and talents and by exploring with them the variety of careers available. In the student services office, a resource reference area is available with a wide selection of career information.

In addition to individual counseling, the counseling staff provides classes and workshops dealing with career development, college living, personal growth, and life enrichment. Referral services are also available through the counseling staff.

Job Placement Assistance Formal placement services are provided for all students graduating with either a four-year or two-year degree. The career development office assists
in arranging on and off-campus interviews and maintains student placement records. The services available to the student include resumé writing, job application procedures, interviewing skills information, and job vacancy listings.

Students who plan to use the placement services should notify the career development office early in the first semester to complete a set of placement credentials.

## Housing

All unmarried students, with the exception of those who live with their parents or grandparents, aunts, or uncles, are required to reside in college-approved facilities. The college reserves the right to make housing adjustments when necessary.

Rooms for incoming freshman and transfer students are reserved in advance upon receipt of the $\$ 100$ tuition deposit. All students who register for the first time at Dordt must pay a $\$ 100$ security deposit at registration. This deposit must be maintained at $\$ 100$ during the student's residence on campus. This fee will be refunded when the student terminates residence at Dordt College if no excessive wear has been sustained, and there are no outstanding bills due the college.

Rooms for returning upperclassmen are reserved in advance upon receipt of $\$ 100$. This deposit will be applied to the first semester's rent and is a non-refundable deposit.

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. The student, by applying for a room and paying a 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. Each room contract terminates at 3:00 p.m. following the last day of examinations. Students must be out of their residence by that time.

The charges set by the college do not include the Christmas and spring vacation periods. During these vacations the dining hall and the residence halls are closed. The college will help make arrangements for those who cannot go home or to a friend's home during these vacation periods.

Rooms of students on and off campus 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 a resident director and resident assistants. Homeowners and college officials cooperate in supervising students in private homes. Students are responsible to the resident director and/or to the homeowner, 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 Defender, the student handbook.

Meals All students, except married students and those assigned to light housekeeping apartments, are required to take their meals at the college dining hall unless exempted by the college. Regular cooking is not permitted in the college residence halls.

## Admissions

## Requirements

Regular admission status with freshman classification is granted to freshmen if their high school grade point average is 2.00 or above. Graduates of approved high schools who have satisfactorily completed a minimum of 17 units of credit may be considered for regular admission to Dordt College. A subject pursued for one school year of 36 weeks with five class periods per week is equivalent to one unit.

At least ten units must be from the fields of social science, English, foreign languages, natural science, or mathematics, but must include three units of English and two units of algebralgeometry. Although the exact distribution of courses for admission is not prescribed, high school students are urged to complete, as a minimum, the following units:

5 or 6 units of language arts (English, speech, journalism, 2 units of foreign language)
2 units of social science
3 units of mathematics (including algebra and geometry)
2 units of natural science
0.5 unit of typing/word processing

## 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 vice president for academic affairs.

## 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 should write to the director of admissions requesting application forms.

Students will be considered for admission after they have submitted the following official forms:

1. Application for admission with $\$ 10.00$ fee.
2. Transcript of high school record.

Accepted students are to deposit $\$ 100.00$ toward tuition within 21 days of the acceptance date. The tuition deposit serves as a declaration of intent to enroll and reserves housing. The $\$ 100.00$ is credited to the student's account at registration. It is refundable until May 1 if requested in writing.

## Entrance Test

Applicants for admission are also required to submit the results of the ACT. Applicants who are not able to take the ACT may be considered for admission, but will be required to take the ACT after enrollment. The SAT may be used for admission purposes; however, those students who have taken the SAT and not the ACT will be required to take the latter at the expense of the college after they are enrolled.

## Notification of Admission

As soon as the required forms have been received they will be evaluated by the director of admissions. 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 on Probation - Students whose records indicate that they might have serious difficulty pursuing college work are admitted on probation.

## Transfer Admissions

Students who have attended another 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. 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 maximum of 64 semester hours of academic credit or 20 three-semester-hour courses is granted to graduates of junior colleges.

Transfer candidates are required to submit the following:

1. Application for admission.
2. Transcript of high school record.
3. Official college transcripts. Transfer candidates must request that registrar at each collegiate institution attended forward an official transcript. Transcripts submitted by the candidate are not acceptable.
4. ACT results.

After the application materials have been evaluated, students will receive notification of the action taken. When students are accepted, they will receive a statement concerning the amount of credit accepted and the academic status assigned.

Admission to advanced standing does not exempt the student from meeting the specified requirements for graduation from Dordt College.

Transfer credits are evaluated by the registrar. Student classification and academic status are assigned following the policies governing all students at Dordt College. Students "in good standing" may be admitted by the director of admissions. Students on "probation" must be approved by the Academic Policies Committee for admission. The exact conditions for admission on probation are determined on an individual basis by the Academic Policies Committee.

## Special Students

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

Permission to register as a special student must be obtained from the associate academic dean.

## Admission of Foreign Students

Dordt College has been approved as an institution of higher education for the training of immigrant students who are in the United States on student visas.

With the letter of admission, the college will send Form I-20A-B, which should be taken to the American Consul in the student's area to arrange for passport and visa. This is not required for Canadian students.

## 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.

## Finances

## Expenses


#### Abstract

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 classical quotas, denominational church offerings, church society contributions, and gifts from individuals.


## Tuition

Full-time, per semester ..... $\$ 4575.00$
Part-time, per credit if taking $8-11$ credits per semester ..... 385.00
per credit if taking $1-7$ credits per semester ..... 192.50
Auditing, per credit if taking $8-11$ credits per semester ..... 192.50
per credit if taking $1-7$ credits per semester ..... 95.00
Senior citizens' auditing, per credit ..... 30.00
Summer courses, per credit ..... 192.50
Room and BoardPer SemesterResidence hall room$\$ 550.00$$\$ 1100.00$
Apartments
without housekeeping facilities ..... 550.00 ..... 1100.00
with housekeeping facilities ..... 675.00 ..... 1350.00
Board-dining hall
21 meals per week ..... 695.00 ..... 1390.00
15 meals per week ..... 645.00 ..... 1290.00
10 meals per week ..... 590.00 ..... 1180.00
Fees
Student Activity Fee ..... 25.00 ..... \$ 50.00
Application fee (required of all first-time applicants) ..... 10.00
Late registration ..... 10.00
Housing damage deposit (refundable if no damages or outstanding bills) ..... 100.00
Student teaching ..... 120.00
Non-local student teaching (in addition to student-teaching fee) ..... 100.00
Music fees
Individual lessons per semester ..... 135.00
Group lessons per semester ..... 60.00
(There is no refund on music-lesson fees after the second week of classes.)

Service charge for returned checks
U.S. checks

Canadian checks
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 $\$ 300$ to $\$ 650$ per year. Travel expenses vary from $\$ 400$ to $\$ 1500$, 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 $\$ 1500$, depending on the student's life style.

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.

Dordt College part-time student grants may reduce tuition by as much as three-fourths the regular part-time rate. The rate per credit is based on the number of courses a student has previously completed, either at Dordt or another institution, and the number of credits enrolled for. Adult learners may also be eligible for state or federal loans and financial aid.

Students should consult the associate academic dean to determine their eligibility for the program and to transfer credits from previous college work.

Student Medical Insurance A hospital-medical-insurance policy is available to all full-time students. Participation in this program is on a voluntary basis. The cost of the policy for singles is $\$ 260.00$ for the 12 -month period from August 20 to August 19. Plans are also available for married couples and families. Information is available from the Business Office.

Payment of Accounts Charges for tuition, fees, room and board are due and payable at the beginning of each semester. Those who do not make full payment will be subject to a finance charge of $.75 \%$ per month ( $9 \%$ annual percentage rate) on the unpaid balance.

Accounts must be paid in full by December 10 for first semester and April 10 for second semester. Transcripts and grade reports will not be released until accounts are paid in full.

Withdrawal Refunds Upon withdrawing completely or partially from school, a student must complete a withdrawal form from either student services or the registrar's office. Refund calculations will be made by the business office only upon receipt of the approved withdrawal form. Refunds will be based on the date on which the registrar signs, approves and completes the withdrawal form. All tuition, room and board charges, as
well as all financial aid given, will use the pro-rata formula listed below in calculating the refund. Weeks run from Monday through Sunday for calculating refunds.

Tuition Withdrawal during the 1st week $100 \%$ Refund

| 2nd | $88 \%$ Refund |
| :--- | ---: |
| 3rd | $81 \%$ Refund |
| 4th | $75 \%$ Refund |
| 5th | $69 \%$ Refund |
| 6th | $62 \%$ Refund |
| 7th | $56 \%$ Refund |
| 8th | $50 \%$ Refund |
| 9th | $44 \%$ Refund |
| 10th | $38 \%$ Refund |
| 11th | $31 \%$ Refund |
| 12th | $25 \%$ Refund |
| After 12th | NO REFUND |

Fees No refund is made on fees.
Room and Board Amount of refund for room and board fees will be refunded on a weekly pro rata basis.

## Financial Aid

In addition to the extensive scholarship program, which 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.

Limited finances need not prevent promising students from attending Dordt College. Generally, qualified students' needs can be met through a financial aid award that includes several types of aid. Any student who wishes to apply for financial assistance may do so by writing to the financial aid office after the student has been accepted for admission to the college.

All United States citizens who wish to apply for financial aid must submit the Free Application for Federal Student Aid (FAFSA). Supplementary information may be requested through additional forms, including the green "Application for Financial Aid" from Dordt College. 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 to the financial aid office at Dordt College.

## Grants-in-Aid

Dordt College makes grants-in-aid available as automatic tuition reduction to students in the following groups. No financial aid application is necessary.

Alumni Grant Full-time students whose mother or father are alumni (attended full-time at least two semesters) are eligible for this annual $\$ 300$ grant. The grant will be awarded only to first-time freshmen in the 1993-94 academic year and will be renewable thereafter.

Canadian Exchange Rate Grant Dordt College provides an exchange rate grant to Canadian students to offset the loss they may incur when paying college accounts in Canadian dollars. 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 are eligible. This grant is based on mileage from the student's permanent residence to Dordt College. Two semesters of continuous local residence will change distance grant-in-aid 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. The mileage scale is based on concentric circles around Sioux Center:

| $\frac{\text { miles }}{50}-300$ | annual amount |
| :---: | :---: |
| $301 \cdot 600$ | $\$ 100$ |
| $601 \cdot 800$ | $\$ 200$ |
| $801 \cdot 1000$ | $\$ 300$ |
| over 1000 | $\$ 400$ |
|  | $\$ 500$ |

Institutional Grant All full-time students who are members of supporting churches or denominations or are graduates of Christian high schools receive this annual $\$ 250$ grant-in-aid.

International Tuition Grant Students from foreign countries other than 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. A foreign student Financial Aid Form or another needs analysis must be completed in order to be considered for this grant.

## Grants

Federal Pell Grant The Federal Pell Grant Program makes funds available to the most needy students. Grants range from $\$ 400.00$ to $\$ 2,300.00$, and application is made by completing a needs analysis form. This program is available to United States citizens.

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 $\$ 200.00$ to $\$ 4000.00$ per year. This grant is renewable each year up to four years as long as the student continues to make satisfactory progress and his/her financial situation does not change.

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 $\$ 200.00$ to $\$ 2,500.00$ per year.

## 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 $\$ 90.00$ quarterly required. Interest is at the rate of $5 \%$ per year. Repayment may be deferred while 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 work 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 will begin four months and principal payments will begin six 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 yearseven 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 $\$ 50.00$ per month and will be payable to the business office at Dordt College.

Federal Stafford Loan This loan is available to students who demonstrate financial need and are United States citizens. A freshman may borrow up to $\$ 2,625.00$ per year. A sophomore may borrow up to $\$ 3,500.00$ per year. A junior or senior may borrow up to $\$ 5,500.00$ per year. Repayment of a Federal Stafford Loan begins six months after leaving school. Until repayment begins, no interest is charged on the loan. Interest rates vary, depending upon the first year the loan was received. The repayment period may be as long as ten years, but a monthly payment of $\$ 50.00$ is usually required. Federal Stafford loans are available through the student's hometown bank or lending institution, and must be certified by the college. All repayments are arranged with and made directly to the holder of the loan. Students who have difficulty obtaining this loan through a local institution should contact the financial aid office for assistance in processing this loan through a bank located near the college. Loan requests should be made six to ten weeks before the funds are needed for educational payments. Freshmen and new students should be aware that first-time borrowers must be in school for 30 days before funds may be dispersed.

## Federal Unsubsidized Stafford Loan This loan is similar in most ways to the Federal Stafford Loan

 (see above paragraph). However, there are two main differences. First, while the government pays the interest on the Federal Stafford Loan, the student must pay the interest on the Federal Unsubsidized Stafford. Second, the Federal Unsubsidized Stafford is not need-based; anyone may apply.Federal PLUS/SLS Loan Parents of dependent students may apply for as much as the difference between the cost of attendance and a student's financial aid, using the PLUS loan. Independent students may apply for a maximum of $\$ 4,000.00$ using the SLS loan. Neither loan is need-based, and applications may be obtained from the student's local bank or from the Financial Aid Office. However, these loans should be used only after all other resources have been considered, since interest and repayment begin 60 days after the money is disbursed, although SLS borrowers may defer payment.

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 the province listed below:

## ALBERTA

Students Finance Board
Department of Advanced Education
10th Floor, Baker Centre
10025 - 106 Street
Edmonton, Alberta T5J 1G4
Telephone: 403-427-2740

## BRITISH COLUMBIA

Student Services Branch
Department of Advanced Education and Job Training
clo Parliament Building
Victoria, B. C. V8V 1 X4
Telephone: 604-387-6100

## MANITOBA

Student Aid Branch
Department of Education
Box 6-693 Taylor Avenue
Winnipeg, Manitoba R3M 3T9
Telephone: 204-945-6322 or 800.782.0316

## NEW BRUNSWICK

Student Financial and Support Services
Department of Advanced Education and Training P.O. Box 6000

Fredericton, N. B. E3B 5H1
Telephone: 506-453-2577

## ONTARIO

Student Awards Branch Ministry of Colleges and Univ. Keskus Mall Box 4500, Station P Thunder Bay, Ontario P7B 6G9
Telephone: 807.345-4830 or $800 \cdot 465 \cdot 3013$

## NEWFOUNDLAND

Student Aid Division
Department of Education
Thomson Student Centre
Memorial University
St. John's, Newfoundland A1C 5S7
Telephone: 709-576-5849

PRINCE EDWARD ISLAND
Student Aid Division
Department of Education
P.O. Box 2000

Charlottetown,
Prince Edward Island C1A 7N8
Telephone: 902-368-4640

## NOVA SCOTIA

Student Assistance Division
Department of Advanced Education and Job Training
P.O. Box 2290, Station M

Halifax, Nova Scotia B3J 3C8
Telephone: 902-424-8420

## QUEBEC

Student Aid Service
Department of Education
Government of the
Province of Quebec
Quebec City, Quebec G1A 1H2
Telephone: 418-643-3750

## SASKATCHEWAN

Student Financial Assistance
Saskatchewan Education
1855 Victoria Avenue
Regina, Saskatchewan S4P 3V5
Telephone: 306•787-5620

## Student Employment

College Work-Study Program Dordt College participates in the Work-Study Program, which creates part-time job opportunities for students from low-income families. These jobs average seven hours per week.
Students qualify for participation in the Work-Study Program if they are:
-United States citizens;
-in need of financial aid;
-capable of doing good academic work in college;
-able to meet job qualifications;
-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 several offcampus positions. Application forms must be completed by July 15.

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 15.

## 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' Readjustment Act (Public Law 90-77) or under the War Orphans

Bill (Public Law 634). Eligible students should write to their regional Veterans' Administration Office to obtain the application information.

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 Scholarship Program The 1965 session of the Iowa Legislature established a state scholarship program for the benefit of Iowa residents attending colleges within the state. These scholarships are based on the financial need and the academic ability of the student and may be used only for tuition and mandatory fees. Application forms and information regarding eligibility for the program are available from Iowa high school counselors.

State of Iowa Tuition Grant Program The 1969 session of the Iowa Legislature 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 tuition and mandatory fees. Application is made by filing a needs analysis form by April 1 .

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.

## Scholarships and Grants

The scholarships listed will be awarded for the 1994.95 shool year.
Scholarships are awarded only to full-time students. One-half of the award will be paid each semester.

More detailed scholarship or grant information and application forms can be obtained by writing to the coordinator of scholarships and grants, Dordt College, Sioux Center, Iowa 51250-1697. All recipients will be notified by the coordinator of scholarships and grants.

The application deadline for all incoming freshman scholarships or special grants is January 15, 1994, unless stated otherwise. February 15, 1994 is the application deadline for all sophomore, junior, and senior scholarships, unless stated otherwise.

## Freshman Scholarships

Distinguished Scholar Awards Distinguished Scholar Awards will be given to five incoming freshman students. These awards guarantee the recipient $\$ 5,000.00$ in total scholarship dollars from Dordt College and all other outside sources. In order to be considered for this award, an applicant must have a grade point average of 3.50 or above after six semesters of high school work, an ACT standard score of 26 or above, and a willingness to be interviewed in person or in a telephone conversation. The applicaion deadline is January 15. The Distinguished Scholar Awards are renewable for an additional three consecutive years, provided the recipient maintains a grade point average of 3.30 .

Dordt College Honors Scholarships Honors Scholarships, ranging from $\$ 1,500.00$ to $\$ 2,500.00$, will be given in recognition of one or more of the following: grade point average, ACT scores, class rank, extracurricular involvement. National Merit Scholarship Corporation Certificate of Merit winners will automatically qualify for a $\$ 2,500.00$ Honors Scholarship award. Honors Scholarship awards are renewable for an additional three consecutve years, provided the recipient maintains a grade point average of 3.00 .

Dordt College Merit Award Scholarships Merit Award Scholarships ranging from $\$ 200.00$ to $\$ 1,500.00$, will be given in recognition of one or more of the following: high school academic record, ACT scores, extra-curricular involvement. The application deadline of January 15, is not applicable to Merit Award Scholarships. However, early applicants will have priority for the available awards. Merit Awards are renewable for an additional three consecutive years, provided the recipient maintains a grade point average of 3.00 .

Dordt College Major/Program Scholarships $\$ 1,000.00$ and $\$ 500.00$ renewable scholarships are available in all the major and program areas offered at Dordt College. Any first-time incoming freshman student is eligible to apply for a Major/Program Scholarship if he or she has a cumulative grade point average of 3.00 or above after six semesters of high school study. These scholarships are renewable for an additional three consecutive years, provided the recipient maintains a cumulative grade point average of 3.00 or above. This scholarship need not be forfeited if the recipient changes his or her major or program of study.

Leadership/Activity Awards Dordt College gives awards to incoming freshman students in recognition of one or more of the following: high school academic record, class rank, leadership ability, extra-curricular involvement. These awards are funded from separate sources. Even though the criteria may vary for each award program, a single set of application materials can be used to make application for any of these awards. Individual descriptions of each award program are listed below.

Dordt College Activity Grants $\$ 1,000.00$ and $\$ 500.00$ renewable grants are available to those incoming freshmen who have a 2.5 cumulative grade point average and have contributed significantly in one of the following activity areas: athletics, club sports, music, student publications, or theater. These grants are renewable for an additional three consecutive years, provided the recipient maintains a 2.0 cumulative grade point average and continues participation in the awarded activity area.

Dordt Development Foundation Activities Grants These $\$ 500.00$ non-renewable grants are awarded to students who have demonstrated exceptional talents and skills in one or more of the following extra-curricular areas: athletics, music, theater. Minimum cumulative grade point average required is 2.00 .

MTC Foundation Scholarships Three $\$ 1,000.00$ MTC Foundation Scholarships are available for students having a Sioux Center, Iowa, telephone prefix (722). Students must have a 3.00 cumulative GPA, an ACT composite score of 21, and demonstrate scholarship, leadership, character, and Christian commitment. These scholarships are renewable for an additional three consecutive years provided the recipient maintains a 3.00 GPA . No application form is necessary; all eligible students accepted for admission by February 1 will be considered by the Dordt scholarship committee.

Presidential Grants for Future Leaders Two $\$ 1000.00$ grants are awarded to students who rank in the top ten percent of their class and show outstanding leadership qualities.

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#### Abstract

Business Awards Dordt College gives scholarship awards to incoming freshman students who intend to study in the field of business. These awards are funded from separate sources. Even though the criteria may vary for each award program, a single, general business scholarship application can be used to make application for any of these awards. Individual descriptions of each award program are listed below.


> American State Bank Business Scholarship This scholarship is available to students who exhibit special aptitude and potential in accounting or business administration. A fouryear $\$ 3,000.00$ scholarship award is given annually. The recipient must rank in the top twenty percent of the high school class and must intend to major in accounting or business administration.

John Bonnema Business Scholarships Two $\$ 1,000.00$ awards will be given. Recipients must have a minimum grade point average of 3.00 , display special potential in the field of business, and demonstrate Christian commitment and Christian principles.

Music Awards Dordt College gives awards to incoming freshman students who have made outstanding contributions in the field of music. These awards are funded from separate sources. Even though the criteria may vary for each award program, a single, general music award application can be used to make application for any of these awards. Individual descriptions of each award program are listed below.

Dordt College Music Grants Four grants in the form of two semesters of private study with the normal fee waived are awarded annually to encourage incoming freshman students to study music at Dordt College. The monetary value of each grant is approximately $\$ 270.00$.

Joe J. Dahm Memorial Music Scholarships Two $\$ 100.00$ awards are available annually, one each in the categories of instrumental performance and vocal performance.

Minnie J. Dahm Organ Education Scholarship A four-year $\$ 1,200.00$ award is given annually to a student who demonstrates a high level of competence and potential as a future professional organist. The recipient must have a minimum grade point average of 3.00 .

Ringerwole Piano Scholarship A $\$ 400.00$ award is given annually to a student who demonstrates a high level of competence and potential as a future professional pianist. The recipient must have a minimum grade point average of 2.00 and will be required to take private piano lessons at Dordt.

## Special Awards

Chris E. Haan Memorial Scholarships for Preseminary Students Two $\$ 4,000.00$ four-year awards are given annually to students interested in entering the preseminary program. Recipients must have a minimum cumulative grade point average of 3.00 . These scholarships are renewed each year provided the recipient remains in good standing in Dordt's preseminary program.

Huisman Minority Students Scholarships Several awards ranging from $\$ 500.00$ to $\$ 1,500.00$ are awarded annually to incoming freshman students. The award recipients must demonstrate leadership qualities and must be from a minority race as defined by the Christian Reformed Church Synodical Committee on Race Relations.

John Bonnema Teacher Education Scholarship A $\$ 1,000.00$ scholarship will be awarded annually. The recipient must have a minimum 3.00 GPA and must show a commitment to Christian education.

John B. Hulst Teacher Education Scholarship A \$1,000.00 scholarship is awarded annually. The recipient must have a minimum grade point average of 3.00 and must intend to enter the teaching profession in a Christian school.

Martin Seven Math Scholarship Dordt College gives one $\$ 300.00$ award to a student who exhibits superior aptitude in the field of mathematics. Application can be made only through participation in the Dordt College Mathematics Competition.

Pro-Edge, Ltd. Agriculture Scholarship One $\$ 750.00$ scholarship will be given annually. It is available to any incoming freshman student who has a 3.00 point average after six semesters of high school studies, and who intends to major in agriculture or animal science. Preference will be given to those applicants who demonstrate a special interest in swine management.

The Richard and Hendrika Zwart Scholarship This $\$ 500.00$ scholarship intends to give recognition and encouragement to students interested in the physical sciences. To be eligible, a student must be a firsttime freshman with a cumulative GPA of 3.00 or above. Preference will be given to applicants who intend to become high school teachers in one of the following areas: physics, chemistry, or physical science. This scholarship may also be awarded to non-teacher education applicants who intend to major in physics, chemistry or engineering.

Vander Haag Computer Science Scholarship This scholarship is available to students who exhibit superior aptitude in the field of computer science. A four-year, $\$ 3,000.00$ award is given annually. The recipient must have a minimum grade point average of 3.00 and must intend to major in computer science or management information systems.

Vander Haag Foreign Students Scholarships Several scholarships are available to first-time freshmen students who reside in a foreign country other than Canada.

## Scholarships for Upperclass Students

Dordt College Merit Awards/Honors Scholarships Students who received Merit Awards/Honors Scholarships as incoming freshmen will have their award automatically renewed if they have maintained a cumulative GPA of 3.00 in their college courses.

Dordt College Major/Program Scholarships Students who received Major/Program Scholarships as freshmen will have their scholarship automatically renewed if they have maintained a cumulative GPA of 3.00 in their college courses. This scholarship need not be forfeited if the recipient changes his or her major or program of study.

Dordt College Activity Grants Students who received Dordt College Activity Grants as fresmen will have their grants automatically renewed if they have maintained a cumulative GPA of 2.0 in their college courses, and if they have participated in the awarded activity area.

## Business Awards

Dordt College gives scholarship awards to upperclass students who intend to study in the field of business. These awards are funded from separate sources. Even though the criteria may vary for each award program, a single, general business scholarship application can be used to make application for any of these awards. Individual descriptions of each award program are listed below.

Carrie Foods Special Effort Scholarships for Business Students Two $\$ 350.00$ awards are given annually. Recipients must have a minimum grade point average of 2.00 and must do scholastic work above the level that would ordinarily be expected of them. This scholarship does not necessarily reward those students who earn excellent grades, but rather those who put forth extraordinary effort to obtain their grades.

Henry De Groot Business Administration Scholarship An annual $\$ 500.00$ award is given to an outstanding accounting, business administration, or business education major. The award is based on evidence of scholarship, Christian commitment, and an interest in service through the administration of a non-profit organization, teaching of accounting, professional accounting, public relations, or advertising.

John Bonnema Business Scholarship A $\$ 1,000.00$ award is given annually to a student who exhibits special potential in the field of business and demonstrates Christian commitment and Christian principles. The recipient must have a minimum grade point average of 3.00 .
R. J. Dykstra Scholarship for Business Administration Students One $\$ 300.00$ award will be given annually to a student who exhibits special potential in business administration. The award is based on Christian commitment, evidence of scholarship, and communication skills.

Rolscreen Honors Program at Dordt College An annual $\$ 750.00$ scholarship award is offered to a student who has a minimum grade point average of 3.00 and shows special aptitude in accounting or business administration.

Education Awards Dordt College gives three scholarship awards to upperclass students who have been accepted in the teacher education program. These awards are funded from separate sources. Even though the criteria may vary for each award program, a single, general education scholarship application can be used to make application for either of these awards. Individual descriptions of each award program are listed below.

John Bonnema Teacher Education Scholarships Two $\$ 1,000.00$ scholarships will be awarded each year. Recipients must have a 3.00 GPA and must show a commitment to Christian education.

John Bosma Memorial Scholarship An annual scholarship of $\$ 600.00$ is awarded to a student who exhibits a strong commitment to Christian service, scholastic ability, and potential for success in the classroom.

Vander Ark Family Scholarship This annual $\$ 600.00$ scholarship award is available to students who exhibit a strong commitment to Christian service, scholastic ability, diligent study habits, sound moral character, and promise of growth in spiritual and moral leadership.

## Special Awards

AuSable Institute Fellowship and Grant-in Aid The AuSable Institute of Environmental Studies will award at least one fellowship $(\$ 1,000.00)$ and one grant-in-aid $(\$ 350.00)$ to qualified Dordt students for the institute's summer sessions. Applicants for the fellowship must have completed the sophomore year with one academic year in the natural science. Applicants must show superior academic ability and distinct interest in environmental studies and stewardship. Fellowship recipients are required to take one course and a practicum during eith summer session. The AuSable grants-in-aid are open to students who have completed the freshman year and show financial need. Applications are due February 1 and awards will be made by March 1.

Chris E. Haan Memorial Scholarships for Preseminary Students One or more $\$ 500.00$ scholarships are available for students in the preseminary program who have a minimum GPA of 3.00 . These scholarships can be renewed provided the recipient remains in good standing in the preseminary program.

Dordt College Alumni Scholarships The alumni board, on behalf of the Dordt College Alumnus Association, awards scholarships to three second-semester juniors. A $\$ 1000.00$ and two $\$ 500.00$ scholarships will be awarded. Students in any area of study at Dordt with a minimum grade point average of 3.25 are eligible for these awards. Some of the criteria for this scholarship are attitude, involvement, and perspective.

Dordt College Social Work Scholarship This scholarship of $\$ 350.00$ is awarded annually to a social work major. Recipients are selected on the basis of grade point average, financial need, general academic interest, and commitment to the field of social work. The recipient must have a minimum grade point average of 2.75 .

Dordt College Study Abroad Scholarships Several scholarship awards of varying amounts are available for worthy students who have been accepted for Dordt's Study Abroad Program in The Netherlands, Germany, Mexico, Spain, Costa Rica, Egypt, and Russia. The application deadline for second semester study abroad scholarships is November 15. The deadline for first semester study abroad scholarships and the summer Mexico scholarships is April 15.

The Foreign Candy Company Scholarships Several scholarship awards of varying amounts are awarded to academically qualified students to enable them to study in a foreign country. Recipients are selected on the basis of financial need, academic ability, and commitment to international education. The application deadline for second semester study abroad scholarships is November 15. The deadline for first semester study abroad scholarships and the summer Mexico scholarships is April 15.

Interstates Electric and Engineering Scholarship A $\$ 1,200.00$ scholarship award is available annually. The recipient must have a minimum grade point average of 3.00 and must demonstrate special aptitude and potential for a career in electrical engineering.

Joe J. Dahm Memorial Music Scholarships Three $\$ 100.00$ awards are given annually to a sophomore, a junior, and a senior based on music scholarship and contribution to the music program at Dordt.

Martin Seven Classics Scholarship This $\$ 500.00$ scholarship is available for students who major in one or more of the following areas: history, philosophy, theology, or individual studies. A minimum cumulative grade point average of 3.00 is required.

## Martin Seven Communication Scholarships

Two $\$ 350.00$ scholarship awards are given annually
to students majoring in communication.
Martin Seven Physical Education Scholarship A $\$ 500.00$ award is given annually to the outstanding physical education major.

Martin Seven Writing Scholarships Several awards are made to students based on creative writings submitted to and judged by the English department faculty.

Minnie Julia Dahm Scholarships for Medical Technology Students Two $\$ 400.00$ awards are given annually. All medical technology students are eligible to apply, but preference will be given to applications from students who will be entering their junior year. Recipients must have a minimum grade point average of 3.00 and must demonstrate an understanding and application of Christian principles.

Minnie Julia Dahm Scholarships for Pre-Medical Students Two $\$ 300.00$ awards are given annually. All pre-medical students are eligible to apply, but preference will be given to applications from students who will be entering their junior year. Recipients must have a minimum grade point average of 3.00 and must demonstrate an understanding and application of Christian principles.

Nick R. Van Til Scholarship This scholarship of $\$ 600.00$ is awarded annually to a junior history, philosophy, or theology major. Recipients are selected on the basis of grade point average, general academic interest, competence, academic potential, life goals, and financial need. Recipients must have a minimum grade point average of 3.30 .

Ringerwole Organ Scholarship This annual scholarship provides two semesters of private organ lessons to an organ student. Each competitor must play a selected list of works for a jury examination committee. The monetary value of this award is approximately $\$ 270.00$.

Summer Ministries Scholarships This scholarship is offered to students who desire to do mission work during the summer and therefore are not able to finance their education with normal summer employment. The amount granted per student can be from $\$ 500-\$ 1,000$. Applications are due March 15 and awards will be made April 15.

Vera W. Mayer Scholarships Through the Iowa College Foundation several awards are available each year to upperclassmen based on academic achievement and financial need. Recipients are chosen by a selection committee. No application is necessary.

## 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.

## Bachelor's Degrees

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. Career planning assistance from qualified personnel is available to help students select courses that will prepare them for service, vocations, or further schooling.

The formal requirements for graduation with a bachelor's degree are the following:

1. A minimum of 40 courses. In meeting this requirement, students must fulfill the general education requirements, complete a major, and, in many cases, take elective or professional courses.
2. A minimum grade point average of 2.00 ( 4.00 scale)
3. A minimum of 10 courses earned at Dordt College. If only the minimum number of Dordt courses is presented, they must be earned in full-time residency during the final academic year. Students who have completed a minimum of 30 courses at Dordt College may request special permission to complete up to 10 of their final courses at another college. Those who have completed a minimum of 20 courses at Dordt College may request special permission to complete up to five of their final courses at another college.

Degree Types Bachelor's degree recipients will earn one of four degree types. Most students will receive the general B.A. degree. (Engineering majors may request the bachelor of science in engineering degree as an alternative to the bachelor of arts degree when applying for graduation. Social work majors receive the bachelor of social work degree.) Students preparing for careers as elementary school teachers will be awarded the B.A. degree in elementary education; students preparing to teach in high schools will receive the B.A. degree in secondary education. The B.A. degree in medical technology is awarded by Dordt College following completion of a program of study that includes a final year of study off-campus, typically at a hospital-administered medical technology program.

Preprofessional Programs Students wishing to prepare for professional schooling may enter one of the following programs:
Predental
Premedical
Prepharmacy
Preseminary
Prelegal Prenursing Prephysical Therapy Preveterinary

All of these programs except prenursing lead to the B.A. degree and prepare the student for graduate-level studies. Students interested in a career in nursing may transfer to a nursing school following one or more years of preparatory study at Dordt.

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.

The preprofessional program advisors are:
Predental, Preoptometry, Prepharmacy - Dr. Edwin Geels
Prelegal - Prof. Donald King
Premedical, Prenursing • Dr. Aaldert Mennega
Prephysical Therapy - Dr. Thomas Visker
Preseminary - Dr. John Vander Stelt
Preveterinary - Prof. Duane Bajema
Majors Every B.A. graduate of Dordt College must complete one major, a sequence of at least 10 courses in a subject area. Following are the majors available at Dordt College:

| Accounting | General Science |
| :--- | :--- |
| Agriculture | German |
| Agri-Business | HPER: Exercise Science |
| Animal Science | HPER: Physical Education |
| Art: Fine Arts Studio | HPER: Recreation |
| Art: Graphic Design | History |
| Art: History | Individual Studies |
| Biology | Management Information Systems |
| Business Administration | Mathematics |
| Business Education | Music |
| Chemistry | Philosophy |
| Communication | Physics |
| Communication: Journalism | Plant Science |
| Communication: Radio/Television | Political Science |
| Communication: Speech | Psychology |
| Computer Science | Social Studies |
| Dutch | Social Work |
| Elementary Education | Sociology |
| Engineering | Spanish |
| Engineering Science | Theatre Arts |
| English | Theology |
| Environmental Studies |  |

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

Students working toward the elementary or secondary education degree should consult the "Teacher Education Program" information on pages $65-82$ for an explanation of majors and course sequences.

General Education General education courses constitute the core curriculum required of all Dordt College students. The core curriculum plays a crucial role in the integration of subject matter through which Dordt College seeks to reflect the wholeness of God's creation.

This integration goes beyond giving students a common educational experience. It is particularly in these courses that students are introduced to the character and scope of Christian perspective and that they learn to think more critically about choices and decisions affecting their lifestyle.

Courses in the core curriculum are meant to provide insight into the nature and demands of contemporary Christian living, whatever one's specific calling. This cannot be accomplished without a sufficient understanding of how various aspects of contemporary life are interrelated and how our global culture has developed. Philosophical and historical knowledge are important in this regard.

General education courses also supply students with the basic quantitative, analytic, lingual, and physical skills essential to the program overall and to their tasks as citizens of God's kingdom.

General education requirements for the B.A. degree include proficiency requirements plus 14 courses.

Elective/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 may take from zero to 18 elective courses. The number of elective courses taken depends upon how many courses are required in a student's major. In certain subject areas a minor of five to seven courses may be earned.

Education degree students should consult the "Teacher Education Program" section on pages 65-82 of the catalog for information regarding elective and professional courses.

## Distribution Requirements

1. General Education (Proficiency Requirements and 14 courses) Proficiency Requirements
a. General Education 10 - Introduction to College
b. Health, Physical Education, Recreation

Each student must complete HPER 10 and four activities courses.
c. Computer Science Proficiency
Computer science proficiency may be demonstrated by one of the following:

1) Passing a computer literacy test administered by the Academic Skills Center. Learning modules are available to prepare students for the test.
2) Taking any computer science course at Dordt College. If a college course is taken to meet the requirement, it may be applied toward meeting the 40 -course graduation requirement.
d. Mathematics Proficiency
Teacher education students must take at least one mathematics course; for other students mathematics proficiency may be demonstrated by one of the following:
3) A percentile ranking of 70 or higher on the mathematics section of the ACT
4) Passing a comprehensive mathematics skills test.
5) Completion of any mathematics course at the college level. If a college course is taken to meet the requirement, it may be applied toward meeting the 40 -course graduation requirement.
General Education Course Requirements (14 courses)
Communication, Language, Literature Requirement (4 courses)
English 101 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
English 200 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Communication 110 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Foreign Language 201 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
The language requirement may be met by taking a Foreign Language 201 course or
Linguistics 201. Three or more years of high school foreign language also meet the requirement.
Prerequisites for the above courses:
a. Two semesters of college foreign language or its equivalent. One year of high school foreign language is equal to one semester of college foreign language.
b. For Foreign Language 201, the prerequisite must be in the same language. For Linguistics 201, the prerequisite courses may be in different languages.
For students who are required to take the TOEFL test the following requirements apply:
a. Students who score below 600 must take Linguistics 100; three semesters of English Conversation (Ling 251-258); and one course from Foreign Language 101, 102, 201 or Linguistics 201 or its equivalent.
b. Students who score 600 or above have met the equivalent of 101 and 102 and must take Foreign Language 201 or Linguistics 201 or its equivalent.
Arts Requirement (1 course)
General Education 200 (Introduction to the Arts) . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Natural Science Requirement (2 courses)
Biology 101 or 1021
Physical Science 107 or 201 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Teacher education students must take one course from the biological sciences and one course from the physical sciences. The courses especially designed for this require-
ment are Biology 101 or 102 and Physical Science 107 or 201. For students who have had a good high school background in the sciences or who are in science programs or majors, there are options from one of the following sequences:
a. Agriculture 101 and 111
e. Chemistry 103 and 104
b. Biology 115 and 122
c. Astronomy 121 and 122
f. Physics 115 and 116
g. Physics 125 and 126
d. Chemistry 101 and 102

If a student begins one of the physical science sequences but does not choose to complete that sequence, the student must complete the science requirement by taking Biology 101 or 102. Similarly, if a student begins one of the life science sequences but does not complete it, the student must take Physical Science 107 or 201.

Social Science Requirement (2 courses)
Psychology 201 or Sociology $201 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$
(Psychology 205 may be taken by students in education.)
Economics 200, 201, 202, or Political Science 2011
History, Philosophy, Theology Requirement (4 courses) History 100 ..... 1
Philosophy 201 ..... 1
Theology 101 ..... 1
Elective ..... 1
One course from History 212, 213, 214, Philosophy 320, 350, Theology, 201, 204.
General Education Requirement (1 course)
General Education 300 (Calling, Task, and Culture) ..... 1
2. Major and Cognate Courses ( $10 \cdot 30$ courses)
B.A. General ..... $10 \cdot 30$
As listed for each department in the "Course of Instruction" section of the catalog.B.A. Secondary Education$10 \cdot 15$
Requirements for teaching majors, minors, and endorsements may be found in theTeacher Education Program section on pages $65-82$ of the catalog.B.A. Elementary Education15
Requirements for the elementary teaching major leading to certification and endorse-ment may be found in the "Teacher Education Program" section on pages 65.82 ofthe catalog.

NOTE: A maximum of two courses in the major field may also be used to meet general education course requirements-the number of courses required in the elective/professional category will be increased by the number of "overlap" courses.
3. Elective/Professional ..... $0 \cdot 18$
B.A. General

1. General Minors ..... 5.7
2. Electives ..... $0 \cdot 18$
B.A. Elementary Education \& B.A. Secondary Education
See the "Teacher Education Program" section of the catalog on pages 65-82.
Preparation for Graduate Study Dordt College, through its major departments,prepares students for graduate level work. Students who plan to do graduate work shouldconsult faculty members in the major department when selecting courses in the majorfield of study or in related supporting subjects. Courses should be carefully selected tomeet the specific requirements of the graduate school that the student plans to enter. Theplacement office maintains a file of graduate school catalogs that may be used by facultymembers and students.

## Associate of Arts Degrees

The formal requirements for graduation with an associate's degree are:

1. A minimum of 20 courses. In meeting this requirement, A.A. students must take general education requirements, complete requirements for an area of concentration, and may also take elective courses.
2. A grade point average of 2.00 or better ( 4.00 scale)
3. A minimum of ten courses 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.

Distribution Requirements The following outline of requirements may be changed slightly for individual programs. Students should confer with their advisor regularly to plan their program. Career planning assistance from qualified personnel is available to help students select courses that will prepare them for service, vocations, or further schooling.

General Education (8 courses) Please read the information on page 33 about the purpose and nature of general education courses.
A writing course ..... 1Any course from English 101, 301, 302, 303, 304, Communication 241.History (any course)1
Theology or Philosophy (any course) ..... 1
Science ..... 1Any course from the agriculture, astronomy, biology, chemistry, physical science, orphysics departments.
Mathematics or Computer Science (any course) ..... 1This requirement may be waived if the student has one of the following:a. A percentile ranking of 70 or higher on the mathematics section of the ACT test.b. Passed a comprehensive mathematics skills test.
Humanities ..... 1Any course from the art, English, music, or theatre arts departments; or any foreignlanguage/linguistics course.
Social Sciences ..... 1Any course from the economics, political science, psychology, sociology, or socialwork departments.
Elective ..... 1One additional course from any of the categories listed above.
HPER 10
General Education 10
Computer LiteracyThis requirement may be met by passing a computer literacy test or by taking anycomputer science course at Dordt College.
Area of Concentration ( $6-12$ courses) Each student must choose an approvedarea of concentration. Course sequences for the various areas of concentrations may befound in the "Academic Offerings" section of the catalog:
Agriculture - page 46
Data Processing page 61
General Studies • page 90 (The general studies concentration allows a wide variety of options.)
Secretarial Science - page 56
Special Education Aide, Teacher Aide - page 77
Elective Courses (0-6 courses) These courses are to be selected by the studentto meet individual needs and goals.
a. A second area of concentration may be worked out.
b. Cognate courses may be selected to support the area of concentration.
c. Additional courses in the area of concentration may be selected.
d. Courses that explore alternate career options may be selected.
e. A wide distribution of courses may be chosen to provide a broad general background.

## Special Educational Opportunities

Individual Studies Major The individual studies major will provide an opportunity for specially qualified students to plan a specific program in an area of study not yet 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 special characteristics such as the ability to articulate their goals clearly and specifically; self-reliance and the ability to work independently; self-motivation; and the ability to carry a project to completion.

The individual studies major is a major option within the graduation requirements for the B.A.-General degree. Since every general student has a large number of elective options beyond the already structured majors, an individual studies major presupposes a scope of courses and program structuring that goes beyond what a student can normally accomplish within the elective course options. Therefore, the student must submit, in writing, a forty-course sequence that makes a unified program. It will be the student's responsibility to specify why each course has been selected and to demonstrate how each course applies to the goal articulated for the individual studies major. The 40 -course sequence must include courses that meet the 14 -course general education requirement; a 15 -course major program that will ensure depth of understanding and performance in the special area selected; and 11 elective courses, each carefully selected to contribute to the special area of study.

Students who wish to plan an individual studies major should see the associate academic dean to discuss the specific requirements and application procedures (minimum requirements are 10 courses and a cumulative grade point average of 2.50 or better). The associate academic dean will assign a faculty member to assist the student in writing his proposal and to serve as faculty coordinator of the accepted program.

The Individual Studies Committee will review all proposals. The committee may approve, reject, or suggest modifications. The committee will also review individual studies major programs periodically to evaluate the quality of work being done, the extent to which goals and requirements are being met, and the need for modifications of the original proposal. The committee has the right to terminate an individual studies major at any time that it becomes apparent that the student is not qualified to continue or is not carrying out the program as originally approved.

Individual Studies Courses Individual Studies 391 and 392 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. 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, 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, which may be obtained from the associate academic dean. 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 proposal must be signed by the faculty project supervisor. Completed proposals must be returned to the associate academic dean for approval by the deadline for adding courses. If the acceptability of an individual studies proposal is questioned, it will be brought to the Individual Studies Committee for final action.

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 associate academic dean for permission to register for Individual Studies 391 or Individual Studies 392.
All 391 and 392 individual studies courses are governed by the following policies:

1. Only juniors and seniors will be allowed to take individual studies courses; however, in unusual cases, others might be allowed to do so on petition to the Academic Policies Committee.
2. A student must have a cumulative grade point average of 2.25 .
3. Not more than one individual studies course may be taken in a semester. No more than three individual studies courses may be applied to the 40 -course graduation requirement.
4. Normally, an individual studies course should be completed in one semester, but, with advance notice, the course may be spread over the first and second semesters of the same year.
5. Individual studies courses are open only to students who have had extensive previous course-work in the department.

## Off-Campus Programs

American Studies Program The American Studies Program in Washington, D.C., draws students from Christian colleges throughout the United States. Students participating in the program spend a semester in the nation's capital attending academic classes, serving as interns in government and nongovernmental agencies, and living in a unique Christian community. The program is open to students majoring in any field. For more information and application forms contact Professor Donald King.

AuSable Institute of Environmental Studies Dordt is one of 19 Christian colleges participating in the summer environmental studies programs offered at AuSable Institute near Mancelona, Michigan, an area rich in land, water, and biotic resources. As many as two courses can be taken at each of two summer sessions and applied toward meeting Dordt graduation requirements. Both the AuSable courses and home campus courses can be used to meet requirements for certificates issued by AuSable in the following areas: naturalist, land resources analyst, water resources analyst, and environmental analyst. Semester internships in environmental education are also offered during the fall and winter semesters.

Course offerings for the May term and summer sessions are as follows:

## May Term

AuSable 305 Ornithology
AuSable 315 Woody Plants
AuSable 361 Natural History in Spring

## Summer Session I

AuSable 220 Environmental Science
AuSable 301 Land Resources
AuSable 303 Natural Resources Practicum
AuSable 311 Field Botany
AuSable 321 Animal Ecology
AuSable 322 Aquatic Biology
AuSable 390 Directed Individual Study
AuSable 471 Conservation Biology

Summer Session II<br>AuSable 302 Water Resources<br>AuSable 304 Natural Resources Practicum<br>AuSable 312 Insect Biology and Ecology<br>AuSable 316 Field Geology<br>AuSable 332 Environmental Chemistry<br>AuSable 342 Fish Biology and Ecology<br>AuSable 391 Directed Individual Study<br>AuSable 482 Restoration Ecology

In alternate summers there is a program in advanced natural history offered to advanced students. For specific courses in these programs and general information contact Dr. Delmar Vander Zee or Prof. Richard Hodgson at Dordt College.

AuSable fellowships and grants-in-aid are available to Dordt students (see "Scholarships and Grants" section of the catalog).

Chicago Metropolitan Center Program Selected juniors and seniors may register for a semester in the Chicago Metropolitan Center Program.

The Chicago Metropolitan Center offers students a distinctive opportunity to work in a large metropolitan city and to study problems and issues of metropolitan life in a fully accredited, supervised educational program.

Students spend four days a week in an internship (Chic 371) related to their academic major and career interest; they also participate in seminars one day per week at CMC's Loop Center.

Fifteen hours of academic credit can be earned through the CMC Program. To achieve this number of credits, students must take the internship course plus two of the three seminars offered. The seminars offered are the Fine Arts Seminar, the Metropolitan Seminar, and the Values and Vocations Seminar.

Each student spends several days in an on-the-job learning experience in such fields as business administration, social work, psychology, journalism, and government. In addition, each student participates in a metropolitan seminar, a values seminar, and a social research seminar.

This program is under the supervision of Trinity Christian College.

German Overseas Program Dordt College sponsors an academic program in Germany in conjunction with Dordt's Netherlandic Studies Program at the Lessing Kolleg or the Goethe Institute. The focus of the program is gaining facility in the German language.

Applicants need a 2.50 grade point average and completion of German 201. The program is designed for sophomores, juniors, and seniors. A screening committee will review all applications.

Iowa Legislative Internship Program Selected juniors and seniors may register for a semester in the Iowa Legislative Internship Program. Students are assigned to Iowa legislators who are responsible for using them as assistants. In addition to the work assigned by the legislator, students complete an individual study project (371) that capitalizes on their work experience and the many resources available in Des Moines.

Latin American Studies Program Dordt College, in conjunction with the Christian College Coalition, offers a semester (or full year) program in San Jose, Costa Rica. The purpose of the program is to offer a Christ-centered cross-cultural program to deepen the students' understanding of the lordship of Jesus Christ in an international context and to equip them for service in the Third World. Participation in the program is open to selected juniors and seniors with a minimum grade point average of 2.75 and at least one year of college-level Spanish courses. Students should contact Dr. Dallas Apol for information and application forms.

Los Angeles Film Studies Program Dordt College, in conjunction with the Christian College Coalition, offers a semester program in Los Angeles.

The program is intended to serve as an introduction to the work and workings of the film industry. It does not assume that students have had previous experience in film, but only that they have a desire to learn more about it. The LAFSP does not intend to be a substitute for film school, as its curriculum is designed to allow students exposure to the industry, to the many academic disciplines that might be appropriate to it, and to critical thinking and reflection on what it means to be a Christian in this field of endeavor. As such, the curriculum is balanced between courses of a theoretical nature and courses that offer students a more applied introduction to the world of film.

Participation in the program is open to selected juniors and seniors with a minimum grade point average of 2.75 . Students should contact Dr. Marlin Vanden Bosch for information and application forms.

Middle East Studies Program In conjunction with the Christian College Coalition, Dordt offers a semester of study in the Middle East, centered in Cairo, Egypt. The program provides the opportunity to study Middle Eastern peoples, cultures, language, and problems in their context, and introduces students to serving other people in the name of Christ. While on the program, students also tour historical sites, and spend three weeks in Israel.

Participation is open to selected juniors and seniors with a minimum grade point average of 2.75 . No knowledge of Arabic is required. Students should contact Mr. H. Krygsman for information.

Netherlandic Studies Program in Contemporary Europe Dordt College offers an opportunity to spend the spring semester off-campus in The Netherlands in a unique learning situation, while earning five courses of credit. Besides the Dutch 259 course, students will select four courses from the following:

ART 248 - Dutch Art and Architecture (3)
Architecture and painting in the Low Countries, with emphasis on the 17 th century. Supplemented by museum visits and city walks (taught in English).

DUTCH 103 - Beginning Dutch (3)
DUTCH 203 - Intermediate Dutch (3)
DUTCH 204 - Introduction to Modern Dutch Literature (3)
This course is taught by special arrangement.
DUTCH 259 - Dutch Conversation (1)
DUTCH 391 - Individual Study (3)
A survey of Dutch literature or advanced composition.
DUTCH 248 - Dutch Culture and Society (3)
A study of contemporary issues in Dutch society which are studied from an interdisciplinary approach and supplemented by field trips (taught in English).

## HISTORY 248 - History of the Low Countries (3)

A study of the history of the Netherlands and Belgium, starting with the Eighty Year War until the present. Also several visits to Dutch historical museums (taught in English).
POLITICAL SCIENCE 248 - Political Science of Dutch Society (3)
An introduction to the present-day political structure of Dutch society, focusing on the relationship of belieflideology and politics (taught in English).
INDIVIDUAL STUDIES 391
Open to qualified student with permission from the designated major department in which the credits will be earned. The Free University offers excellent opportunities to do a research project for those who need to earn credits in a particular discipline. If needed, the program will provide a "tutor" to guide the student.

During the last three weeks, the student will be able to select one of the following courses:

## DUTCH 348 - Culture and Society of the Lowlands in Contemporary Europe (3)

The course will focus on the identity of the Dutch speaking community as it enters a new era of economic and political affiliations within a larger West-European community.
SPECIAL TOPICS 348 - (3)
On a rotating basis courses on special topics will be offered from a variety of disciplines, e.g. business, theology, art.
Applicants need a 2.50 grade point average. Also recommended is a course of college Dutch or its equivalent. The program is designed for sophomores, juniors, and seniors. A screening committee will review all applications. Students should contact Dr. Case Boot or Dr. John Struyk for information and application forms.
Russian Studies Program In conjunction with the Christian College Coalition, Dordt offers a semester of learning in Russia, focused in Moscow, Nizhnii Novgorod and St. Petersburg. Students have the opportunity to study Russian language, history, culture and current events "on location." Participation is open to selected juniors and seniors with a minimum grade point average of 2.75 . No knowledge of Russian is necessary. Students should contact Mr. Arnold Koekkoek for information and application forms.

Semester in Spain In cooperation with Calvin College, Dordt College offers a second semester study program in Spain. The program is open to upperclassmen who are majoring or minoring in Spanish and who have taken at least two years of college-level Spanish courses. Students should contact Dr. Dallas Apol for information and application forms.

Summer Study Program in Mexico High school and college students may apply to study at the Romance Language Institute in Durango, Mexico. Dordt College students have the opportunity to serve as chaperons for the high school students. Classes are held at all levels, from beginning Spanish to an M.A. program. The Dordt College program in Mexico is for three weeks each summer. College students can earn one course credit ( 3 semester hours). Students should contact Prof. Corinne Huisman or Dr. Dallas Apol for information and application forms.

## Academic Policies

Class Attendance All students are expected to attend all class periods and all laboratory periods. Penalties for absence from class 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. Each semester hour requires one period per week of class work and approximately two hours per week of preparation.
Student Classification Classification is made at the beginning of the academic year and is determined by the number of full courses successfully completed:
Sophomore
8 courses
Junior . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18 courses
Senior . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 28 courses

Student Load The normal student load is five courses per semester. The minimum load for full-time student classification is four courses ( 12 semester hours) per semester.

Under the conditions listed below, students may take more than five courses per semester. However, the decision to do so should be considered very carefully and should be made in consultation with an academic adviser. The following policies will govern overloads:
a. Within the definition of a normal load, a student may take two approved one-hour courses in addition to the five-course load.
b. No freshman may register for an overload in his/her first semester, and may do so in the second semester only if he/she has a grade point average of 3.00 or better and has written permission from the registrar.
c. A first semester freshman who is acepted on academic probation will not be allowed to take more than a four-course load.
d. Sophomores, juniors, and seniors may register for a one-course overload if they have a cumulative grade point average of 2.00 or better and written approval of their advisor.
e. Students who wish to take more than one overload course per semester must have a cumulative grade point average of 3.00 or better and have written approval from the registrar.
f. IN A STUDENT'S FOUR-YEAR PROGRAM, NO MORE THAN TWO OVERLOAD COURSES WILL BE APPLIED TO THE GRADUATION REQUIREMENT OF 40 COURSES.

## Class Visitor and Audit Policies

1. Full-time Students - will be allowed class visitor privileges with the permission of the instructor and the registrar if there is room in the class.
2. Part-time Students - will not be granted class visitor privileges. They will be permitted to audit classes at half the regular tuition rate.

Dropping Courses Changes in registration must be completed during the drop/add period (within one week after the opening date of each semester). Permission to change courses must be obtained from the registrar of the college.
No course may be dropped without the permission of the registrar. Courses dropped without permission are recorded as " F ". Courses dropped after the drop/add period are recorded as "WP"-withdrawn passing-if the student has a passing grade in the course when it is dropped and "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 ".
Repeating Courses A student may repeat a course regardless of the grade earned. The initial grade will be ruled through and will not be used in calculating the grade point average. Only the last course will be listed for credit and the last grade will be used for calculating the grade point average.

Withdrawal From School A full-time student who wishes to withdraw from school must see the director of career counseling to obtain the necessary withdrawal form and receive permission to leave school. The form must be signed by the director of career counseling, dean of students, 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 "W/P" or "W/F," 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.)

Grading System The following grading system is in effect at Dordt College:

| Grade | Points Per Hour | Description <br> A |
| :---: | :---: | :--- |
| B | 4 | Good |
| C | 3 | Graduation Average |
| D | 2 | Unsatisfactory |
| F | 1 | Failure |
| P | 0 | Pass |
| WP | 0 | Withdrawn Passing |
| WF | 0 | Withdrawn Failing |
| AU | 0 | Audit |

Grade Point Average Students must maintain a 2.00 grade point average (GPA) in order to graduate. 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.

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 a course load greater than that stated in the catalog.

Pass-Fail Option Students have the option of selecting courses on a pass-fail basis. This policy 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 course grade on their grade point average.

The following guidelines have been adopted to aid in the selection of $\mathrm{P} / \mathrm{F}$ courses:
P/F courses may be taken by sophomores, juniors, and seniors.
Sophomores, juniors, and seniors may take one P/F course per semester. Seniors taking six courses in a semester may put two courses on P/F. A total of six P/F courses may be applied to the 122 hours required for graduation.

The grade of " $P$ " will be calculated for grade point average purposes as follows: Hours attempted $=0$; Credits $=2,3,4$, etc.; Grade points $=0$. Thus, a grade of " P " WILL HAVE NO EFFECT ON THE STUDENT'S GRADE POINT AVERAGE because the grade point average is determined by dividing the grade points by the hours attempted.

A grade of " $F$ " will be calculated in the same way as an " $F$ " under the normal grading system. Thus, a grade of " $F$ " WILL REDUCE THE STUDENT'S GRADE POINT AVERAGE.

Students who receive a " $P$ " in a P/F course may not retake the course on a graded basis.
The various departments have the prerogative to identify courses that should not be P/F.
Students may register for P/F in elective courses only. Excluded, therefore, are:

1. All general education requirements.
2. All requirements for majors and teaching minors.
3. All requirements for teacher education programs.

Students will select the P/F option during the add/drop period at the beginning of the semester. Changes from A-F to P/F grading and from P/F to A-F grading may be made on forms supplied by the registrar's office as follows:

1. $\mathrm{P} / \mathrm{F}$ to A-F grading-any time prior to last day of classes.
2. A-F to P/F grading-any time during the first ten weeks of the semester.

Academic Standing A student is expected to maintain a 2.00 grade point average for graduation. When the cumulative grade point average is below the required minimum GPA for good standing, the student will be placed on academic probation. The minimum GPA levels required to be in good academic standing are these:

| Credits Earned | $\underline{\text { GPA }}$ |
| :--- | :--- |
|  | 1.60 |
| $13-23$ | 1.70 |
| $24-40$ | 1.80 |
| $41-53$ | 1.85 |
| $54-68$ | 1.90 |
| $69-83$ | 1.95 |
| 84 or more | 2.00 |

If no credits are achieved in a given semester, the student may be dismissed for academic reasons.

Normally a student may be on academic probation for only one semester. If the student does not raise the cumulative GPA above the required minimum, special permis. sion is required to register for further work at Dordt College. The Academic Policies Committee may grant such permission or dismiss the student. The committee's decision is based on the circumstances involved in each individual case.

Students are notified by letter when they are placed on probation or dismissed for academic reasons.

A student dismissed for academic reasons may not apply for readmission before a lapse of one academic year.

Students should be aware that 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.

Grade Reports First semester mid-term grades are reported to freshmen. These are not recorded on the permanent record but are for the purpose of indicating progress being made. Mid-term reports are obtained from the student's faculty adviser.
Final grade reports are released by the registrar's office as soon as possible after the close of each semester.

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 vice president for academic affairs.

Graduation Students must make application for graduation the semester prior to their graduation. Graduation exercises are held only at the end of the spring semester. In order to participate in the graduation exercises, the student must have completed all course work for the degree. Requests for exceptions must be brought to the Academic Policies Committee via the associate academic dean prior to February 1. There are no exceptions for the A.A. degree.

# Academic Offerings Course Descriptions 

## Accounting

General Major-
Business Administration 201, 202, 225, 301, 302, 310, 311, 312, 313, 314, 315,351 ; one elective course in business administration; Economics 201, 202; one elective course in economics; Computer Science 101, 103, or 111; Mathematics 107.

## Agriculture

## General Majors-

Core (common to all four majors):
Agriculture 101, 111, 121, 361, 371; Biology 122; Chemistry 101; one course from Economics 200, 201, 202. Note: Credit will not be given for both Economics 200 and 201 or 202. Agri-Business majors must take Economics 201.

Agriculture: Core; four courses from Agriculture 232, 233, 234, 235, 236, 332, 334, 337, Biology 213, 302; three courses from Agriculture 201, 251, 255, 311, 313, 315, Biology 213, 217, 319; Chemistry 102.

Agri-Business: Core; Agriculture 312; Business Administration 201, 202, 205, 301; Economics 202; two elective courses from business administration or economics.

Animal Science: Core; Agriculture 232, 236; one course from Agriculture 233, 235; one course from Agriculture 234, 332, 334; one course from Agriculture 321, 337; Biology 213, 302; Chemistry 102.

Plant Science: Core; Agriculture 201, 311, 321; one course from Agriculture 251, 255; one course from Agriculture 313, 315; Biology 319; one course from Biology 213, 217; Chemistry 102.

## Area of Concentration (Associate of Arts in Agriculture)

Agriculture 101, 111, 121, 201; one course from Agriculture 233, 235, 237; one course from Agriculture 232, 234, 236; one course from Agriculture 251, 255; Chemistry 101. Specific general education requirements include: English 101, History 100, Theology 101, Biology 101, Communication 110, and Computer Science 101.

101 Introduction to Animal Science (4)
Management, physiology, breeding, feeding, and marketing of cattle, swine, sheep, poultry, and other animals. Three lectures and one three-hour laboratory period per week.

## 111 Introduction to Plant Science (4)

This course deals with the production, management, and utilization of the major groups of economically important plants-grain crops, forage crops, fruits, vegetables, ornamentals, fibers, and stimulants. The effects of soil, climate, and plant pests are considered in relation to the management of various cropping situations. Three lectures and one three-hour laboratory period per week.

## 121 Introduction to Farm Operation and Management (3)

Stewardship and economic decision-making in operation of a farm business. Setting goals, organizing the farm business, record-keeping, budgeting and other basic planning techniques, credit, taxes, basic investment analysis, and marketing. Two lectures and one three-hour laboratory period per week.

## 201 Nature and Properties of Soils (3)

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 period per week. Prerequisites: Agriculture 111; Chemistry 101.

## 232 Principles of Animal Nutrition (3)

The evaluation, composition, and values of feedstuffs as they relate to animal diet formulation will be considered. Diets will be formulated for the major livestock species and differing digestive systems. Two lectures and one threehour laboratory period per week. Prerequisites: Agriculture 101; Chemistry 101.

233 Principles of Dairy Science (3)
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 232; Chemistry 101.

## 234 Principles of Animal Health (3)

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. Recommended: Biology 302.

## 235 Principles of Swine Science (3)

A study of swine care and management, physiology, diseases, equipment, reproduction, and nutrition. Two lectures and one three-hour laboratory period per week. Prerequisites: Agriculture 101; Chemistry 101. Recommended: Agriculture 232.

## 236 Principles of Livestock Evaluation (3)

 The evaluation of livestock species including beef, swine, dairy cattle, and sheep. The evaluation and judging will include live animal, gross anatomy, and carcass evaluation. Two lectures and one three-hour laboratory per week. Prerequisite: Agriculture 101.237 Animal Production and Management (3)
The study of a particular animal species from a production and management orientation. One or two lectures and three to six hours laboratory experience per week. Prerequisites: Agriculture 101, 121 ; enrollment in the associate of arts program. Note: Credit will not be given for both Agriculture 237 and Agriculture 337.

## 251 Horticultural Plants (3)

The study of greenhouse, vegetable, and
ornamental plants. The physiology, culture, and aesthetics of horticultural practices will be examined. Three lectures per week. Prerequisite: Agriculture 111 or Biology 115.

## 255 Forage Crop Management (3)

The production and management of crops for livestock feed are considered in terms of establishment, growth, harvesting, preservation and quality. Primary emphasis is given to the value of major temperate grasses and legumes as livestock feed in terms of energy, protein, and other nutritional components. Three lectures per week. Prerequisites: Agriculture 101, 111.

## 311 Soil Fertility (3)

An integrated discussion of soil-crop yield 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, 102.

## 312 Marketing of Agricultural Products (3)

 An analysis of agricultural marketing systems, factors determining agricultural prices, and farmer marketing management. Topics are setting marketing goals, government price institutions, contract and futures markets, and marketing under risk and uncertainty. Three lectures per week. Prerequisite: Agriculture 121.
## 313 Plant Protection-Weed Science/ Plant Pathology (3)

An introduction to the principles of weed science and plant pathology. Attention will be given to identification, morphology, taxonomy, physiology, ecology, life cycles, and appropriate control methods of major weed species and diseases. Three lectures per week. Prerequisites: Agriculture 111, 201; Biology 115; Chemistry 101, 102.

315 Entomology and Pest Management (3) An introduction to entomology and insect-pest management including insect biology, taxonomy, ecology, life cycles, and conventional and non-conventional control of agricultural insect pests. Three lectures per week. Prerequisites:

Agriculture 111; Biology 115, 122; Chemistry 101, 102.

## 321 Advanced Farm Operation and Management (3)

Christian concepts of stewardship and justice in agriculture, advanced planning techniques, investment analysis, agricultural finance, decisionmaking under risk and uncertainty, intergenerational transfer of the farm business, governmental regulation and promotion of agriculture. Three lectures per week. Prerequisites: Agriculture 121; one course from Economics 200, 201, 202.

## 332 Advanced Animal Nutrition (3)

Nutritional physiology for ruminants and monogastrics will be discussed dealing with the various nutrients and their role in animal nutrition. Advanced ration formulation will be discussed as it relates to the different digestive systems. Three lectures per week. Prerequisites: Agriculture 232; Chemistry 102.

## 334 Physiology and Breeding of Farm Animals (3)

An application of the principles of physiology and genetics to the major classes of livestock. Physiology of reproduction, milk production, and ruminant digestion will receive attention. Heritability, selection methods, and mating systems will be studied. Three lectures per week. Prerequisites: one course from Agriculture 231, 233, 235; Biology 213; Chemistry 101, 102.

## 337 Enterprise Management (3)

Management of a major agricultural enterprise will be discussed. One to two lectures and three to six hours of laboratory activity at the ASC per week. Prerequisites: Agriculture 232; one course from Agriculture 231, 233, 235; Chemistry 101, 102; enrollment in one of the bachelor of arts programs. Note: Credit will not be given for both Agriculture 237 and Agriculture 337.

## 341- Special Topics (3)

348 These courses 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.
361 Senior Seminar (3)
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. Prerequisite: senior standing in the agriculture department.

## 371 Practicum (3)

Students are given 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.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Agriculture 391. Art 207, 208, 209, 210; two courses from Art 218, 220, 225, 228, 230, 240; two courses from 302, 316, 318, 320, 325, 328, 330, 340; Phil 206.

Graphic Design emphasis: Art 201, 202, 209, 218, 225, 230, 240, 332, 340; one course from Art 207, 208, 210; Buad 206.

History emphasis: Art 201, 202, 207, 208, 209, 210, 216; two courses from Art 218, 220, 225, 228, 230; two courses from Art 302, 316, 318, 320, 325, 328, 330.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" on pages 65-82.

## 201 Design Theory (3)

Manipulation of two and three 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 (3)

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)

 This course is the first of a three-semester survey of the history of the visual arts. It investigatesthe 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) 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)

This is the third course in a historical survey of art and architecture. The course will begin with the foundations of modernism in the last half of the 19th century and then cover the plurality of styles in the 20th century.

## 210 Art History: North American Art and Architecture (3)

This course covers American art and artists not included in the survey courses. It includes the art of pre-revolutionary times, the regionalists of the 20th century, as well as current international movements in the present time. This survey includes the work of Mexican, Canadian, Black, and Native American artists.

## 216 Sculpture (3)

An introduction to the various methods and materials used in developing three dimensional form including wood, metal, and plaster. The student becomes involved in both additive and subtractive methods of working. Class size is limited.

## 218 Ceramics (3)

An introduction to clay and the basic process of slab, pinch, coil and wheel-thrown constructions. Class size is limited.

220 Fibers (3)
An introduction to a variety of techniques and processes dealing with fibers and textiles from a creative point of view. Class size is limited.

## 225 Painting (3)

An introduction to painting, emphasizing techniques and methods of communicating ideas visually. Work will give opportunity to experiment in various media and techniques including watercolor, acrylics, and tempera. Class size limited.

## 228 Printmaking (3)

An introduction to some basic printmaking methods: serigraphy, linocuts, collographs, and intalio. Class size limited.

230 Photography (3)
An exploration of black and white photography as an art form. The student must provide his own 35 mm camera. Class size is limited.

## 240 Graphic Design (3)

An introduction to basic design processes and layout procedures in the area of graphic design. The course explores combinations of design elements with copy and typography, development
of ideas into visually dynamic designs, and the preparation of illustrations and copy into camera-ready layouts. Prerequisites: Art 201, 202, or permission from instructor.

## 302 Advanced Drawing (3)

316 Advanced Sculpture (3)
318 Advanced Ceramics (3)
320 Advanced Fibers (3)
325 Advanced Painting (3)
328 Advanced Printmaking (3)
330 Advanced Photography (3)
332 Advanced Studio (3)
333 Advanced Studio (3)
340 Advanced Graphics (3)
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.

## 341- Special Topics (3)

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.

## 370 Senior Seminar in Art (3)

A critical examination of contemporary problems and trends in the field of art. The course will include readings, discussions, a paper or presentation, critique of current exhibitions, and the senior art show.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Art 391.

## Astronomy

General Minor: Planetary ScienceAstronomy 121; Geology 110, 220; three additional courses in astronomy.

121 Solar System Astronomy (4)
An advanced descriptive introduction to
planetary astronomy, with emphasis upon recent discoveries concerning planets and satellites, and
their implications for an improved understand ing of our Earth. Theories concerning the origin of the Solar System will also be discussed. Three lectures a week, plus a weekly laboratory/discussion or observing session. Prerequisite: one year of high school algebra.

## 122 Stellar and Galactic Astronomy (4)

An advanced descriptive introduction to stellar and galactic astronomy. Discussion of the kinds of stars, their origins, energy production, and final collapse; the nature of nebulae, star clusters, black holes, galaxies and quasars; modern cosmology; extra-terrestrial life. Students will undertake a variable star observing project. Three lectures a week; occasional observing sessions (weather permitting).
310 The Giant Planets (3)
The nature and structure of the four giant hydrogen planets (Jupiter, Saturn, Uranus, Neptune), their rings and satellite systems. Conducted
as a weekly evening seminar, offered every third spring semester. Prerequisites: Astronomy 121; Geology 110, 220.

## 320 The Planet Mars (3)

The nature and structure of Mars and its satellites; phenomena of the Martian atmosphere; the possibilities of life on Mars. Frequent comparisons with Earth, Moon, and other planets will be made. Conducted as a weekly evening seminar, offered every third spring semester. Prerequisites: Astronomy 121; Geology 110, 220, or equivalent with permission of instructor.

## 330 The Minor Planets (3)

The study of minor planets (asteroids) in terms of their orbital distribution, physical composition, and their value in the study of the history of the Solar System. Conducted as a weekly evening seminar, offered every third spring semester. Prerequisites: Astronomy 121; Geology 110, 220, or equivalent with permission of instructor.

## Biology

General Major- Biology 115, 122, 200, 213; six elective courses in biology numbered 200 or above (Biology 355, 391 strongly recommended); Chemistry 103, 104, 201, 202, 205.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## 101 Biological Science (3)

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 the plants and animals and a Christian perspective on the biotic world. A biology course designed for non-majors.

## 102 Biological Science (3)

A study of the functioning of organisms in the major terrestrial and aquatic environments. This ecological perspective emphasizes the interactions among the organisms and their physical environment. This includes the effect and responsibility man has in the ecosystem in which he has been placed. The biology of different types of organisms and the major biomes (environments) in which they can be found are studied. Past fossil
communities and genetics are also covered. A biology course designed for non-majors.

## 115 General Botany (4)

An introductory study of the anatomy, physiology, taxonomy, and ecological importance of major plant groups. Three lectures and one laboratory period of three hours per week.

## 122 General Zoology (4)

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 (3)

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. At least two Saturday field trips. Two lectures and one laboratory period per week or three lectures per week. Prerequisite: one year of college biology.
201 Human Anatomy and Physiology (3)
An introduction to the study of human biology, with emphasis on the structures and functions of the organ systems of man. Two lectures and one laboratory period of two hours per week. Prerequisite: Biology 122. Freshman pre-nursing students with permission.
202 Human Anatomy and Physiology (3)
A continuation of Biology 201.
204 Environmental Biology (3)
A second level ecology course emphasizing population ecology and parameters that are involved in endangered and threatened species. This will be studied in the context of Christian environmental stewardship principles. The class will meet in seminar/discussion format. Prerequesite: Biology 200.

210 Nutrition (3)
A study of the essential nutrients and their functions. Attention will be given to meal planning, weight control, and diets for special conditions. Three lectures per week. Open to pre-nursing and secondary or elementary education students only.

## 211 Invertebrate Zoology (4)

A study of the taxonomy, anatomy, life history, and ecology of major groups of invertebrates. Three lectures and one laboratory-field period of three hours per week. Prerequisite: Biology 122.

## 213 Genetics (3)

An introduction to the principles of inheritance and variation in plants, animals, microbes, and man. Three lectures per week. Prerequisites: Biology 115, 122, or permission of instructor.

## 214 Genetics with Laboratory (4)

An introduction to the principles of genetics using the lectures of Biology 213, with additional experience in the laboratory with live organisms. This course is designed for students who intend to go on to graduate school, medical school, secondary education, or for those students who desire more work in genetics than what is offered in Biology 213. Prerequisites: Biology 115, 122.

## 217 Plant Morphology (4)

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)

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 permission of instructor.

## 251 Perspectives on Origins (3)

A study of some theories of the origin of life, of man, and of the universe, including the history of evolutionism, and examination of the evidences for and against various theories. Christian and non-Christian approaches are evaluated. Not open to freshmen. Prerequisite: one college science course.

## 301 Embryology (3)

A study of the development of representative vertebrates such as the frog, chick, and pig. Two lectures and one laboratory period of three hours per week. Prerequisite: Biology 122.

## 302 Microbiology (3)

A study of the form, structure, and classification of various micro-organisms. Emphasis on bacteria, general laboratory technique, culture, media, sterilization, germicidal action of disinfectants, and staining methods. Includes information on antibodies and antigens, host-antigen reaction, bursal and thymic influences on lymphoid cells, humoral and cellular response mechanisms, and non-specific host defense mechanisms. Two lectures and one laboratory period per week. Prerequisites: Biology 115, 122, or permission of instructor.

## 304 Histology (4)

A study of the microscopic anatomy of animal tissues and organs, with emphasis on the relationship between structure and function. Two lectures and two laboratory periods of two hours per week. Prerequisite: Biology 122.

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

## 319 Plant Physiology (3) <br> 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 phyto-hormones. Two lectures and one three-hour laboratory period per week. Prerequisites: Biology 115; Chemistry 103, 104.

## 335 Cell Biology (3)

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.

## 341- Special Topics (3)

348 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)
Laboratory, field, or library research on an ap. proved 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)

A continuation of Biology 355.

## 391 Individual Studies (3)

Strongly recommended for majors; open to qualified juniors and seniors upon approval of the proposed research project by the department. See catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Biology 391.

## Business Administration

General Major- Business Administration 201, 202, 205, 206, 225, 301, 351; Economics 201, 202, 303; five elective courses in business administration and economics of which one but not more than two must be in economics.
Within the business administration major, students may wish to choose among the follow-
ing emphasis areas by taking selected upper level courses.
-Management/Marketing
-Finance
-Economics
To concentrate in one of these areas, students should choose some or all of the upper level courses recommended by the department in the PROGRAM REQUIREMENTS section of the Student Handbook for the Department of Business and Economics.

## 101 Introduction to Business (3)

A survey of the dynamic economy of our nation and a study of the objectives and responsibilities of business. The course considers the ethical problems of business. A non-technical course designed to benefit all college students.

201 Principles of Accounting - Financial (3) An elementary course in fundamental accounting theory and practice; a study of principles of accountability, record keeping, procedures, and preparation of financial reports.
202 Principles of Accounting - Managerial (3)
An introduction to management accounting with
primary emphasis on the record keeping and internal reporting that forms the basis for management decisions. Prerequisite: Business Administration 201.

## 205 Principles of Management (3)

A basic course in management fundamentals as applied to business organizations as well as to school, church, and other organizations seeking to accomplish objectives through group activity; a Christian approach to management problems. Prerequisite: sophomore standing.
206 Principles of Marketing (3)
A study of marketing institutions, channels of product distribution, problems of price deter-
mination, promotion methods, government in fluences, and ethical problems facing marketing personnel.

## 210 Information Processing and Management (3)

This course is designed to aid students in developing personal skills relative to efficient information processing and management. In addition to supervised drill work, classroom lectures will seek to clarify and identify the current procedures and electronic technology found in the business environment today. Credit will not be given for both Business Administration 210 and Business Education 105, 112, 321.

## 225 Introduction to Finance (3)

This course is 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. Prerequisites: Business Administration 201 and either Computer Science 101 or moderate spreadsheet experience.

## 226 Personal Financial Management (3)

This course is designed to prepare students for the many financial decisions which they will be making during their lives, and to provide insight and encouragement for making those decisions in a way that glorifies God.

## 301 Business Law I (3)

Will you ever lease an apartment, sign a sales contract, need a will, be named in a lawsuit or be confronted by a high-pressure door-to-door salesman? Both business and nonbusiness students can benefit from this basic course on law. Topics include criminal law, torts, contracts, agency, property, wills, and the Uniform Commercial Code.

## 302 Business Law II (3)

A continuation of Business Administration 301 with emphasis on the law of bailments, negotiable instruments, sales, partnerships, corporations, secured transactions, bankruptcy, federal regulations, and the Uniform Commercial Code. Discussions include how to start a business, how to sign and endorse checks, how
to extend credit, and laws prohibiting false advertising and employment discrimination. Prerequisite: Business Administration 301 or permis. sion of instructor.

## 305 Personnel Management (3)

A survey course which examines the role of personnel management and its contribution to the total management effort. Emphasis will be placed on recruitment and placement, developing human resources, labor relations, remuneration, and security. Prerequisites: Business Administration 205; junior or senior standing.

## 306 Marketing Management (3)

This course will prepare students to manage the interacting forces in the market to facilitate exchange processes between the producer and consumer. Strategic planning in relation to product development and its introduction in the market place within acceptable ethical standards will be discussed. Prerequisites: Business Administration 205 and 206; junior or senior standing.

## 307 Production and Operations Management (3)

This course is 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 operations, and to inform them of the opportunities and challenges in the field. Prerequisites: Business Adminstration 202 and 225 ; junior or senior standing.

## 308 Advertising (3)

A course in principles and practices of advertis. ing, promotion, and public relations strategy, in Christian perspective. A study of legal and ethical aspects of advertising and promotion, and application of effective procedures. Prerequisites: Business Administration 206; junior or senior standing.
310 Intermediate Accounting I (3)
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)

Continuation of Business Administration 310, in cludes special financial reports and financial analysis.

## 312 Advanced Accounting (3)

A comprehensive study of accounting problems of partnerships, consolidations, branch operations, bankruptcies, estates, trusts, etc. Prerequisite: Business Administration 202.

## 313 Cost Accounting (3)

A study of measurement and evaluation of production costs, including job order costing, process costing, standard costing, 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 A.I.C.P.A. standards, and on professional ethics. Prerequisites: Business Administration 311, 312.

## 315 Federal Income Tax (3)

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 permission of instructor.

## 316 Advanced Federal Income Tax (3)

This course will study federal income tax regulations and forms, based on the Internal Revenue Code, with primary emphasis on corporations, partnerships, S corporations, estates and trusts. Rerequisite: Business Administration 315.
325 Advanced Financial Management (3) 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 and 225.

## 326 Investments Management (3)

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 permission of instructor.

## 330 International Business (3)

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.

## 341- Special Topics (3)

348 Courses on different topics, designed to be special interest courses, utilizing individual instructor strengths, interests, and competencies. Each course selected will involve a topic not usually treated in depth in regularly scheduled courses.

## 351 Senior Business Seminar (3)

An integration of departmental courses involving student research and analysis on current topics in business and economics, with primary emphasis on Christian perspectives for the businessperson. Required of all senior students in business administration.
371- Business Administration Practicum (3-9)
373 A course 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: completion of 12 or more courses in the major area.

## 375- Accounting Practicum (3-9)

377 A course 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: completion of 12 or more courses in the major area.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Business Administration 391.

## Business Education

For descriptions of SECONDARY majors, minors, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.
Area of Concentration (Associate of Arts in Secretarial Science)
Business Education 105, 112, 113, 211, 321, 322, 323, 324; Business Administration 101; one course from Business Education 203, Business Administration 201; one course from Business Education 212, 324, Business Administration 202, 225, 301, 302, 315, English 305; Communication 110. (General requirements must be met by the following specific courses: English 101, 200. The general education computer literacy requirement is met automatically in this area of concentration; however, students must meet the general education mathematics requirement.)
Note: Medical Emphasis Option includes Biology 201, 202; Business Education 324.

## 105 Calculating Machines/Records Management (3)

The development of job-level skill in the operation of the electronic calculator emphasizing the application to the solution of typical problems in business math. Includes an overview of the records control field-the structure of various filing systems and procedures (with practical applications), storage and retrieval systems, and equipment used in records control. (Open only to majors in business education and to students in the associate of arts program in secretarial science.)

## 112 Typewriting II (3)

Development of accuracy and speed. Application of skill to more complex tabulations, correspondence, reports, business forms, and composition at the typewriter. This course may be waived by passing a proficiency examination administered by the business education department. For students who have had no previous typewriting training, arrangements can be made by the department for basic keyboard instruction. (Open only to majors in business education and to students in the associate of arts program in secretarial science and data processing.)

## 113 Typewriting III (3)

Development of skill to production level. Emphasis upon office-type work assignments with evaluation based upon high-level office standards
of production. Prerequisite: Business Education 112 or equivalent.

## 203 Introduction to Accounting (3)

A one-semester terminal course in accounting to provide exposure to basic accounting records and reports as to content and value for management. Designed for secretarial science students. Students who wish to complete additional accounting courses must begin with Business Administration 201. Credit will not be given for both Business Education 203 and Business Administration 201.

## 211 Shorthand I (3)

A study of Speedwriting shorthand, including the abbreviations and brief forms, principles of reading and writing shorthand, and taking dictation. (Open only to majors in business education and to students in the associate of arts program in secretarial science.)

## 212 Shorthand II (3)

A review of Speedwriting shorthand principles, building increased speed on new-matter dictation, and transcription skill development in the production of mailable copy; language arts skills necessary for transcription are also emphasized.
321 Office Procedures and Administration (3)
A study of procedures and duties essential to the efficient administration of an office by an
executive secretary, including receiving, transmitting, duplicating, storing, and retrieving business information, composing business letters, reports, and memoranda. Prerequisite or corequisite: Business Education 112.

## 322 Advanced Secretarial Procedures and

 Communications (3)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 opportunities for the secretary, and general development of skills and secretarial ethics for the high-level secretary. Prerequisite: Business Education 321.

## 323 Automated Word Processing (3)

Identifying the changes made in the traditional office affected by word processing procedures and equipment. An introduction to the production of typewritten communications at top speed with maximum accuracy, minimum effort, and lowest cost, through the combined use of proper procedures and modern word processing equipment. Prerequisite: Business Education 112.

## 324 Advanced Word Processing (3)

A continuation of Business Education 323. Course emphasis will center on the following three areas: advanced techniques, specialized applications (e.g. medical, legal), and microcomputer word processing and communications applications. Prerequisite: Business Education 323.

## Chemistry

> General Major- Chemistry 103, 104, 201, 202, 212, 301, 302; four courses from Chemistry 205, 311, 312, 321, 391, AuSable 332 (see pages 38-39); Mathematics 111 or 112; Physics 115, 116 or 201, 202.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## 101 General Chemistry (4)

A course in 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 laboratory period of three hours per week. The laboratory experiments will parallel the lecture content.
102 Organic and Biological Chemistry (4)
A continuation of Chemistry 101. Organic molecules and their functional groups, biomolecules and their function in living cells will be studied. Three lectures and one laboratory period of three hours per week. The laboratory will include experiments in organic and biological chemistry.

## 103 General and Analytical Chemistry (4)

 A course in the fundamental principles of chemistry. The lecture portion will includediscussion of the mole, reaction stoichiometry, solutions, gases, the first law of thermodynamics, and atomic structure. Laboratory work will consist of experiments related to lecture topics, as well as an introduction to analytical chemistry. Three lectures and one three-hour laboratory period per week.

## 104 General and Analytical Chemistry (4)

A continuation of Chemistry 103. Topics included are bonding theory, structure of solids and liquids, chemical equilibria, chemical kinetics, the second law of thermodynamics, and electrochemistry. Three lectures and one three-hour laboratory period per week.

## 201 Organic Chemistry (4)

A study of the chemistry of the hydrocarbons, including aliphatic, cyclic, and aromatic. An introduction to organic reation mechanisms. Three lectures and one laboratory period of three hours per week. Prerequisite: Chemistry 104.


#### Abstract

202 Organic Chemistry (4) A study of the various organic functional groups. The study of organic reaction mechanisms is continued. Three lectures and one laboratory period of three hours per week. Prerequisite: Chemistry 201.

203 Advanced Chemistry for the Life Sciences (3) The course will cover, on a deeper level, some topics previously encountered, such as solution chemistry, with emphasis on pH and buffers; thermochemistry; and kinetics. Other topics will include radioactivity and its uses, spectroscopy, and the role of enzymes in thermodynamics and kinetics. The course is intended for those in preprofessional programs, such as the pre-medical, pre-dental, pre-optometry programs, etc., and biology majors.


205 Biochemistry (3)
An introduction to the chemistry of living systems. Some topics discussed include pH and buffers, carbohydrates, lipids, proteins, nucleic acids, and enzymes. This knowledge is then applied to a study of the metabolism of the major cell constituents and integrated through a consideration of the interrelations among the carbon, nitrogen, and energy cycles. Three lectures per week. Prerequisite: Chemistry 202.

## 212 Quantitative Analysis (3)

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, and discussion of various analytical methods. Laboratory work will be included. Prerequisite: Chemistry 104.

## 301 Physical Chemistry (4)

An introduction to thermodynamics with ap-
plication to physical and chemical systems. This introduction includes a study of solution chemistry. Three lectures and one laboratory period per week. Prerequisites: Chemistry 103; Physics 115 or 125; Mathematics 112; junior or senior standing.
302 Physical Chemistry (4)
A continuation of Chemistry 301, quantum mechanics and kinetics. Three lectures and one laboratory period per week.
311 Advanced Inorganic Chemistry (3)
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)

Optical, electrical, and chromatographic methods of quantitative analysis and theoretical study. Two hours of lecture and one laboratory period per week. Prerequisite: Chemistry 104 or permission of instructor.

## 321 Advanced Organic Chemistry (3)

Advanced topics in organic chemistry, with an emphasis in reaction mechanism, kinetics, and other currently active areas of organic chemistry. Intended primarily for chemistry majors. Three lectures per week. Prerequisite: Chemistry 202.
391 Individual Studies (3)
Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

392 Individual Studies (3)
Same as Chemistry 391.

## Communication

General Majors- Communication: Communication 201, 220, 222, 228, 240, 241, 301; one course from Communication 313,315 ; three electives from communication courses numbered 200 or above, except Communication 373.
Journalism emphasis: Communication 201, 220, 222, 240, 241, 242, 250, 301, 313; one course from Communication 302, English 305.

Radio/Television emphasis: Communication 201, 222, 240, 241, 250, 258, 301,352 ; one course from Communication 313, 315; one course from Communication 302, English 304, 305.

Speech emphasis: Communication 201, 212, 220, 222, 311, 313, 315; three electives from communication courses numbered 200 or above, except Communication 373.

For descriptions of SECONDARY and ELEMENTARY majors, minors, fields of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## 41- Student Publications Production (1)

48 Open to all who work on student publicationswho submit, in advance, a learning activities contract listing the types of projects and learning experiences in which they will participate. (Graded on a P/No record basis.)

## 110 Fundamentals of Speaking and Listening (3)

The study of the basic concepts and designs of public speaking such as organization, style, content, and delivery. An important part of the course will concentrate on listening concepts and abilities. This course emphasizes the presentation of speeches and exercises in listening.

## 201 Principles of Communication (3)

A course designed to introduce the beginning communication student to some of the basic principles and thought in the study of communication such as communication models, variables, symbols, perception, intrapersonal communication, and semantic problems.

## 212 Oral Interpretation (3)

This course seeks to give students practice in the analysis and presentation of the various types of prose and poetry including the reading of the Holy Scriptures. An introduction to reader's theatre and choral reading will be presented.

## 220 Small Group Discussion and Com-

 munication (3)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 panels, symposiums, and dialogues.

## 222 Interpersonal Communication (3)

The study of concepts, problems, and responsibilities in personal communication between individuals, such as conversation and informal discussions, with consideration of status, power, trust and other variables.

## 228 Organizational Communication (3)

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)This course is 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 Basic News Writing (3)

An introduction to gathering and writing news for the print and broadcast media. The course includes practice in writing several types of news stories. It uses the Diamond as its laboratory. It stresses the importance of reporting news from a Christian perspective.

## 242 Newspaper Writing, Design and Layout (4)

A continuation of Communication 241. Students will learn interviewing, editing, in-depth reporting, critical and feature writing. Magazine writing and production will be introduced. Students will
practice style, headlines, etc., using the Diamond as laboratory. Prerequisites: Communication 241; a satisfactory grammar score.

## 244 Magazine Production (3)

This course will focus on magazine content, layout, and design. Content will include article writing (editorials, features, profiles), photography composition, and desktop publishing (including infographics). Students will use the Signet as their laboratory. (Basic photography skills are recommended.)

## 246 Advanced Journalism Production (3)

A course in journalism production in magazine or newspaper with work for various publications. The course will be designed for each individual to extend his/her knowledge and skills beyond the basic course. Prerequisite: Communication 241 or 244 or consent of the instructor.

## 250 Introduction to Broadcasting (3)

This course provides an introductory exploration into the world of radio and television as communication media. Through a lecture-discussion format, the student is introduced to the complexities of sight and sound broadcasting and the electronic media's impact on society. Special emphasis is given to broadcasting in the United States with some overview of broadcasting in other countries. This course is designed as a practical, non-theoretical, non-philosophical approach to broadcasting.

## 258 Broadcast Announcing (3)

A practical, introductory course in communicating to a broadcast audience through careful use of pronunciation, articulation, diction, and microphone technique. Exercises will include various types of broadcast speaking such as commercials, news, and music programs. Prerequisite: Communication 250.

301 Advanced Expository Writing I (3) 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. Signifi-
cant class time is spent in workshop format, students reading and discussing their own work.

## 302 Advanced Expository Writing II (3)

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.

## 311 Advanced Public Speaking (3)

An emphasis upon proper speech construction, and delivery with application of communication concepts. Includes analysis of some public addresses. Prerequisite: Communication 110 or permission of instructor.

## 313 Persuasion (3)

The analysis and study of modern research regarding various types of persuasive appeals and of theories of persuasion with particular emphasis upon Christian theory and ethics.

## 315 Argumentation (3)

Basic principles of argumentation and their application in debate. Consideration of analysis of issues, evidence and reasoning, refutation, ethics, and various types of debate.

## 341- Special Topics (3)

348 This course 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.

## 352 Radio Production (3)

Training in equipment use and control room procedures; uses and functions of microphones and video tape recorders. Classroom and studio instruction in radio programming and production skills. Prerequisite: Communication 250.

## 371- Communication Internship (3-9)

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.

391 Individual Studies (3)
Open to qualified juniors and seniors with permis. sion from the department. See the catalog section "Individual Studies" for application procedures
and policies governing individual studies.

## 392 Individual Studies (3)

Same as Communication 391.

## Computer Science

General Major- Computer Science 111, 112, 120, 201, 202, 205, 208, 301, 305; Mathematics 112, 113, 212; three courses from Mathematics 203, 204, 206, 209, 304; Physics 115 and 116, or Physics 201 and 202; Engineering 204.<br>Area of Concentration (Associate of Arts in Data Processing)<br>Computer Science 101, 111, 115, 120, 201; Mathematics 107; Business<br>Administration 201; Business Education 112, 321, 323.

## 101 Introduction to Computing (3) <br> This course deals with the use of computers in society. Topics include computer design and use, simple BASIC programs, and applications programs in word processing, file management, and spread sheet. Discussion and study will also deal with developing proper attitudes and perspectives toward computing technology. Not recommended for students with prior computer experience. (Note: only one course from Computer Science 101, 102, 103 may be taken for credit.)

## 102 Programming for the Natural Sciences

 (3)An introduction to the methods and nature of problem solving and computer programming in the natural sciences using BASIC and FORTRAN programming languages. File handling is introduced along with proper programming practice and methods. (Note: only one course from Computer Science 101, 102, 103 may be taken for credit.)

## 103 Programming in BASIC (3)

This course is an introduction to the methods and nature of problem solving using the BASIC programming language. Data management and file development are introduced along with proper programming practice and methods. The history of the development of computers and the impact of computer technology on society are included as elements of this course. (Note: only one course from Computer Science 101, 102, 103 may be taken for credit.)

## 111 Structured Programming I (3)

An introduction to systematic and analytical
methods of problem solving. Three basic phases of problem solving are emphasized: the analysis of the problem; the stepwise refinement of the algorithm; and the implementation in a computer language. Basic notions of computer programming, elementary composition principles, and the fundamental data structures are introduced.

## 112 Structured Programming II (3)

A continuation of Computer Science 111. Advanced programming and problem solving methods are introduced. The topics include string manipulation, linked lists, file handling, recursion, program modularity, and programming style. Prerequisite: Computer Science 111.

## 115 Programming for Business (3)

An introduction to COBOL computer language, and programming in this language. Topics include file development and maintenance with emphasis on business applications. Prerequisite: Computer Science 111.

## 120 Information Systems Design (3)

An introduction to the nature of information systems; the conceptual foundations and use of such systems. Topics include information system planning, system flowcharts, input/output design, data dictionaries, and database queries. Prerequisite: any college level computer science course.

## 131 Data Communications (3)

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: any college level computer science course.

## 201 Database Systems Design (3)

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. Prerequisite: Computer Science 112 and 120 or permission of instructor.

## 202 Data Structures (3)

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. Prerequisites: Computer Science 112 or 115; Mathematics 111 or 112 .

## 205 Computer Architecture and Assembly Language Programming (3)

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. Prerequisite: Computer Science 102 or 111, or permission of instructor.

## 208 Programming Language Concepts (3)

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 112 or permission of instructor.

## 210 Information Systems for Decision Support (3)

A study of decision-support systems for organization planning and management. Topics include modeling and simulation methods for problem solving and decision making. Prerequisite: Computer Science 201.

## 301 Computer Technology and Society (3)

 An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course a Christianphilosophy of technology is carefully studied and application is made to such problems as the role of the computer, technocracy, and the historical two-culture dualism. During the 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, whistleblowing, responsible salary structures, and morality in career choice. This course requires the student to write and present orally a significant research paper. Prerequisites: Philosophy 201, two 200 level computer science courses, junior or senior standing.

## 305 Operating Systems (3)

A study of the basic principles of modern multiprogramming 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. Prerequisite: Computer Science 202.

## 341- Special Topics (3)

348 These computer science courses cover different topics which maximize individual instructor strengths, interests, and competencies. Each course will deal with a topic in computer science not usually treated to any great extent in regularly scheduled courses.

## 371 Practicum (3)

Students will be given opportunity to apply the principles of management information systems in an on-campus or off-campus assignment. Prerequisite: senior standing. Corequisite: Computer Science 210.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Computer Science 391.

## Dutch

# General Major- Dutch 201, 202, 206, 302; Linguistics 201; five courses from Dutch 101, 102, 207, 208, 301, 341-348, 391, 392; four semesters of Dutch conversation 251-258. Study abroad courses are recommended. 

General Minor- Dutch 201, 202, 206, 302; one course from Dutch 102, 341-348, 391; three semesters of Dutch conversation 251-258. Study abroad courses are recommended.

## 101 Elementary Dutch (4)

Emphasis on the basic structure of the language, core vocabulary, and pronunciation. Assigned work in the language laboratory.

## 102 Elementary Dutch (3)

Continuation of 101. Prerequisite: Dutch 101 or its equivalent.

## 201 Intermediate Dutch (3)

A review of the grammatical structure of Dutch, with an emphasis on the nature of language. Attention is given to listening, speaking, reading and writing skills, vocabulary, and culture. Prerequisite: Dutch 102 or its equivalent.

## 202 Literary and Cultural Readings (3)

This course is designed to develop the reading skill and an appreciation for Dutch culture and literature. Emphasis upon contemporary literature. Permission will be granted for individual readings in academic areas of interest to the student. Prerequisite: Dutch 201 or departmental approval.

## 206 Dutch Culture (3)

This course is designed to cover many aspects of the Dutch way of life. Listening and speaking skills will be developed through the classroom activities. Prerequisite: Dutch 201 or departmental approval.

## 207 World Literature (3)

See English 207. Students who wish this course to be listed as a Dutch course will be assigned their paper based on Dutch readings.

## 208 World Literature (3)

See English 208. Students who wish this course to be listed as a Dutch course will be assigned their paper based on Dutch readings.

## 251- Conversation (1)

258 The 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; one hour of preparation per week. Prerequisite: Dutch 102.

301 Dutch Phonology (3)
See Linguistics 301. The principles and universals of phonology will be studied. A direct application will be made to the Dutch language.

## 302 Advanced Dutch Grammar (3)

This course is designed for those who desire a better understanding of the structure of the language. The scope of grammar will be approached systematically. Prerequisite: Dutch 201 or its equivalent.

## 341- Special Topics (3)

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 (3)

Open to qualified juniors and seniors with permission from the department. See the catalog secton "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Dutch 391.

## Economics

For descriptions of the SECONDARY and the ELEMENTARY field of specialization, see the "Teacher Education Program" section on pages 65-82.

200 Economics and Christian Stewardship (3)
This course 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. Credit will not be given for both Economics 200 and Economics 201 or 202.

## 201 Principles of Economics: Macro (3)

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.

## 202 Principles of Economics: Micro (3)

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, selected policy questions. Also studied are Christian views on the nature of humanity, human motivation, and the market.

## 303 Money and Banking (3)

An analysis of the nature and function of money, the operation of the financial system, the organization of comercial 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 201, 202.

## 305 Labor Economics (3)

A study of the labor force and market, organized labor, collective bargaining, labor legislation, and
regulatory institutions. Christian views and the responsibilities of labor and management are studied as well as Christian norms on appropriate labor policies. Prerequisite: Economics 202.

## 309 Economic History of the United States (3)

 A history of the development of the United States from the economic point of view. 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 202 or permission of instructor.
## 315 Government Finance (3)

This course covers government taxing and spending at the local, state, and federal levels. Christian and secular views on governmental economic activity, benefit-cost analysis, forms of taxation and their effects, debt financing, budget processes and problems are studied. Prerequisite: Economics 201.

## 321 Economic Development in the Third World (3)

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 develop. ment. We will also consider the implications of biblical principles for policy to promote economic development and alleviate poverty. Prerequisites: one course from Economics 200, 201, 202, or permission of instructor.

## 333 Economics of Natural Resources and the Environment (3)

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 environmen-
tal quality, and evaluation of current and proposed policies from a Christian point of view. Prerequisite: Economics 202 or permission of instructor.

## Education

Teacher Education Program The Teacher Education Program is built on a liberal arts base and on professional courses that prepare students for teaching in either the elementary school or in the secondary school. By completing the components of either an elementary or a secondary education program, the students are recommended for the first 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 arrangement of the education department or may be obtained from the director of the Teacher Education Program.

The standards for admission to the Teacher Education Program are:

1. a minimum cumulative GPA of 2.20 after five courses completed, 2.40 after 10 courses completed, 2.50 after 20 courses completed.
2. minimum skill proficiencies in the language arts and mathematics (See requirements under Approval for Student Teaching.)
3. effective oral communication skills.
4. a recommendation following an interview with a member of the education department.
5. completion of Education 201 and 104.
6. acceptable physical and psychological health.
7. acceptable Christian life style.

Completed applications are evaluated by the education department and then by the Teacher Education Committee. The committee formally

1. admits applicants who have met all the criteria for admission.
2. conditionally admits applicants whose deficiencies can be remediated.
3. 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
Each applicant is informed of the decision of the Teacher Education Committee regarding admission to the program.

Retention in the Teacher Education Program The progress of students in the program is regularly reviewed by the Teacher Education Committee. Retention in the program requires the following:

1. meeting the minimum admission standards.
2. a minimum cumulative GPA of 2.40 after 10 courses completed, 2.50 after 20 or more courses completed.
3. acceptable completion of professional education courses and field experiences.
4. acceptable progress in endorsement areas.

If a student's status in the program changes, the student is asked to meet with a member of the Teacher Education Committee. If a student is dismissed from the program, readmission will be considered when the student requests it through the director of teacher education.

Approval for Student Teaching Student teaching is required of all students preparing for licensure. Students must apply for student teaching toward the end of the junior year. Approval for student teaching is based on the following guidelines:

1. Elementary education students
a. Completion of a minimum of thirty courses for credit applicable to an approved program in teacher education.
b. Completion of Education 101, 201, 104, 203, 204, 215, 230, 301, 321, 322, 323, 324, 325 prior to student teaching.
c. Successful completion of proficiencies in the language arts and mathematics.
d. Unconditional status in the Teacher Education Program.
e. Achievement of a cumulative minimum GPA of 2.50 .
f. Recommendation on the basis of performance in professional education courses, professional experiences, and in endorsement areas.
2. Secondary education students
a. Completion of a minimum of thirty courses for credit applicable to an approved program in teacher education.
b. Completion of Education 101, 201, 104, 203, 204, 215, 230, 301, and methods in the major area of study prior to student teaching.
c. Successful completion of proficiencies in the language arts and mathematics.
d. Unconditional status in the Teacher Education Program.
e. Achievement of a minimum cumulative GPA of 2.50 .
f. Recommendation on the basis of performance in professional education courses, professional experiences, and courses in the major.
3. Special education students
a. Completion of all the requirements for either an elementary or a secondary program.
b. Completion of all the requirements for the selected area of special education endorsement.

Applications for student teaching are approved by the Teacher Education Committee.
To receive graduation credit and a recommendation for licensure, student teaching must be taken at Dordt College.

Requirements for Institutional Recommendation for Licensure To be recommended by the Teacher Education Committee for licensure, the student must have completed all program requirements and all B.A. degree requirements.

To qualify for licensure each student must have unconditional status in the Teacher Education Program, a minimum cumulative GPA of 2.50 , and a successful student teaching experience.

Program Options and Requirements The program of courses in teacher education meets the minimum requirements both for graduation and for initial licensure. Each program option in teacher education includes:

- general education requirements
- professional education or licensure requirements
- content courses in the major selected
- a human relations component
- electives (depending on the program option selected)

The general education program is the same for all students with one important exception for education students: Psychology 205 is acceptable both as fulfillment of a general education requirement in the place of Psychology 201 and also as a professional education requirement.

The following professional education core courses are required of all elementary education students regardless of the option selected:

Educ 101 - Introduction to Education (3)
Educ 201 - Curriculum and Instruction (3)
Educ 104 - Pre-Student-Teaching Field Experience I (1)
Educ 203 - Media and Technology in Education (1.5)
Educ 204 - Pre-Student-Teaching Field Experience II (1)
Educ 215 - Educational Psychology (3)
Educ 301 - Introduction to the Education of Exceptional Students (3)
Educ 372 - Student Teaching: Elementary (15)
Educ 330 or 230 - Human Relations ( 3 or 1.5) plus units from other coursework
Psych 205 - Developmental Psychology I (3)
The options which follow identify the academic requirements for teaching endorsements.

## Option I: General Elementary Teaching Endorsement K-6

*Endorsement 102
*The term "endorsement" and the numbers listed are part of the Iowa licensure code.

> Program Content Courses/Credit Hours
> (required for options I and II)
> Educ 205 - Children's Literature (3)
> Educ 321 - Teaching Social Studies in Elementary School (1.5)
> Educ 322 - Teaching Mathematics in Elementary School (3)
> Educ 323 - Teaching Reading in Elementary School (3)
> Educ 324 - Teaching Language Arts in Elementary School (1.5)
> Educ 325 - Teaching Science in Elementary School (1.5)
> Two courses selected from:
> Educ 111 - Elementary School Health \& Physical Educ (3)
> Educ 211 - Art for the Elementary Teacher (3)
> Educ 311 - Materials of Elementary Music Education (3)

The professional education and the program content courses constitute a major in elementary education.

Field of Specialization In addition to the above, a field of specialization of at least 12 semester hours is needed.

1. ART: Art 201, 202, 210; Art 216 or 218.
2. ENGLISH/LANGUAGE ARTS: one course from English 201, 202, 321; one course from English 205, 221, 222, 225; English 336; one course from English 301, 302, 303, 304, 305.
3. FOREIGN LANGUAGE-GERMAN: German 201, 202, 206, three hours of 251-258 or German 301.
4. FOREIGN LANGUAGE-SPANISH: Spanish 201, 202, 206, three hours of 251-258 or Spanish 301.
5. MATHEMATICS: any three math courses and one computer science course.
6. MUSIC: Music 103, 104, 312, one semester each of applied music in voice and piano. (Do not take Educ 311 as part of program.)
7. PHYSICAL EDUCATION: HPER 204 (203 prerequisite is waived), 207, 209, 306. (Do not take Educ 111 as part of program.)
8. READING: Education 205, 326, 327; one course from Education 329, Linguistics 301, Linguistics 371
9. SCIENCE-BASIC: Biology 101 and 102 or 115 and 122; Physical Science 107; one course from Physical Science 201, Environmental Studies 151, Biology 251.
10. SOCIAL SCIENCES-HISTORY: History 201, 202; one course from History 212, 213, 214; one course from History 203, 205, 209, 210, 211.
11. SOCIAL SCIENCES—SOCIAL STUDIES: Economics 200; Geography 201; History 201 or 202; one course from Political Science 201, Psychology 201, Sociology 201.
12. SPEECH COMMUNICATION/THEATRE: Communication 212, 220; Education 232; Education 262 or Theatre Arts 201.
13. BIOLOGY: Biology 115, 122, 200, and one elective course in biology.
14. CHEMISTRY: Chemistry 103, 104, 201, 202.
15. ECONOMICS: Economics 201, 202, and two economics electives.
16. ESL: Foreign Language 201, Linguistics 201, 301, 371.
17. LANGUAGE ARTS: Education 232, 262; English 336; one course from English 201, 202, 203, 221, 222.
18. POLITICAL SCIENCE: Political Science 201, 212, 214, 220 or 222.
19. PSYCHOLOGY: Psychology 201, 210, 302; one course from Psychology 225, 303, 315.
20. SOCIOLOGY: Sociology 201, 210, 216; one sociology elective.

2 1. SPECIAL EDUCATION: Education 301 and three electives from Education 302, 303, 304, 305, 306, 312.
22. THEOLOGY: Theology 201 or 204, 203, one course from 211-219; 307 or 311.
23. THEATRE ARTS: Education 262; TA 201, 310; TA 202 or 304.

Course titles and descriptions may be found under the specific discipline listing in this section of the catalog.

Option II: Minor General Elementary Teaching Endorsement K-6 and a Subject Area Endorsement; Endorsement 102 and one of the following.

The elementary education major must be completed as listed in Option I. By continuing study in one of the following fields, a K-6 subject area endorsement can be obtained.

1. ART: Endorsement 113. Art 201, 202, 210, 216; one course from 207, 208, 209; two courses from Art 218, 220, 225, 228, 230; one course from Art 302, 316, 318, 320, 325, 328, 330. (Educ 211 is required as a professional education credit.)
2. ENGLISH/LANGUAGE ARTS: Endorsement 119. Communication 212 or Education 262; Education 205; English 200; English 201 or 202; English 301 or 302; English 336; two English courses numbered above 200.
3. FOREIGN LANGUAGE-GERMAN: Endorsement 125. German 201, 202, 206, 301, 302; three semesters of German 251-258; Linguistics 201; one course from 341-348, 391. (Educ 355 required as professional education credit)
4. FOREIGN LANGUAGE-SPANISH: Endorsement 133. Spanish 201, 202, 206, 301, 302; three semesters of Spanish 251-258; Linguistics 201; one course from 341-348, 391. (Educ 355 required as professional education credit)
5. HEALTH: Endorsement 137. HPER 101, 202, 204, 205, 207, 209, 211; Education 111; Sociology 302.
6. MATHEMATICS: Endorsement 142. Mathematics 107, 109, 111 or 112, 207, 208, 210; one mathematics course numbered 113 or above; Computer Science 103 or 111. (Math 110 must be taken if needed for entering Math 111 or 112.)
7. MUSIC: Endorsement 144. Music 103, 104, 207 or 208, 308, 315; one semester each of Music 14 and 15; Music 19; EITHER four ensemble credits and one course chosen from Music 203, 207 or 208, $305,316-319$, OR two courses chosen from Music 203, 207 or 208, 305, 316-319; *312 (*this course required as part of the professional education sequence but not counted as part of the music major or minor).
8. PHYSICAL EDUCATION: Endorsement 146. HPER 18, 24, 101, 203, 204, 207, 208, 306, 325; one course from HPER 205, 209, 212, 213, 214, 215, 304. (Note: HPER 212-215 are half courses.)
9. READING: Endorsement 148. Education 205, 306, 323, 326, 327, 329, 371; Communication 301 or 302; Education 232 or Communication 212 or Linguistics 371 .
10. SCIENCE-BASIC: Endorsement 150. (total semester hours must equal twenty-four or more) Biology 101 and 102 or 115 and 122; Biology 200; Environmental Studies 151 or Physical Science 201 or Biology 251; three or four courses from Chemistry 101, 102, Physics 115, 116, Geology 110, Astronomy 121.
11. SOCIAL SCIENCES-HISTORY: Endorsement 162. History 201, 202; one course from History 212, 213, 214; three courses from History 203, 205, 209, 210, 211, 212, 213, 214, 215, 303, 304, 307, 341-348, 391, 392; two courses from History 305, 309, 310, 313, 314, 315, 322.
12. SOCIAL SCIENCES-SOCIAL STUDIES: Endorsement 164. Economics 200; Geography 201; two courses from Political Science 201, 212, 214, 220, 312, 313; History 201, 202; one course from History 212, 213, 214; one course from History 203, 205, 209, 210, 211, 215.
13. SPEECH/COMMUNICATION/THEATRE: Endorsement 167. Communication 201, 212, 220; Education 232, 262; Theatre Arts 201; Theatre Arts 202 or two TA activities.

## Option III: Major K-6 Subject Area Endorsement

Completion of the core courses with an appropriate methods course, along with one of the following majors, prepares the student for specialized subject area teaching in K-6.

1. ART: Endorsement 113. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 220, 225, 228, 230; two courses from Art 302, 316, 318, 320, 325, 328, 330. (Educ 211 is required as professional education credit.)
2. ENGLISH/LANGUAGE ARTS: Endorsement 119. Education 205, 232, 262, 326; English 201, 202, 301 or 302, 336; two three-hour elective courses in English. (Educ 324 required as professional education credit.)
3. FOREIGN LANGUAGE-GERMAN: Endorsement 125. German 201, 202, 206, 301, 302; Linguistics 201; three courses from German 102, 207, 208, 341-348, 391, 392; four semesters of German 251-258. (Educ 355 required as professional education credit.)
4. FOREIGN LANGUAGE-SPANISH: Endorsement 133. Spanish 201, 202, 206, 301, 302; Linguistics 201; three courses from Spanish 102, 207, 208, 341-348, 391, 392; four semesters of Spanish 251-258. (Educ 355 required as professional education credit.)
5. MATHEMATICS: Endorsement 142. Mathematics 107, 109, 111 or 112, 207, 208, 210; three threehour electives in mathematics numbered 113 or above; Computer Science 103 or 111. (Educ 322 required as professional education credit.)
6. MUSIC: Endorsement 144. Music 103, 104, 207 or 208, 308, 315; two semesters each of applied music in piano and voice-Music 14 and 15; Music 19; two courses from Music 203, 207 or 208, 305; four 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.
7. PHYSICAL EDUCATION: Endorsements 146 and 101. HPER 18, 24, 25, 101, 203, 204, 205, 207, 208, 209, 306, 325; two courses from HPER 212-215. (Note: HPER $212-215$ are half courses.)
8. SCIENCE-BASIC: Endorsement 150. Biology 101 and 102 or 115 and 122; Biology 200; Environ. Studies 151; Physical Science 201; four courses from Chem. 101, 102, Physics 115, 116, Geology 110, Astronomy 121. (Educ 325 required as professional education credit.)
9. SOCIAL SCIENCES—HISTORY: Endorsement 162. History 201, 202; one course from History 212, 213, 214; four courses from History 203, 205, 209-215, 303, 304, 307, 341-348, 391, 392; three courses from History 305, 309, 310, 313, 314, 315, 322. (Educ 321 required as professional education credit.)
10. SOCIAL SCIENCES-SOCIAL STUDIES: Endorsement 164. Geography 201; Economics 200; two courses from Political Science 201, 212, 214, 220, 312, 313; History 201, 202; one course from History 212, 213, 214; one course from History 203, 205, 209, 210, 211, 215; Psychology 201 and 210 or Sociology 201 and 210. (Educ 321 required as professional education credit.)
11. SPEECH COMMUNICATION/THEATRE: Endorsement 167. Communication 201, 212, 220, 311; Education 232, 262; Theatre Arts 201, 202; three Theatre Arts activities; one three-hour elective course in Communication or Theatre Arts. (Educ 324 required as professional education credit.)
Course titles and descriptions may be found under the specific discipline listing in this section of the catalog.

## Option IV: Major Secondary Certification 7-12

One of the following majors must be completed. Each major includes the requirements for at least one teaching endorsement. The professional education or certification requirements are: Educ 101 - Introduction to Education (3)

Educ 201 - Curriculum and Instruction (3)
Educ 104 - Pre-Student-Teaching Field Experience I
Educ 203 - Media and Technology in Education (1.5)

> Educ 204 - Pre-Student-Teaching Field Experience II (1) Educ 215 - Educational Psychology (3)
> Educ 301 - Introduction to the Education of Exceptional Students (3) Educ 374 - Student Teaching: Secondary (15)
> Educ 330 or 230 - Human Relations ( 3 or 1.5 ) plus units from other coursework
> Subject-specific methods (3)
> Psych 205 - Developmental Psychology I (3)

1. ART: Endorsement 114. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 220, 225, 228, 230, 240; two courses from Art 302, 316, 318, 320, 325, 328, 330, 340. (Educ 350 is required as professional education credit.)
2. BUSINESS—GENERAL: Endorsement 115. Business Administration 201, 202, 206, 301, 302; Business Education 112; Economics 200; one course from Business Education 323, Computer Science 101, 103; two three-hour course electives from business administration or business education.
3. BUSINESS—OFFICE: Endorsement 116. Business Administration 205; Business Education 112, 113, 211, 212, 321; two courses from the following combinations-Business Education 323 and 324 or Computer Science 101 or 103 with one advanced course in Computer Science from 111 or 120; two three-hour elective courses in business administration or business education.
4. BUSINESS-MARKETING/MANAGEMENT: Endorsement 117. Business Administration 205, 206, 305, 308; Economics 201, 202; four courses from Business Administration 201, 202, 301, 302, Business Education 323 or Computer Science 101 or 103.
5. ENGLISH/LANGUAGE ARTS: Endorsement 120. Education 206 and 326; English 201, 202, 301 or 302, 336; four courses from English 312, 314-318, 391; one English course above 200.
6. FOREIGN LANGUAGE-GERMAN: Endorsement 126. German 201, 202, 206, 301, 302; Linguistics 201; three courses from German 102, 207, 208, 341-348, 391, 392; four semesters of German 251-258.
7. FOREIGN LANGUAGE-SPANISH: Endorsement 134. Spanish 201, 202, 206, 301, 302; Linguistics 201; three courses from Spanish 102, 207, 208, 341-348, 391, 392; four semesters of Spanish 251-258.
8. MATHEMATICS: Endorsement 143. Mathematics 112, 113, 200, 203, 206, 207, 208, 210, 304, 391; two courses from Mathematics 291-294; one course from Computer Science 102, 103, 111.
9. MUSIC-CHORAL MUSIC EDUCATION: Endorsement 145. Music 103, 104, 203, 204, 207, 208, 315; Music 308 or 309 ; one course from Music 210, 211, 212, 305,307 ; Music 241-244; two semesters from Music 245, 246, 251, 252, 261, 262, 271, 272; six large ensemble credits; Music 19; *Music $312, * 313, * 323$, *two semesters from 316-319 (*required as professional education credit).
10. MUSIC-INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 104, 203, 204, 207, 208, 305, 315, 271-274; Music 308 or 309; two semesters from Music 241,
$242,251,252,261,262,275,276$; Music 14,19 ; six large ensemble creditsं; $*$ Music $312, * 314$, *316-319 (*required as professional education credit).
11. MUSIC-CHORAL/INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 104, 203, 204, 207, 208, 305, 315, 271-274, 241-244; Music 308 or 309 ; six semesters of Concert Choir or Chorale; six semesters of Band or Orchestra; Music 19; *Music 312, *313, *314, *316-319, *323 (*required as professional education credit).
12. PHYSICAL EDUCATION: Endorsements 147 and 101. HPER 18, 24, 25, 101, 203, 204, 205, 207, 208, 209, 304, 305, 325; two courses from HPER 212-215; (Note: HPER 212-215 are half courses.)
13. SCIENCE-BIOLOGICAL, MAJOR I: Endorsements 151 and 152. Biology 115, 122, 200, 213, 391; five elective courses in biology numbered above 200; Chemistry 103, 104, 201, 202, 205. SCIENCE-BIOLOGICAL, MAJOR II: Endorsements 151 and 154. Biology 115, 122, 200, 213, 391; two elective courses in biology numbered above 200; Chemistry 101, 102; Environmental Studies 151; Geology 110 or Astronomy 121; Physics 115, 116.
14. SCIENCE-CHEMISTRY, MAJOR I: Endorsement 152. Chemistry 103, 104, 201, 202, 205, 301, 302; one course from Chemistry 311, 312, 321, 391; Mathematics 112; Physics 115, 116.
SCIENCE-CHEMISTRY, MAJOR II: Endorsements 152 and 154. Chemistry 103, 104, 201, 202, 205 or 312, 311, 391; Biology 101, 102; Environmental Studies 151; Geology 110 or Astronomy 121; Physics 115, 116.
15. SCIENCE-GENERAL SCIENCE: Endorsement 154. General Science endorsement may be obtained by completing one of the following: Science-Biological Major I with the addition of Physics 115 and 116; Science-Biological Major II; Science-Chemistry Major II; Science-Physics Major II.
16. SCIENCE-PHYSICAL SCIENCE: Endorsement 155. Physical Science endorsement may be obtained by completing one of the following: Science-Chemistry Major I with the addition of Astronomy 121 and 122, Geology 110 or Physical Science 201; Science-Physics Major I with the addition of Astronomy 121 and 122, Geology 110 or Physical Science 201; ScienceChemistry/Physics Major with the addition of Astronomy 121 and Geology 110.
17. SCIENCE-PHYSICS, MAJOR I: Endorsement 156. Physics 201, 202, 203, 206, 325, 335, 336; Chemistry 301; Mathematics 112, 113, 201, 204; one course from Physics 301-305, 326, 391. SCIENCE-PHYSICS, MAJOR II: Endorsements 154 and 156. Physics 201, 202, 203, 206; Chemistry 101, 102; Biology 101, 102; Geology 110 or Astronomy 121; Mathematics 112, 113.
18. SCIENCE-CHEMISTRY/PHYSICS: Endorsements 152 and 156. Chemistry 103, 104, 201, 202, and one course from 203, 205, 311 or 312; Physics 201-203, 206; Mathematics 112, 113; Chemistry 391 or Physics 391.
19. SOCIAL SCIENCE-AMERICAN HISTORY: Endorsements 158 and 166. History 201, 202; one course from History 212, 213, 214; History 338 or 339; three courses from History $203,205,209,210,211,212,213,214,215,303,304,307,341-348,391,392$; three courses from History $305,309,310,313,314,315,322,341-348,391,392$. (NOTE 1: If History 338 is chosen, one course should be deleted from the last group and one course added to the previous group.) (NOTE 2: This major is the only one that leads to endorsement in American history; however, it also meets endorsement requirements for world history.)
20. SOCIAL SCIENCE-WORLD HISTORY: Endorsement 166. History 201, 202; one course from History 212, 213, 214; History 339; six courses from History 203, 205, 209, 210, 211, 212, 213, $214,215,303,304,307,341-348,391,392$. (NOTE: This major fulfills requirements for world history endorsement only.)

Students who complete a social science major in either American history or world history can add an endorsement in American government, economics, psychology, or sociology by completing a required 15 semester hours in one of these social sciences as follows:
AMERICAN GOVERNMENT: Endorsement 157. Five courses from Political Science 212, 214, 220, 222, 313, 322, 370. (Note: One course taken on the American Studies Program may be substituted for one of the courses.)
ECONOMICS: Endorsement 160. Economics 201, 202, 303; two courses from Economics 305, 309, 315, 321, 333. (Note: 305, 309, 315, 321, and 333 are offered in alternate years.)
PSYCHOLOGY: Endorsement 163. Psychology 201, 210, 302; two courses from Psychology 206, 221, 225, 303, 315.
SOCIOLOGY: Endorsement 165. Sociology 201, 216: three electives in sociology.
21. SPEECH COMMUNICATION/THEATRE: Endorsement 168. Communication 201, 212, 220, 222, 311, 313, 315; Theatre Arts 201; three elective courses from Communication 228, 250, 258, 301, 341-348, 352, 391, 392, Theatre Arts 202, 203, 310, 340.
Course titles and descriptions may be found under the specific discipline listing in this section of the catalog.

## Option V: Minor Secondary Certification 7-12 With an Added Endorsement

 An academic minor provides an added teaching endorsement. Minors may be selected from the following.1. ART: Endorsement 114. Art 201, 202, 210, 216; one course from Art 207, 208, 209; two courses from Art 218, 220, 225, 228, 230; one course from Art 302, 316, 318, 320, 325, 328, 330. (Educ 350 is required as professional education credit.)
2. BUSINESS—GENERAL: Endorsement 115. Business Administration 201, 202, 206, 301, 302; Business Education 112; Economics 200; one course from Business Education 323, Computer Science 101, 103.
3. BUSINESS-OFFICE: Endorsement 116. Business Administration 205; Business Education 112, $113,211,212,321$; two courses from the following combinations-Business Education 323 and 324 or Computer Science 101 or 103 with one advanced course from Computer Science 111 or 120 .
4. BUSINESS—MARKETING/MANAGEMENT: Endorsement 117. Business Administration 205, 206, 305, 308; Economics 201, 202; two courses from Business Administration 201, 202, 301, 302, Business Education 323 or Computer Science 101 or 103.
5. ENGLISH/LANGUAGE ARTS: Endorsement 120. Education 206 and 326; English 201 or 202; English 301 or 302; English 336; two courses from English 312, 314, 315, 316, 317, 318; two English courses numbered above 200 .
6. FOREIGN LANGUAGE-GERMAN: Endorsement 126. German 201, 202, 206, 301, 302; Linguistics 201; three semesters of German 251-258; one course from German 341-348, 391.
7. FOREIGN LANGUAGE-SPANISH: Endorsement 134. Spanish 201, 202, 206, 301, 302; Linguistics 201; three semesters of Spanish 251-258; one course from Spanish 341-348, 391.
8. JOURNALISM: Endorsement 141. Communication 240, 241, 301.
9. MATHEMATICS: Endorsement 143. Mathematics 112, 113, 203, 208, 210; three courses numbered 200 or above; one course from Computer Science 102, 103, 111.
10. HEALTH: Endorsement 138. HPER 101, 202, 204, 205, 207, 209, 211, 304; Sociology 302.
11. PHYSICAL EDUCATION: Endorsement 147. HPER 18, 24, 101, 203, 204, 205, 207, 208, 304; two courses from HPER 209, 212-215, 305, 325. (Note: HPER 212-215 are half courses. Only two may be applied to the minor.)
12. SCIENCE-BIOLOGICAL: Endorsement 151. Biology 115, 122, 200, 213; four courses or minimum of ten semester hours of biology numbered 200 or above.
13. SCIENCE-CHEMISTRY: Endorsement 152. Chemistry 103, 104, 201, 202, 301; one or two elective courses in chemistry (total must be at least 24 s.h.).
14. SCIENCE-GENERAL SCIENCE: Endorsement 154. Biology 115, 122; Chemistry 101; Environmental Studies 151; Physics 115, 116; two elective courses in biology, chemistry, or physics.
15. SCIENCE-PHYSICAL SCIENCE: Endorsement 155. Chemistry 103, 104; Physics 201, 202; Astronomy 121; Geology 110; Physical Science 201.
16. SCIENCE-PHYSICS: Endorsement 156. Physics 201, 202, 203, 206, 325; two elective courses in physics.
17. SOCIAL SCIENCE-AMERICAN GOVERNMENT: Endorsement 157. Political Science 201, 212, 214, 220, 222, 313, 322, 370. (NOTE: Political Science 391 or a semester of participation in the American Studies Program may be substituted for one of the courses above.)
18. SOCIAL SCIENCE-ECONOMICS: Endorsement 160. Economics 201, 202, 303, 305, 309, 315, 321, 333. (NOTE: $305,309,315,321$, and 333 are offered in alternate years.)
19. SOCIAL SCIENCE-PSYCHOLOGY: Endorsement 163. Psychology 201, 205, 207, 210; four threehour elective courses in psychology.
20. SOCIAL SCIENCE-SOCIOLOGY: Endorsement 165. Sociology 201, 207, 210, 215, 216; three three-hour elective courses in sociology and/or social work.
21 . SOCIAL SCIENCE-AMERICAN HISTORY: Endorsement 158. History 201, 202; six courses from History 305, 309, 310, 313, 314, 315, 322, 341-348, 391, 392.
21. SOCIAL SCIENCE-WORLD HISTORY: Endorsement 166. Eight courses from the following: History 203, 205, 209, 210, 211, 212, 213, 214, 215, 303, 304, 341-348.

2 3. SPEECH COMMUNICATION/THEATRE: Endorsement 168. Communication 201, 212, 220, 222, 240, 241, 311, 315; Education 262 or Theatre Arts 202; Theatre Arts 201.

Course titles and descriptions may be found under the specific discipline listing in this section of the catalog.

## Special Program Options

I. Endorsements on Both Elementary and Secondary Levels

A K-6 endorsement and a $7-12$ endorsement to teach in a selected academic area may be obtained by completing the major and the professional requirements on both levels. The K-6 and 7.12 majors are similar in most academic areas. The professional education requirements are as listed under Option I and include an appropriate methods course and student teaching on both elementary and secondary levels. This option is intended primarily for art, music, and physical education majors.
II. Athletic coach K-12: Endorsement 101

The following courses with an education degree qualify an applicant to be a head coach. HPER 204 - Physiology of Physical Activity
HPER 207- Care and Prevention of Athletic Injuries
HPER - Coaching Theory (Any two from 212, 213, 214, 215.)
Psychology 205 - Developmental Psychology
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 is limited to assistant coaching assignments in most sports, and head coaching in golf, tennis, swimming, and soccer.
III. English as a Second Language K-12 Minor: Endorsement 104

This endorsement may be obtained by completing a major in either elementary education or in one of the secondary programs, student teaching in ESL on both the elementary and secondary levels, and completion of the ESL minor as indicated below.

> Linguistics 201 - Introduction to Linguistics
> Linguistics 301 - Phonology
> Linguistics 371 - Practicum of ESL
> English 335 - History of the English Language
> English 336 - English Grammar
> Education 355 - Methods of Teaching a Foreign Lauguage
> Foreign Language 202 - Literary and Cultural Readings
> Foreign Language 206 - Foreign Language Culture

Electives in the areas of foreign language, linguistics, and/or English support this endorsement.
IV. Special Education Minor

Dordt College offers programs in special education which enable a student to obtain the following K-6 or 7-12 endorsements in special education.

> Multicategorical Resource Teacher: Mildly Disabled
> Endorsement 221 (K-6)
> Endorsement $222(7-12)$

Requirements for the K-6 Multicategorical Resource Teacher-Mildly Disabled:
Completion of the K-6 Option I program and
Educ 301 - Introduction to the Education of Exceptional Students
Educ 303 - Instructional Methods and Strategies for the Mildly Disabled-Elem.
Educ 304 - Introduction to Behavior Disorders
Educ 305 - Methods and Materials for the Education of the Mentally Disabled
Educ 306 - Assessment and Diagnosis in Special and Remedial Education
Educ 309 - Supervised Practicum in Special Education
Educ 312 - Introduction to the Education of Mildly Disabled Children and Youth
Educ 327 - Diagnosis and Remediation of Reading Difficulties
Educ 378 - Student Teaching-Multicategorical Resource: Elementary
Requirements for 7-12 Multicategorical Resource Teacher-Mildly Disabled:
Completion of the 7-12 Option IV program and
Educ 301 - Introduction to the Education of Exceptional Students
Educ 304 - Introduction to Behavior Disorders
Educ 305 - Methods and Materials for the Education of the Mentally Disabled
Educ 306 - Assessment and Diagnosis in Special and Remedial Education
Educ 308 . Career and Vocational Education for the Disabled
Educ 309 - Supervised Practicum in Special Education
Educ 312 - Introduction to the Education of Mildly Disabled Children and Youth
Educ 313 - Instructional Methods and Strategies for the Mildly Disabled-Secondary
Educ 327 - Diagnosis and Remediation of Reading Difficulties
Educ 379 - Student Teaching-Multicategorical Resource: Secondary
Since all the endorsement options in special education require course work beyond the typical four-year program, careful planning with the director of special education is essential.

## Associate of Arts Degree Options

Education offers the following areas of concentration for an A.A. degree. See the Academic Program section for the general requirements for all A.A. programs.
Associate of Arts/Special Education Aide:
Education 101, 201, 104, 301, 309; four courses from Education 303, 304, 305, 306, 308, 312, 313 (not both 303 and 313); two courses from Education 111, 205, 211, 215, 232, 262, 311, 203/321, 322, Geography 201, Mathematics 109, Physical Education 207; Communication 110; Psychology 205; two physical education activities

Associate of Arts/Teacher Aide:
Education 101, 111, 201, 104, 301; five courses from Education 203/321, 205, 211, 215, 232, 262, 311, 322, Physical Education 207, Geography 201, Mathematics 109; Communication 110; Psychology 205; two physical education activities


#### Abstract

101 Introduction to Education (3) This course is designed to introduce students to the domain of education and to induct them into 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.


## 104 Pre-Student-Teaching Field Experience I (1)

A field experience of at least 20 hours in a local school. Required of all elementary and secondary education students. Prerequisites: Educ 101 and concurrent enrollment in Educ 201.

## 111 Elementary School Health and Physical Education (3)

Provides general background and information needed for formulating and teaching a suitable program in health and physical education. This class is not open to elementary education students pursuing physical education teaching minors.

## 201 Curriculum and Instruction (3)

This course 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. Prerequisites: Educ 101 and concurrent enrollment in 104; admission into T.E.P. or departmental approval.

203 Media and Technology in Education (1.5)

An opportunity to use technology to more effectively achieve educational objectives. Students
review and use current software packages, prepare a lesson on videotape (microteaching), and consider the implications of technological change for teaching. Prerequisite: Educ 101.

204 Pre-Student-Teaching Field Experience II (1)
A field experience of at least 30 hours completed by elementary and secondary education students in schools of their choice. Prerequisite: Educ 104 or its equivalent and admission to the teacher education program.

## 205 Children's Literature (3)

A reading and examination of a wide selection of children's books and magazines useful in enriching the subject areas of the elementary school curriculum and in providing good reading habits. Criteria for judging such material is considered and practice in storytelling is provided. Prerequisite: Educ 101.

## 206 Adolescent Reading Interests (3)

The course 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 junior and senior high levels. Offered in alternate years. Prerequisite: Educ 101.

211 Art for the Elementary Teacher (3) Methods and techniques of organizing and motivating art instruction for elementary school children. Creative work with material for the young child: crayon, cut paper, water color, and poster paint. Prerequisite: Educ 201.

## 215 Educational Psychology (3)

An application of psychology to the educational
environment. Emphasis is given to developing a biblical approach to the learning process. Includes units on cognitive and affective development, learning theories, classroom management, and evaluation of pupil progress. Prerequisite: Psychology 205.

## 223 Teaching Bible in the Elementary School (1.5)

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: Education 101.

## 230 Multicultural Issues in Education (1.5)

This course is 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 which 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 which is free of such biases and will instead reflect a perspective which is pluralistic in its orientation and promote a biblical view of the person. Paired with Educ 203; Prerequisite: Educ 101.

## 232 Interpersonal Communication for the Classroom Teacher (3)

Major emphasis is placed upon communication between student and teacher with attention given to the development of a speech model on the part of the teacher. Prerequisite: Educ 201.

## 262 Creative Dramatics for Children (3)

An introduction to informal dramatics for the classroom, especially elementary and junior high. Emphasis is on dramatic activity requiring minimal equipment and facilities. Field experience required in area schools. Prerequisite: Educ 101.

301 Introduction to the Education of Exceptional Students (3)
An introduction to the education of those who have special needs or talents. Emphasis is on current and future trends in both special and regular education and their implications for learners who have special needs. Instructional approaches which increase integration between regular and special education students are presented. Prerequisite: Educ 101.

303 Instructional Methods and Strategies for the Education of the Mildly Disabled-Elem. (3)
A course dealing with the instruction of students with mild handicaps such as learning disabilities, mild behavior disorders and mild mental retardation. Focus is on strategies directed toward the successful integration of the mildly handicapped student into the regular elementary classroom. Prerequisite: Educ 301.

## 304 Introduction to Behavior Management (3)

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. Prerequisite: Educ 101 or Psych 205.

## 305 Methods and Strategies for the Education of the Mentally Disabled (3)

A course dealing with the instruction of students who have been identified as mentally disabled. Special focus is on the use of instructional strategies and the development of curriculum which is directed toward those with mild or moderate mental disabilities. Prerequisite: Educ 301.

## 306 Assessment and Diagnosis in Special and Remedial Education (3)

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 which meet the needs of the handicapped. Prerequisite: Educ 301.

308 Career and Vocational Education for the Disabled (3)
A course designed to examine vocational and career programming for the mentally disabled adolescent. Emphasis is on the examination of work experience programs, vocational training, and vocational evaluation. Prerequisite: Educ 302.

## 309 Supervised Practicum in Special Education (1)

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. Prerequisite or corequisite: Educ 302.

## 311 Materials of Elementary Music Education (3)

Provides background skills and materials necessary for the prospective elementary teacher. Not open to those majoring or minoring in music. Prerequisite: Educ 201

312 Introduction to the Education of Children and Youth with Mild Disabilities (3)
A survey course dealing with the provision of educational services to mildly handicapped children and youth, with a special focus on issues and approaches related to a multicategorical approach. Prerequisite: Educ 301.

## 313 Instructional Methods and Strategies

 for the Education of the Mildly Disabled-Secondary (3)A course dealing with the instruction of students with mild disabilities such as learning disabilities, mild behavior disorders, and mild mental retardation. Focus of the course is on strategies directed toward the successful integration of the mildly disabled student into the regular junior high and senior high classroom. Prerequisite: Educ 301.

## 321 Teaching Social Studies in the Elementary School (1.5)

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 applicatory activities for each major topic. Prerequisite or corequisite: Educ 201.

## 322 Teaching Mathematics in the Elemen-

 tary School (3)Mathematics for the student who plans to teach in the elementary school. Mathematics foundations, the number systems, and different methods of calculation are taught. Methods, materials, goals, and means of evaluating the teaching of math are emphasized. Prerequisite: Educ 201.

## 323 Teaching Reading in the Elementary School (3)

A course designed to cover basic principles involved in the teaching of reading, plus suggested techniques, approaches, and materials to be used in teaching reading in the elementary school. Prerequisite: Educ 201.

324 Teaching Language Arts in the Elementary School (1.5)
A basic course in the principles, techniques, materials, and methods of teaching English grammar and composition, spelling, handwriting, listening, and speaking. Paired with Educ 325. Prerequisite: Educ 201.

## 325 Teaching Sciences in the Elementary

 School (1.5)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 science classroom. Paired with Educ 324. Prerequisite: Educ 201.

## 326 Reading in the Content Areas (3)

A course designed to enhance the use of text materials in the elementary and secondary classroom. Attention is given to organizational and study skills necessary for content learning
and to the development of functional techniques for teaching content materials. Prerequisite: Educ 201.

## 327 Diagnosis and Remediation of Reading Difficulties (3)

A study of the causes of reading difficulties in the elementary and secondary school, their diagnosis and correction in both classroom and remedial settings. Prerequisite: Education 323 for elementary education students; secondary education students must see the instructor.

## 329 Reading in Early Childhood (3)

A course designed to cover the methods and materials appropriate for developing literacy in children up to age eight. Prerequisites: Educ 201 and 323.

## 330 Human Relations in Education (3)

A course designed to develop an awareness of the responsibility of educators to establish educational programs that develop a sensitivity to and understanding of the different culturelethnic groups in a pluralistic society. Includes a history of the discrimination that many minority groups have encountered in North America and educational strategies for dealing with problems minority groups have experienced in the educational process.
(Note: Education 201 is prerequisite to all secondary methods courses numbered from 350 to 360 .)

## 350 Methods of Teaching Art (3)

Methods and techniques of organizing and motivating art on the secondary school level. Media explored depends on the needs and interests of the class.

## 351 Methods of Teaching Biology (3)

A review of recent trends in biology teaching. Use of audio-visual materials pertinent to biology, methods of evaluation, laboratory techniques, and textbook evaluations are included. Students give several class presentations and observe actual teaching situations.

## 352 Methods of Teaching Business Education (3)

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.

## 353 Methods of Teaching Chemistry (3)

A review of recent trends in chemistry teaching. Use of audio-visual materials pertinent to chemistry, methods of evaluation, laboratory techniques, and textbook evaluations are included. Students give several class presentations and observe actual teaching situations.

## 354 Methods of Teaching English (3)

Discussion of a Christian approach to the teaching of English. Methods and approaches to teaching literature, 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.

## 355 Methods of Teaching a Second Language (3)

Presentation of various methods of teaching a second language. 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: Linguistics 201 or departmental approval. Offered in alternate years.

## 356 Methods of Teaching History (3)

Discussion of a Christian approach to the teaching of history. Emphasis is on current methods of teaching history and consideration of practical suggestions in classroom procedure.

## 357 Methods of Teaching Mathematics (3)

 Methods of effective teaching of mathematics on the secondary level. Prospective teachers attain understanding of the basic mathematics taught at the secondary level.
## 358 Methods of Teaching Speech (3)

A study of the concerns of the speech teacher in the 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.

## 359 Methods of Teaching Physics (3) <br> A review of recent trends in physics teaching. Use of audio-visual materials pertinent to physics, methods of evaluation, laboratory techniques, and textbook evaluations are included. Students give several class presentations and observe actual teaching situations.

## 371 Student Teaching-Reading (7.5)

Students will work with qualified cooperating teachers in an elementary remedial reading classroom. Intended for those who student teach in both the regular elementary classroom and the remedial reading classroom. Prerequisite: Educ 327.

## 372 Student Teaching-Elementary (15)

Students work full days with qualified cooperating teachers in the elementary school. Prerequisites as stated in the program section.

## 373 Student Teaching-Elementary (7.5)

Same as above except for fewer hours of credit. Intended for those who student teach on two
levels or for those who student teach both in the regular elementary classroom and in the special education classroom.

374 Student Teaching-Secondary (15) Students work full days with qualified cooperating teachers in the junior high or senior high school. Prerequisites as stated in the program section.

375 Student Teaching-Secondary (7.5)
Same as above except for fewer hours of credit. Intended for those who student teach on two levels or for those who student teach both in the regular secondary classroom and in the special education classroom.

## 378 Student Teaching-Multicategorical Resource K-6 (7.5)

Students work full days with qualified teachers in K-6 multicategorical resource rooms. Prerequisites as stated in the program section.

379 Student Teaching-Multicategorical Resource 7-12 (7.5)
Same as Education 378 except that teaching is done in a secondary program.

391 Individual Studies (3)
Available for qualified juniors and seniors. See the catalog section on individual studies for application procedures.

## 392 Individual Studies (3)

Same as Educ 391.

## Engineering*

## General Major-

Core (common to both emphases)-
Chemistry 103, 104; Computer Science 102; Economics 202; Mathematics 112, 113, 201, 204; one course from Mathematics 203, 206, 209, 311, 315; Physics 201, 202, 203; Engineering 101, 105, 202, 204, 206, 299, 362, 380, 390.

Electrical Emphasis:
Core; Engineering 205, 207, 304, 305, 306, 326, 360, 363, 365.

Mechanical Emphasis:
Core; Engineering 210, 211, 212, 300, 302, 303, 312, 320, 350.
*Accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

## Engineering Science

## General Major-

Core (common to all emphases):
Mathematics 112, 113, 201, 204; Physics 201, 202, 203; Chemistry 103, 104;
Computer Science 102; Economics 202; Engineering 101, 105, 202, 390.
General Emphasis:
Core; six engineering courses providing a coherent sequence as approved by the engineering department; three courses from the natural sciences and having approval of the engineering department; one course from Mathematics 203, 206, 209, 311, 315.

Agriculture Emphasis:
Core; Engineering 210, 211, 212; Agriculture 101, 111, 201, 221; two elective courses in agriculture; one course from Mathematics 202, 206, 209, 311,315 ; three engineering courses providing a coherent sequence as approved by the engineering department.

Business Administration Emphasis:
Core; Business Administration 201, 202, 205, 225, 313; one elective business administration course or one course from Mathematics 203, 206, 209, 311, 315; Economics 201, 305; six engineering courses providing a coherent sequence as approved by the engineering department.

Chemistry Emphasis:
Core; Chemistry 201, 202, 301, 302, 311; two courses from Chemistry 205, 312, 321; one course from Mathematics 203, 206, 209, 311, 315; Engineering 210, 212; three engineering courses providing a coherent sequence as approved by the engineering department.

Computer Emphasis:
Core; Computer Science 111, 112, 202, 205, 208; Mathematics 212; one course from Mathematics 203, 206, 209, 311, 315; Engineering 204, 206, 304 ; three engineering courses providing a coherent sequence as approved by the engineering department.

Physics Emphasis:
Core; one course from Mathematics 203, 206, 209, 311, 315; Physics 325,

335, 336; three courses from Physics 206, 326, 391, Chemistry 301, 302; six engineering courses providing a coherent sequence as approved by the engineering department.

## 101 Engineering Design and Graphics (3)

 This course introduces the student to engineering design and graphics, including discussion of the economics, aesthetics, social aspects, and ethics of design; and culminating in a design project. In addition, the course covers descriptive geometry (including orthographic projection and auxiliary views), isometric and oblique pictorials, sections, dimensions, tolerances, and computer aided drafting (CAD, utilizing AutoCAD).
## 105 Engineering Principles (3)

An introductory course for freshmen students in engineering dealing with Christian perspectives of technology, the profession of engineering, an introduction to computer aided drafting (CAD, utilizing AutoSketch), calculations and problem solving, a review of basic principles of mechanics and electronics, and engineering economics.

## 202 Elements of Materials Science (3)

An introductory course in the chemistry and physics of engineering materials including crystalline, amorphous ceramic, and polymeric materials. Introductory metallurgy includes examination of the effects of processing (heat treatment and manufacturing) and service environment on microstructure and properties. Prerequisite: Chemistry 104.

## 204 Introduction to Microprocessors and Digital Circuits (4)

Subjects studied are basic microprocessor architecture, instruction set, elementary assembly language programming, elementary input and output, basic logical functions, Boolean algebra, integer arithmetic in binary systems, combinational and sequential circuits, and memory. This course is intended to serve both computer science and engineering students. A weekly
laboratory gives practical experience with TTL logic and the Z-80 microprocessor. Prerequisite: Physics 115, 116, or Physics 125, 126.

## 205 Linear Circuit Analysis (4)

A course on the classical techniques of linear circuit analysis. Topics include nodal, loop and mesh analysis, network theorems (superposition, Thevenin, Norton, maximum power transfer), transient analysis of RL, RC, and RLC circuits, sinusoidal steady state response, phasor methods, impedance, admittance, power (instantaneous, average, complex), power factor, balanced three-phase circuits, wye-delta connections, three-phrase power measurement, mutual inductance, transformers, two-port networks. Prerequisite: Engineering 206.

## 206 Electronics I (4)

An introductory course. Topics include definitions of voltage, current, resistance, capacitance, inductance; Kirchhoff's laws; simple nodal and mesh analysis; equivalent circuits; DC and AC analysis; diodes; bipolar and field effect transistors; biasing; small-signal analysis; and operational amplifiers. Laboratory exercises cover basic measurement techniques and typical applications of diodes, transistors, and operational amplifiers. Prerequisite: Mathematics 113. Corequisite: Mathematics 204.

## 207 Circuit Analysis and Transforms (4)

A study of circuit analysis techniques suitable for predicting the time and frequency domain response of circuits. Topics include complex frequencies, poles and zeros, series and parallel resonance, Fourier and Laplace analysis. Laboratory exercises use circuit simulations on a digital computer and measurements collected on actual circuits to reinforce the lectures. Prerequisite: Engineering 205.

## 210 Statics and Dynamics (4)

Objectives include an understanding of equilibrium of particles and rigid bodies subject to concentrated and distributed forces, as well as the kinematics and kinetics of particles and rigid bodies. Four classes per week. Prerequisites: Mathematics 113; Physics 125.

## 211 Kinematics and Dynamics of Machinery (3)

A design-oriented course covering theory of machines, and design and analysis of machine elements such as four-bar mechanisms, cams, gears, gear trains, and planetary gear systems. The course makes heavy use of computer methods for both design and analysis techniques. Graphical methods are used to check on computer solutions. Prerequisite: Engineering 210.

## 212 Strength of Materials (4)

An analysis of the types of stress and deformation in materials. The course uses the methods of mechanics to examine the reactions of materials under a variety of loading conditions, including shear and bending in beams, torsion, and loading of columns. Theories of failure are introduced. Laboratory work provides experience with instrumentation and analysis of loading situations and reinforces lecture topics. Prerequisite: Engineering 210.

## 299 Thermodynamics I (3)

An introduction to thermodynamic principles including work, heat, properties of pure substances, the first and second laws, entropy, availability, and thermodynamic relations. Prerequisites: Physics 126; Mathematics 113.

## 300 Thermodynamics II (4)

Applied engineering thermodynamics: a study of power and refrigeration cycles, mixtures and solutions, chemical reactions, and some fluid flow applications. Laboratory work provides experience with instrumentation of mechanical systems and reinforces lecture topics. Prerequisite: Engineering 299.

## 302 Fluid Mechanics (3)

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; and introductory compressible flow. Prerequisites: Mathematics 204; Physics 126.

## 303 Heat Transfer (3)

A study of the three modes of heat transfer: conduction, convection, and radiation; with application to heat exchangers. Computer methods of solution are used extensively. Prerequisites: Engineering 302; Computer Science 102.

## 304 Microprocessor Interfacing (4)

Topics include bus structure, memory, serial I/O, parallel I/O, interrupt driven I/O, grounding and shielding techniques, transmission line effects, encoding of digital data (FM, Manchester, MFM, etc.), characteristics of logic families. Prerequisites: Engineering 204, 206.

## 305 Electronics II (4)

This course begins with a study of the basic physics of solid state devices. Study proceeds to the large and small signal behavior of solid-state devices, typical circuit topologies (such as CE, CB, CC, output stages, differential pairs, etc.), frequency response, feedback, stability and oscillators. The laboratory consists of short design problems. Prerequisites: Engineering 206, 207.

## 306 Analog Circuit Design (4)

Operational amplifiers, voltage regulators, power amplifiers, video amplifiers, modulators, demodulators, phase-locked loops; and other analog circuits are studied. Emphasis is on practical applications to open-ended problems and the formulation of design objectives. The laboratory consists of short design problems. Prerequisite: Engineering 305.

## 312 Mechanical Engineering Design Lab I (4)

This course combines a study of machine design (same as Engineering 315) with a three hour per week laboratory course emphasizing the primary areas of mechanical engineering such as fluid flow, heat transfer, strength of materials, metallurgy, and machine design. Prerequisites: Engineering 211, 212, 299, 302.

## 315 Machine Design (3)

A senior level design course covering the fundamentals of mechanical design and the design of machine elements. The student is assumed to have a basic knowledge of statics, strength of materials, and kinematics of machine elements. The first half of the course is an in-depth analysis of stress, static strength, and fatigue strength; while the second half of the course utilizes those analytical tools to establish design procedures for such machine elements as springs, screws and fasteners, bearings, gears, shafts, clutches, brakes, and flexible drive elements. Prerequisites: Engineering 202, 211, 212.

## 320 Metallurgy (3)

The metallurgical fundamentals of structure at the grain, crystal, and atomic levels are considered in relation to material behavior, including deformation and failure mechanisms. The metallurgy of heat treatments and manufacturing methods are studied, and the methods of metallography and materials testing are covered prior to their use in a concurrent mechanical engineering laboratory course. Prerequisite: Engineering 202.

## 326 Electromagnetic Fields (4)

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 215; Mathematics 201, 204.

## 341- Special Topics in Engineering (3)

348 Elective courses designed to treat particular topics in greater detail than would be done in any of the above courses. Topics will depend on the mutual interest of students and staff.

## 350 Solar Energy Engineering (3)

A senior level design course focusing on solar energy as an alternative form of energy for meeting distillation, space heating, domestic hot water, air conditioning, and industrial needs. The thermal processes by which solar radiation is transmitted to and absorbed by a surface, converted into heat, and stored and distributed will
be studied. Auditing of building energy loads, conservation procedures, and design of appropriate passive or active solar energy systems are explored. The F-Chart method is studied in detail, with heavy use being made of computer methods, both for load determination and system design. Prerequisite: Engineering 303.

## 351 Heating, Ventilating and Air Conditining (3)

A course on the design of HVAC systems. Topics covered include heating and cooling load calculations, energy conservation, solar energy, air handling systems, use of ASHRAE handbooks, space heating design, and air conditioning design. Prerequisite: Engineering 303.
360 Introduction to Power System Analysis (3)
An introduction to the design, planning, and operation of electric power utilities, including principles of economic dispatch and politics which impact design and operating strategies. Topics include power transmission lines, transformers, generators, system modeling, load flow analysis, faults, and system stability. Prerequisites: Engineering 207, 326; Mathematics 201, 204.

## 362 Control Systems (3)

A study of the dynamics and automatic control of systems. Topics include feedback, steady-state operation, transient response, root loci, statespace representation, frequency response, stability criteria and compensation. Many kinds of systems are considered including mechanical, electrical, hydraulic, pneumatic, thermal, and chemical. Structured modeling approaches, state equations, and Laplace transforms are used. Prerequisites: Chemistry 104; Mathematics 204; Physics 215.

## 363 Introduction to Communication

 Systems (3)A study of modern communication systems performance and theory with applications in radio, satellite and telephone systems. Topics include linear modulation (AM, SSB, etc.), exponential modulation (FM and PM), sampling theory, pulse modulation (PAM, PWM, PCM, etc.), digital modulation (ASK, FSK, etc.), elementary consideration of noise. Prerequisites: Engineering 207; Mathematics 201, 204.

## 365 Digital Circuit Design (3)

The course starts with a study of various methods of implementing synchronous sequential circuits, the design of asynchronous sequential circuits and the avoidance of hazards and races. Also covered are analog to digital and digital to analog converters. Exemplary designs of arithmetic logic units, floating point mathematics circuits, and error correction circuits are discussed. Prere. quisite: Engineering 304.

## 380 Senior Design Project (3)

A three-hour-per-week advanced laboratory project course providing students with the opportunity to use, in an integral manner, the knowledge and skills which have been acquired to this point in their education. The project requires students to be involved in research, design, experimentation, analysis, and communication. Students work in teams of two or three on a project of their mutual interest. Planning for the project begins late in the junior year. Work on the project, while culminating in the last semester of the senior year, takes place during both semesters of the senior year. Teams confer weekly with members of the engineering department staff. Prerequisite: Engineering 312 or Engineering 304 , senior standing.

## 390 Technology and Society (3)

An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course a Christian philosophy of technology is carefully studied and application is made to such problems as the role of the computer, technocracy, appropriate technology, and the historical two-cultures dualism. During the 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, whistleblowing, responsible salary structures, and morality in career choice. This course requires the student to write and orally present a significant research paper. Prerequisites: Philosophy 201; junior or senior standing.

## 391 Individual Studies (3)

Open to third- and fourth-year students with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Engineering 391.

## English

> General Major- English 201-202, or 207-208; five courses from English 312, 314, 315, 316, 317, 318; Theatre Arts 364 or 365 and three courses beyond English 200 or four courses beyond English 200.

For descriptions of SECONDARY and ELEMENTARY majors, minors, field of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## 101 Grammar and Composition (3)

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.

## 200 Responding to Literature (3)

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.

## 201 American Literature (3)

Selected prose and poetry of the Puritans and Neo-Classicals, and an extensive study of the American Romantics: Poe, Hawthorne, Emerson, Thoreau, and Whitman.

## 202 American Literature (3)

This course surveys American writers from 1860 to the present. It aims to show the rise of realism and naturalism, the effect of worldview 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 angle of vision.

## 203 American Literature (3)

A study of fiction and poetry since the 1930s,
including O'Connor, Updike, Malamud, Lowell, Roethke, and others.

205 Canadian Literature (3)
A study of major Canadian fiction writers and poets since 1945, with particular attention paid to recurring themes in modern Canadian literature.
207 World Literature (3)
The literature studied is from the Greek, Roman, Medieval, and Renaissance periods. All writings are studied in English translation. A paper is required.

208 World Literature (3)
In this course, masterpieces of European authors from the 17 th to the 20 th century will be read and discussed. All readings are in English. A paper is required.
221 The Short Story (3)
The course introduces students to the contemporary short story. In addition to reading broadly in the genre through anthologies, students will study specific contemporary writers like 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)

The aims of this course are to see how various writers of different cultures and eras expressed themselves on selected universal themes such as love, justice, religious experiences, and man's inhumanity to man.

## 225 Film and Novel

This course will introduce students to film art and film criticism, compare and contrast films to novels and stories, and examine worldviews of the various artists. It 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.

301 Advanced Expository Writing I (3)
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, students reading and discussing their own work.

302 Advanced Expository Writing II (3)
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.)

## 303 Reading and Writing of Poetry (3)

This course will ask students to read and write various poems with fixed forms and poems in free verse. It 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)

The course will introduce 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. Significant time will be spent in workshop format; however, additional time will be spent discussing technique, as well as the ways in which one's faith affects the work of writing fiction.

## 305 Business and Technical Writing (3)

This course 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.
312 Shakespeare and Elizabethan Drama (3) 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.
314 Medieval and Renaissance Literature (3) This course traces the development of English literature from Beowulf and Anglo-Saxon literature through the literature of the English Renaissance. While particular texts may change, Chaucer, Sidney, Spenser, and Shakespeare (his poems) are read intensively. Special attention is paid to the Scriptural tradition which this literature evokes, and, in the Renaissance, to the
effects of the Protestant Reformation on the themes and perspectives of literature. Throughout, the course focuses on how the literature of these periods addresses fundamental questions about human nature.

315 17th and 18th Century Literature (3)
This course focuses on some major texts of the 17th and 18th centuries in English literature, exclusive of the novel. While these texts will be presented within their historical contexts (with the English Civil War as the central shaping event), attention is focused on the changing poetics and worldviews which inform these texts. Thus the notion of poetry as a means of religious expression is explored in Donne and Herbert. Milton's comprehensive vision of creation, fall, and redemtpion in Paradise Lost is examined. Finally, the origins of modern rationalism and views of human nature are explored in Dryden, Pope, and Swift.

316 Literature of English Romanticism (3) This course offers the experience and critique of the Romantic temperament as exemplified in the poetry and prose of Burns, Blake, Wordsworth, Coleridge, Lamb, Hazlitt, Byron, Shelley, and Keats.

## 317 Literature of the Victorian Age (3)

Students explore the interests of Tennyson, Browning, J.S. Mill, Ruskin, Arnold, the Rosettis, Hopkins, G. Eliot, Dickens, and others, noting the social, cultural, and historical influences of the Victorian period.

## 318 Modern British Literature (3)

This course offers a glimpse of modern thinking as exemplified in 20th century British writers such as Hardy, Conrad, Housman, the War poets, Yeats, Forster, Waugh, Spender, Orwell, Auden, Thomas, and Lessing. It also includes some classic Christian responses-selections from C.S. Lewis, J.R.R. Tolkien, G.K. Chesterton, Hopkins, Thompson, and Eliot.

## 321 The American Novel (3)

This course is a study of the American novel beginning with Charles Brockden Brown and extending through the 19th and 20th centuries. Such authors as Hawthorne, Melville, Crane, Lewis, Hemingway, Faulkner, and Steinbeck will be studied. Lectures, discussions, papers are required.

## 322 The English Novel (3)

The study of the beginning of the English novel with Defoe, Richardson, and Fielding, followed by a survey of 19th and early 20th century novelists such as Bronte, Thackeray, Trollope, Dickens, Conrad, and Forster.

## 323 Modern and Contemporary English and American Novels (3)

The study of selected contemporary novels, American and English. Novelists include Bellow, Malamud, Potok, Updike, Burgess, and O'Connor.

## 333 History and Theory of Literary Criticism (3)

In this course we will analyze major works of literary criticism and theory of criticism, both classic works from Plato through Eliot and key works drawn from the ferment of contemporary theory, with the aim of formulating clearer Christian theories of literature.

## 335 History of the English Language (3)

The course 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)

Through the study of both traditional and transformational grammar, students learn how grammar shapes language. They examine the structure of sentences, practice writing a variety of structures, examine the elements of style, and try to eliminate their own usage problems.

## 341- Special Topics (3)

348 These literature courses cover a different topic each year and each is designed to be a special interest course maximizing individual instructor strengths, interests, and competencies. Usually each course will study in-depth the works of two or three literary figures normally not covered as intensively.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

[^1]
## English as a Second Language

For information on an ESL teaching endorsement, see the "Teacher Education Program" section on pages 65-82.

## Environmental Studies

| General Major- | Environmental Studies $151 ;$ Biology 115, 122, 200; Chemistry 101, 102, <br> or Chemistry 103, 104; Economics 202, 333; Philosophy 333; Political |
| ---: | :--- |
|  | Science 212, 222; plus six elective courses. The electives may be selected |
| from Biology 204, Engineering 390, Geology 110, Mathematics 107, |  |
|  | Political Science 233, 322; or from the following courses approved by |
|  | the Environmental Studies Advisory Committee: up to two courses from |
|  | several departments; Individual Studies 391, 392; up to four courses |
|  | from the AuSable Institute of Environmental Studies (see pages 38-39); |
|  | up to two courses in the American Studies Program (see page 38); or |
|  | up to two courses in the Chicago Metropolitan Program (see page 39). |

151 Introduction to Environmental Studies (3)

An introduction to contemporary environmental studies, with emphasis upon class discussion of relationships between human population, resource use, and pollution, in the light of biblical teaching about environmental stewardship.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permis. sion from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Environmental Studies 391.

## 207 World Literature (3)

See English 207. Students who wish this course to be listed as a French course will be assigned their paper based on French readings.

## 208 World Literature (3)

See English 208. Students who wish this course to be listed as a French course will be assigned their paper based on French readings.

## 251- Conversation (1)

258 The 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 a week; one hour of preparation per week. Prerequisite: French 102.

## General Education

Area of Concentration (Associate of Arts)
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 department 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 which has been designed in consultation with and approved by the associate academic dean to meet specific educational goals of the student.
NOTE: IN ALL OPTIONS (A-D), COURSES TAKEN TO MEET GENERAL EDUCATION REQUIREMENTS MAY ALSO BE USED TO MEET THE REQUIREMENTS OF THE CONCENTRATION OPTION.
10 Introduction to College (Cr.)An introduction to the purposes and proceduresof the academic, cultural, and social activities atDordt College.
200 Introduction to the Arts (3)This course is specifically designed for meetingthe general education requirement. The designallows for considerable flexibility. Studentschoose from a variety of sub-courses in art,drama, and music topics which are of interestto them. Students also fulfill requirements by at-tending special arts events and lectures.

## 300 Calling, Task, and Culture (3)

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: History 100; Theology 101; Philosophy 201; junior or senior standing.

## General Science

General Major- Biology 115, 122, 200, 213, 335; two elective courses in biology; Chemistry 103, 104, 201, 202, 203, 205, 311; Physics 115, 116; Mathematics 112.

For the teaching endorsement options in the sciences, see the "Teacher Education Program" section on pages 65-82.

## Geography

201 World Regional Geography (3)
A geographic survey of major world regions. Emphasis is placed on both human and physical geography as each region is surveyed as to loca-
tion, component countries, world role, distinctive physical and cultural characteristics, and major problems.

## Geology

110 The Earth: Geology and Oceanography (3)
A descriptive survey of the Earth as a planet. Designed primarily for science majors. Primary emphasis on basic concepts of geology and oceanography. Special attention to Earth's crust, submarine geology, plate tectonics, and interior structure. The history of planet Earth will be discussed in Christian perspective. This course
may not be used to meet the two-semester science requirement.

## 220 Physical Geology (3)

An intermediate level study of the nature and structure of planet Earth. Chief attention given to surface processes such as erosion, deposition, glaciation, landforms, and the role of plate tectonics. Prerequisite: Geology 110 or equivalent with permission of instructor.

## German

$$
\begin{aligned}
& \text { General Major - } \text { German 201, 202, 206, 302; Linguistics 201; five courses from German } \\
& \text { 101, 102, 207, 208, 301, 341-348, 391, 392; four semesters of German con- } \\
& \text { versation } 251-258 \text {. Study abroad courses are recommended. } \\
& \text { General Minor- } \text { German 201, 202, 206, 302; one course from German 102, 341-348, 391; } \\
& \text { three semesters of German conversation 251-258. Study abroad courses } \\
& \text { are recommended. }
\end{aligned}
$$

For descriptions of SECONDARY and ELEMENTARY majors, minors, field of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

101 Elementary German (4)
Emphasis on the basic structure of the language, core vocabulary, and pronunciation. Assigned work in the language laboratory.

## 102 Elementary German (3)

Continuation of German 101. Prerequisite: one year of high school German or German 101.

## 201 Intermediate German (3)

A review of the grammatical structure of German, with an emphasis on the nature of language. Attention is given to listening, speaking, reading and writing skills, vocabulary, and culture. Prerequisite: two years of high school German or German 102.

## 202 Literary and Cultural Readings (3)

This course is designed to develop the reading skill and an appreciation for German culture and literature. Emphasis upon contemporary literature. Permission will be granted for individual readings in academic areas of interest to the student. Prerequisite: German 201 or its equivalent.

## 206 German Culture (3)

This course is designed to cover many aspects of the German way of life. Listening and speaking skills will be developed through the classroom activities. Prerequisite: German 201 or its equivalent.

## 207 World Literature (3)

See English 207. Students who wish this course to be listed as a German course will be assigned their paper based on German readings.

## 208 World Literature (3)

See English 208. Students who wish this course
to be listed as a German course will be assigned their paper based on German readings.

## 251- Conversation (1)

258 The 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; one hour of preparation per week. Prerequisite: German 102.

301 German Phonology (3)
See Linguistics 301. The principles and universals of phonology will be studied. A direct application will be made to the German language.

## 302 Advanced German Grammar (3)

This course is designed for those who desire a better understanding of the structure of the language. The scope of grammar will be approached systematically. Prerequisite: German 201 or its equivalent.

## 341- Special Topics (3)

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 course as well as the content will reflect student interest and need. Prerequisite: departmental approval.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as German 391.

## Greek

101 Elementary Greek (4)
This course briefly surveys the historical phases
of the Greek language. The student is introduced
to the basic forms of the Greek language, a foun-
dational vocabulary and elementary grammar.
Selections from the Gospel of John are read.

102 Elementary Greek (4)
This course continues Greek 101 with an emphasis on review of forms, expansion of vocabulary, and development of reading skills. Selections from classical Greek authors are read.

## 201 New Testament Greek (3)

This course systematically deals with syntax of Hellenistic Greek. Selections from the Gospels are read.

202 New Testament Greek (3)
This course continues 201. Selections from the Epistles, Acts, and the earliest Church Fathers are read.

## 301 Patristic Greek Authors (3)

Selections from the Greek Church Fathers are read. This course both develops Greek reading skills and introduces the student to the earliest
post-New Testament Christian writers. Prerequisite: Greek 201.

## 302 Hellenistic Greek Authors (3)

Selections from Hellenistic writers and from Jewish Greek writers of this period are read. This course develops both Greek reading skills and introduces the student to non-Christian writers which were part of the world of early Christianity. Prerequisite: Greek 201 and 202.

## 341- Special Topics (3)

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.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Greek 391.

## Health, Physical Education, Recreation

General Majors- Exercise Science emphasis: Health, Physical Education, Recreation 101, 203, 204, 207, 208, 211, 325,361 or 391 , Biology 201, 202. (Chemistry 101 and 102 are strongly recommended in the sophomore year.)
Physical Education emphasis: Health, Physical Education, Recreation 101, 203, 204, 207, 208, 325; and four elective courses from 202, 205, 206, 210, 211, 212, 213, 214, 215, 304, 305, 306, 391, 392. (Note: 212-215 are half courses.)

Recreation emphasis: Health, Physical Education, Recreation 101, 203, 204, 206, 207, 208, 210, 325, 371, and Business Administration 205.

General Minors-General: Six approved courses within the HPER course offerings. Courses may be tailored to meet individual goals. The six courses must be approved by the HPER department chairperson.

Recreation: Health, Physical Education, Recreation 206, 207, 210, 371; Business Administration 205; two courses from Business Administration 206, Communication 222, 228, Political Science 214, Psychology 210.

For descriptions of SECONDARY and ELEMENTARY majors, minors, field of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

10 Concepts in Physical Education (1) P/F 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.

11 Adaptive Program (Cr.)
Restricted activity for students with physical disabilities. Prerequisite: recommendation by a medical doctor.

## 12 Aerobic Dance (Cr.)

An opportunity for students to work on a personal fitness program through vigorous exercises to music.

13 Badminton (Cr.)
Development of skills, techniques and participation in beginning badminton.
14 Senior Lifesaving (. 5 Cr .) Leads to Red Cross certification.
15 Bowling (Cr.)
Development of skills and knowledge in bowling necessary for the recreational purposes of the beginner. Not open to freshmen.

16 Cross-Country Skiing (Cr.)
The skills and techniques of this popular sport will be taught and practiced.

## 17 Golf (Cr.)

Beginning golf in which students will be taught the skills of the sport. Students must furnish their own clubs. No green fees for class work. Not open to freshmen.
18 Gymnastics-Floor Exercise (Cr.)
Development of beginning and intermediate skills and techniques in gymnastics and tumbling, including work in free exercise.
19 Gymnastics-Apparatus (Cr.)
Development of beginning and intermediate skills in gymnastics. Course will include parallel bars, balance beam, sidehorse, vaulting, rings, and uneven bars.

20 Personalized Program (Cr.)
A student may earn credit in a unique skill area
that is not taught at Dordt. Examples: judo, karate, scuba diving, etc.

## 21 Physical Fitness (Cr.)

Knowledge, development, and maintenance of personal physical fitness through the use of aerobics, calisthenics, the "exergenie," etc.

22 Racquetball (Cr.)
Skills and techniques of racquetball.

## 23 Slow Pitch Softball (Cr.)

Development of skills in softball and the opportunity to participate in a currently popular sport.

## 24 Square and Folk Dance (Cr.)

An opportunity for students to participate in square dance and folk dances from various countries.

## Swimming (Cr.)

Several sections are offered each semester. Each section is divided for non-swimmers, intermediate, and advance swimmers, WSI certification can be earned through special arrangements.

## 26 Tennis (Cr.)

Development of skills and knowledge in tennis.

## 27 Volleyball (Cr.)

Development of skills and techniques, and participation in power volleyball.

## 28 Weight Training (Cr.)

A well-rounded weight training program with carry-over recreational emphasis.
101 Introduction to Health, Physical Education, and Recreation (3)
This course is 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) <br> The first half of the course is devoted to in-

troducing 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 which will aid the student in making sound decisions regarding personal health.

## 203 Anatomy, Kinesiology, and Biomechanics (3)

A study of the anatomical and mechanical phenomena which 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.

## 204 Exercise Physiology (3)

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 course includes the practical application of physiological concepts and principles to physical education and sport.

## 205 Curriculum in Physical Education and Health (3)

This course will provide 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.

206 Recreational Leadership (3)
A study of leadership principles and their relationship to the field of recreation. The course is intended to give the necessary background and experience which would enable the student to work in a variety of recreational settings.

207 First Aid and Athletic Injuries (3)
A study of accepted methods used to prevent athletic injuries. Instruction in administering first aid practices in emergencies. First semester with an emphasis on the elementary school child, second semester focusing on participants in interscholastic sports. (This course is not open to freshmen. It is intended during the second semester for physical education majors and minors only.)

## 208 Assessment in Physical Education and Health

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)
This course studies the physical, mental, social, emotional, and spiritual dynamics of helath. Emphasis is placed on the utilization of health information in making good health choices.

## 210 Community Recreation (3)

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)

A study of the structure and function of the essential nutrients. Attention will be given to diet analysis and personal food choices.

## 212 Coaching Theory of Basketball (1.5)

Eight-week course with emphasis on coaching skills, philosophies, and modern techniques of basketball. Not open to freshmen.

## 213 Coaching Theory of Track and Field (1.5)

Eight-week course with emphasis on coaching skills, philosophies, and modern techniques of track and field. Not open to freshmen.

214 Coaching Theory of Volleyball (1.5) Eight-week course with emphasis on coaching skills, philosophies, and modern techniques of volleyball. Not open to freshmen.

## 215 Coaching Theory of Baseball/Softball (1.5)

Eight-week course with emphasis on coaching skills, philosophies, and modern techniques of baseball and softball. Not open to freshmen.
304 Teaching Physical Education and Health (3)
The purpose of this course is to provide the student with effective teaching skills and methods in physical education and health instruction. Various concepts are discussed which will assist the student in the understanding of teaching physical education and health.

305 Peer Teaching in Physical Education (3) This course is designed to provide the student the opportunity to apply the teaching skills and
methods learned in HPER 304 in a peer teaching environment. It also provides the opportunity to learn personal participation skills in a variety of physical activities. Prerequisite: HPER 304.

## 306 Elementary Physical Education Skills and Methods (3)

This course is designed to provide a background for teaching physical education to elementary school children. Emphasis will be given in adaptive physical education. This course is only open to professional physical education students.

## 325 Psychosocial Dimensions of Physical Activity (3)

This course has a two fold 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. Open to juniors and seniors only. Prerequisite: Psych 201, 205 or Soc 201.

361 Field Experience in Physical Therapy (3)
This course is designed to give students en-
rolled in the pre-physical 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 pre-physical therapy program.

## 371 Field Experience in Recreation (3)

This course is 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, or 210

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.
392 Individual Studies (3)
Same as HPER 391.

## History

General Major- History 201, 202; one course from History 212, 213, 214; History 338 or 339; six history courses beyond History 100.

For descriptions of SECONDARY and ELEMENTARY majors, minors, field of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## 100 Western Civilization Since the Renaissance (3)

A survey of the highlights in the growth and development in western civilization from the Renaissance to the present day.

## 201 American History (3)

Colonization and its antecedents, the Revolution and the development of nationalism, westward expansion, Jacksonian democracy, the rise of sectionalism, the slavery controversy and the Civil War.
202 American History (3)
Continuation of History 201. Reconstruction era, the problems of industrialization, the farm
revolt, politics of the Gilded Age, the reform movement, the politics of prosperity and of depression, the United States as a great power, and the United States as leader of the free world.

## 203 Ancient History (3)

The history of ancient Greece and Rome from the Minoan Age to the end of the Empire in the West, with special attention to the interaction of the Hellenic, Hellenistic, and Roman civilizations.

## 205 Medieval Europe (3)

History of Europe from the height of the Roman Empire in the second century to approximately
1300. The decline of the Roman Empire, the rise of Islam, the development of medieval institutions and the rise of cities will be emphasized.

## 209 Nineteenth Century Europe (3)

History of Europe from the Congress of Vienna to approximately 1890 , with most emphasis on Western Europe. Stress will be on political, cultural, and social factors that have influenced European history since 1815. Attention will also be given to outstanding figures such as Metternich, Cavour, Bismarck, Marx, and Darwin. Not open to freshmen except by permission of instructor.

## 210 Twentieth Century Europe (3)

Continuation of History 209. History of Europe from approximately 1890 to the present, with most emphasis on Western Europe. Focus will be upon such areas as the underlying causes of World War I, the political-social-economiccultural upheavals between the wars, the impact of World War II, and the problems which face present-day Europe.

## 211 History of Canada (3)

A survey of Canada's history from the age of discovery and exploration to the present. The various forces and individuals which 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.

## 212 Africa and the Middle East (3)

The roots of contemporary problems and development in Africa and the Middle East are explored and analyzed. The transition from the traditional political, economic and social institutions to the present institutions will be emphasized. Not open to first semester freshmen.

## 213 Latin America (3)

A survey of the history of Latin America from pre-Columbian times to the present. Emphasis will be on the 20th-century period. Not open to first semester freshmen.

## 214 The Far East (3)

A survey of the history of the Far East, with primary emphasis on China and Japan. Not open to first semester freshmen.

## 215 History of Mexico (3)

A survey of the history of Mexico from the time of the Spanish conquest to the present. Attention will be given to colonial life, to the reform
era of the early republic, and to 20th century revolutions. Emphasis will also be given to the interaction, development and change of political, economic, and social institutions in Mexico.

## 303 Modern Russia (3)

Study of Russia in the 19th and 20th centuries with concentration on internal developments. The revolutionary movements leading to the Communist revolution receive particular emphasis. Includes an examination of the Soviet system as it has evolved since 1917. Prerequisite: junior or senior standing or permission of instructor.

## 304 Renaissance and Reformation (3)

History of Europe from approximately 1300 to 1648. Such themes as humanism, the cultural renaissance, the rise of Protestantism, the Counter-Reformation, and the development of the modern secular state will be studied.

## 305 American Problems (3)

A course designed to pursue in-depth domestic relations that have had an important bearing upon the course of American history. The approach will be a combination of lectures, discussions, and reports emphasizing especially the historiographical material pertinent to each issue studied. Prerequisites: History 201-202 or permission of instructor.

## 307 Historiography (3)

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: assumes a general knowledge of history.

## 309 Economic History of the U.S. (3)

See Economics 309. This course may be taken for either history or economics credit. Prerequisite: permission of instructor.

## 310 History of Native Americans (3)

A course that combines lectures and readings and traces the history of native Americans from known beginnings to recent times. Attention is given to Indian-white relations as well as to cultural aspects of native American history. Assumes some knowledge of American history. Not open to freshmen.

## 313 American Political Thought (3)

See Political Science 313. This course may be taken for either history or political science credit.

## 314 American Intellectual History

This course examines the development of ideas by which Americans interpreted their experience, and which they employed in shaping American society and culture, from the colonial period to the 1960 's. Major components in this study include the ideas of Puritan Calvinism; evangelicals and the Enlightenment; liberalism and constitutional theory; the development of social theory and historical consciousness in the 19th century; modernism and fundamentalism; and 20th century pragmatism and postmodernism. Previous study of American history is advised.

## 315 History of American Evangelicalism

 This course 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 evanglicals 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.
## 322 American Constitutional Law (3)

See Political Science 322. This course may be taken for either history or political science credit.

338 History Seminar-United States History Emphasis (3)
The focus of this course is the writing of a research paper upon some aspect of the history of the United States. Students will select a topic for in-depth study in order to become familiar with the essential ingredients for historical study such as reading, research,
and writing. Emphasis will be upon such matters as how to use a library for research purposes, evaluation of evidence, and constructing a narrative depicting the results of their investigation. This course can be used to meet the teaching certification requirements for an American history endorsement. Either History 338 or 339 is required of all history majors. Open only to juniors and seniors.

## 339 History Seminar-World History Emphasis (3)

The focus of this course is the writing of a research paper upon some aspect of world history. The course description and requirements are the same as for History 338. This course can be used to meet the teaching certification requirements for a world history endorsement but not for an American history endorsement. Either History 338 or 339 is required of all history majors. Open only to juniors and seniors.

## 341- Special Topics (3)

348 Each of these courses is devoted to a different topic, and each is designed to be a specialinterest 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.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3) <br> Same as History 391.

## Individual Studies

## 391 Individual Studies (3)

Individual study of a topic which is interdepartmental or which falls within a department which does not have an individual study option. Permission must be granted by the associate academic dean.

## 392 Individual Studies (3)

Same as Individual Studies 391.

NOTE: For more information refer to pages $38-39$ of the catalog.

101 Elementary Latin (4)
This course covers the basic structures of Latin with introductory prose readings.

## 201 Intermediate Latin (4)

Continued work in basic skills, stress on vocab-
ulary. Reading of classical prose, some attention given to the nature of language and the relation of Latin to English and the Romance languages. Prerequisite: two years of high school Latin or Latin 101.

## Linguistics

100 English as a Second Language (3)
This course is intended to help non-native English speakers improve their verbal and nonverbal communication skills. The course includes practice in listening, speaking, reading, and writing. Students will also learn vocabulary building techniques, note-taking, and various aspects of North American culture.

201 Introduction to Linguistics (3)
A study of the nature of language as it relates to linguistic theories and speakers of languages. Using data taken from English and a variety of other languages, primary attention is given to the sounds and forms of language. Opportunity is provided for students to research a variety of cultural topics related to their major field or personal interest. Prerequisite: Foreign Language 102 or its equivalent. The course is open to freshmen with permission of the language department.

## 251- English Conversation (1)

258 These courses are designed to give the student practice in listening and speaking. The content of the course will be altered each year. The class
will meet two times each week, one hour of preparation per week. These courses are open to non-native English speakers only. Completion of three semesters is the equivalent of one course toward the 40 -course graduation requirements. Prerequisite: Score of 500 on the TOEFL test or Linguistics 100 .

## 301 Phonology (3)

A study of the human speech sounds and sound systems. In the beginning of the course the universal aspects of human speech will be emphasized; then, various applications will be developed in the English language or in various modern languages offered by the foreign language department. (See e.g., German 301).

## 371 Practicum of English as a Second Language (ESL) (3)

This course will offer students the opportunity to practice the principles and methods of teaching ESL. Emphasis will be given to the following areas: pronunciation, conversation, reading, and composition. Prerequisite: departmental approval.

## Management Information Systems

General Major- Computer Science 111, 112, 120, 201, 202, 210, 301, 371; Mathematics 107 or 206, 111 or 112; Business Administration 201, 202, 205, 206; Economics 201 or 202.

## Mathematics

General Major-
Mathematics $112,113,200,201,203,304,311$; three mathematics courses numbered 200 or above; two courses from Mathematics 291-294. (One course from Computer Science 102, 103, or 111 may be substituted for one of the three mathematics electives.)

For descriptions of SECONDARY and ELEMENTARY majors, minors, field of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## 106 Elements of Mathematics (3)

An introduction to the contents and methods of mathematics, including some discussion of its historical development.

## 107 Elementary Statistics (3)

An elementary course in statistical techniques and methods and their application to a variety of fields. Spreadsheet knowledge is suggested.
109 Theory of Elementary School Mathematics (3)
A study of the techniques, concepts, and theories underlying elementary school mathematics. For elementary education students specializing in mathematics. Topics include set theory, natural number system, numeration systems, integers, number theory, rational numbers, decimal notation, real numbers, and informal plane geometry. Prerequisite: Mathematics 106 or two years of high school algebra and geometry.

## 110 College Algebra (3)

A study of standard pre-calculus topics in algebra and trigonometry. Elementary functions and functional notation are emphasized in preparation for calculus. Prerequisite: three semesters of high school algebra.

## 111 Calculus for Business, Social, and Life Sciences (4)

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 application. Credit will not be given for both Math 111 and 112. Prerequisite: Math 110 or equivalent.

## 112 Calculus I (4)

A study of the basic concepts and techniques of calculus for students majoring in mathematics, computer science, engineering, or the physical sciences. Topics include limits, differentiation, integration, and applications. Credit will not be given for both Math 111 and 112. Prerequisite: Math 110 or equivalent.

## 113 Calculus II (4)

Continuation of Mathematics 112; a study of definite integrals, formal differentiation and integra-
tion, transcendental functions, sequences, series, and applications. Prerequisite: Mathematics 112.

200 Mathematical Proof and Calculus Theory (3) An introductory study of logic and the various methods of proof in mathematics, with application to and development of the theory of single variable calculus. Prerequisite: Mathematics 113.

## 201 Multivariable Calculus (3)

A study of the algebra and calculus of vectorvalued functions, three-dimensional analytic geometry, differential and integral calculus of functions of several variables, line and surface integrals. Prerequisite: Mathematics 113.

## 203 Elementary Linear Algebra (3)

An introductory study of vector spaces, linear transformations, matrices, and determinants, with particular emphasis upon solving systems of linear equations. Prerequisite: Mathematics 111 or 112.
204 Differential Equations (3)
An introduction to the theory and techniques of solving elementary differential equations and the use of these techniques in applied problems. Prerequisite: Mathematics 113.
206 Introduction to Mathematical Statistics (3)
An introduction to the theory and techniques of statistical analysis; probability, random variables, discrete and continuous distributions, estimation, and statistical hypothesis testing. Prerequisite: Mathematics 113.

## 207 Number Theory (3)

An introduction to number theory including congruences, residues, Diophantine equations, prime numbers and their distribution, and properties of number-theoretic functions. Prerequisite: Mathematics 111 or 112 or permission of instructor.

## 208 Modern Geometry (3)

A study of the basic concepts of modern geometry, both Euclidean and non-Euclidean, with some attention given to finite and projective geometry as well. Prerequisite: Mathematics 111 or 112 or permission of instructor.

## 209 Numerical Analysis (3)

A study of numerical methods for integration, differentiation, calculus of finite differences, and ap-
plications, using the computer. Prerequisites: Mathematics 113; Computer Science 102 or 111.

## 210 History of Mathematics (3)

A survey of the history of mathematical thought and institutions from ancient times through the 17th century, supplemented by a study of various topics chosen from the 18 th through 20 th centuries. Prerequisite: Mathematics 111 or 112 or permission of instructor.

## 212 Discrete Structures (3)

A course relating discrete mathematical structures to computing. Topics included are sets, relations, functions, equivalence and congruence relations, Boolean algebra, graph theory and matrices. Prerequisite: Mathematics 111 or 112 or permission of instructor.

## 291- Problem Solving Seminar (1)

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. Prerequisite: Math 112 or permission of instructor.

304 Abstract Algebra I (3)
An introduction to algebraic structures: groups, rings, integral domains, and fields. Prerequisite: Mathematics 203 or permission of instructor.

305 Abstract Algebra II (3)
Continuation of Mathematics 304. A more extensive study of algebraic structures. Prerequisite: Mathematics 304.

## 311 Real Analysis I (3)

An introduction to the content and methods of single variable real analysis: infinite sets, the real number system, sequences, limits, series, con-
tinuity, differentiation, and integration. Prerequisite: Mathematics 200 or permission of instructor.

## 312 Real Analysis II (3)

A rigorous study of the theory of real and vectorvalued functions of several variables: differentiability, multiple integrals, line and surface integrals, infinite series of functions. Prerequisites: Mathematics 201, 311.

315 Complex Analysis (3)
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 permission of instructor.

## 317 Topology (3)

The definition and study of various topologies and their applications in real analysis. Includes the following topics: bases, subbases, connectedness, compactness, completeness, and separation. Prerequisite: Mathematics 200 or 203.

## 341- Special Topics (3)

348 These mathematics courses cover different topics which 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.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Mathematics 391.

## Medical Technology

To be certified by the Registry of Medical Technologists of the American Society of Clinical Pathologists or other certifying agency, a student must complete three years of college work (30 courses) and one year of clinical education in a school of medical technology approved by the Council on Medical Education of the American Medical Association.

The three-year ( 30 course) pre-clinical program must include:

1. All the general education courses required for the B.A. degree.
2. Course work prescribed by the registry-a minimum of 16 semester hours in chemistry; a minimum of 16 semester hours in biology, including microbiology; and 2 courses
of college mathematics, one of which must be statistics. In addition, physics, human anatomy and physiology, and computer science are strongly recommended.
3. Elective courses to complete the 30 course minimum. The college recommends that the electives include: Chemistry 205 and Psychology 201. It is suggested that Latin, Spanish or French be used to meet the foreign language requirement.

In the junior year the medical technology student, working through the college medical technology coordinator, will complete the application procedures for admission to a school of medical technology approved by the Council on Medical Education.

At the end of the second semester of the junior (or senior) year, the student must preregister for the entire year of hospital training in order to be properly enrolled at Dordt College and to ensure financial and insurance benefits. Forms are avilable from the medical technology advisor or the associate academic dean.

## Music

General Major- Music 19, 103, 104, 203, 204, 207, 208, 308, 309, 315; six semesters in one area from 241-276; six large ensemble credits; additional courses in music from one area as follows:

1. History-Literature: Music 210; one elective course in music.
2. Theory-Composition: Music 307; Music 391 or 392.
(Private lessons must be 251-256.)
3. Organ: Music 211 or 212; Music 360, 361.
4. Piano: Music 350, 351.
5. Voice: Music 340, 341.
6. Instruments: Music 370, 371.
7. Church Music: Music 210, 211, 212.
(Normally students take three semesters of organ and three of voice.) NOTE: Performance majors (3-6) must audition for acceptance into the program by the end of the sophomore year. Performance majors are required to present a full senior recital and a half junior recital.
General Minor- Church Music: Music 103, 104, 210, 211, 212, 315; four semesters of private lessons or large ensembles.
For descriptions of SECONDARY and ELEMENTARY majors, minors, field of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## Ensembles

10 Chorale (1)
11 Concert Band (1)
12 Concert Choir (1)
13 Small Instrumental Ensemble (.5)
18 Small Vocal Ensemble (.5)
20 Orchestra (1)

## Classroom Courses

## 103 Music Theory I (4)

A basic course in music theory which lays the foundation for basic musicianship and further study in music through development of basic skills in music reading, notation, aural perception, and keyboard. The materials of Western
music are studied as a basis for the understanding of music, for discrimination in music, and for composition.

## 104 Music Theory II (4) <br> Continuation of Music 103. Prerequisite: Music 103.

## 203 Music Theory III (4)

A continuation of Music 103-104, with focus on advanced and chromatic harmony. Prerequisite: Music 104.

204 Music Theory IV (4)
An examination of the dissolution of the majorminor tonal system and the resulting new theoretical bases of 20 th-century music. Aural skills related to the analytical and written skills will be pursued. Prerequisite: Music 203.

## 207 Music History (3)

The historical development of the art of music, showing the cumulative values of music progress through the great eras in history and the relationship of music to the political, economic, and cultural conditions of these eras. Offered in alternate years.

## 208 Music History (3)

Continuation of Music 207. Offered in alternate years.
210 History of Music in the Church (3)
A study of church music from ancient times to the present. Special attention will be given to the development of American hymnody. Offered in alternate years.

## 211 Worship and Liturgy (3)

Inquiry into the relationship of music to principles, patterns, and practices of worship. Biblical-historical perspectives will be applied in analysis of current worship patterns and in building worship and liturgy models. Offered in alternate years.

212 Church Music Organization and Literature (3)
A study of the organization of the church music program and appropriate music literature for organ, voice, and instruments. Offered in alternate years.

## 305 Arranging (3)

A detailed study of orchestral, band, and choral arranging. Offered in alternate years.
307 Composition (3)
A study of compositional methods, with an em.
phasis on contemporary techniques. Offered in alternate years.
308 Music Literature (3)
This course is designed for the music major, but open to the non-major by consent of the instructor. Intensive and extensive listening will be required. A basic repertory background in several media will be explored. The compositions will be examined and discussed in terms of salient style features and form. Offered in alternate years.

309 Form and Analysis (3)
A practical and analytical course in the structure of music forms.
312 Teaching Music in the Elementary School (3)
A course for music majors and minors designed to provide a detailed study of methods and materials of music education in the elementary school.

## 313 Choral Music Education in the Secondary School (3)

Teaching techniques and materials for the prospective vocal music educator, including advanced choral conducting. Offered in alternate years.

## 314 Instrumental Music Education in the Secondary School (3)

Teaching techniques and materials for the prospective instrumental music educator, including advanced instrumental conducting. Offered in alternate years.
315 Conducting (3)
A study of choral and instrumental conducting with corresponding literature. Offered in alternate years.

## 342- Special Topics (3)

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.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.
392 Individual Studies (3)
Same as Music 391.

## Pedagogy

Completion of $316-319$ is the equivalent of one course toward graduation for instrumental music majors. Completion of 323 plus two semesters of $316-319$ is the equivalent of one course toward graduation for choral music majors.

## 316 Brass Pedagogy (1)

Methods of teaching brass instruments. Offered in alternate years.

## 317 Woodwind Pedagogy (1)

Methods of teaching woodwind instruments. Of fered in alternate years.
318 String Pedagogy (1)
Methods of teaching string instruments. Offered in alternate years.

## 319 Percussion Pedagogy (1)

Methods of teaching percussion instruments. Offered in alternate years.

## 323 Vocal Pedagogy (2)

Methods of teaching voice.
325 Organ Pedagogy and Literature (3)
Study of the techniques and methods of teaching organ and survey of literature for the organ.
326 Piano Pedagogy and Literature (3)
Study of techniques and methods of teaching piano and survey of literature for the piano.

## Private Instruction

The following are courses of private instruction for non-music majors and may be repeated.
14 Private and Class Voice (1)
15 Private and Class Piano (1)
16 Private Organ (1)
17 Private Instruments (1)
19 Piano Proficiency (0)
The following are courses of private instruction on their principal instrument for music majors. Semesters of private instruction are numbered consecutively from one to six. Each semester of private instruction is a prerequisite for the following semester; i.e., a student must successfully complete semester one before registering
for semester two, etc. One hour of credit is awarded for each semester. Six semesters of private study are equivalent to two courses toward graduation. Music majors may take a maximum of six semesters from the following:
241- Private Voice ( 1 credit hour per 246 semester)
251- Private Piano (1 credit hour per 256
261266 271276 semester)

The following advanced study courses are open only to general majors.
340 Advanced Voice Study (3)
Advanced voice literature and recital preparation. By audition. Open only to general majors in voice.

## 341 Advanced Voice Study (3)

Continuation of Music 340. Open only to general majors in voice.
350 Advanced Piano Study (3)
Advanced piano literature and recital preparation. By audition. Open only to general majors in piano.
351 Advanced Piano Study (3)
Continuation of Music 350. Open only to general majors in piano.
360 Advanced Organ Study (3)
Advanced organ literature and recital preparation. By audition. Open only to general majors in organ.

## 361 Advanced Organ Study (3)

Continuation of Music 360. Open only to general majors in organ.
370 Advanced Instrumental Study (3)
Advanced instrumental literature and recital preparation. By audition. Open only to general majors in an instrument.
371 Advanced Instrumental Study (3)
Continuation of Music 370. Open only to general majors in an instrument.

## Philosophy

General Major- Philosophy 201, 301, 302, 303, 304, 309 and five elective courses in philosophy; electives may include Engineering 390 and/or one course from Political Science 310, 311, 312, Theology 347.

## 201 Perspectives in Philosophy (3)

An introduction to the nature, task, and basic problems of philosophy, its relationship to worldview, and a survey of its history.

## 202 Logic (3)

An introduction to the study of logic, both deductive and inductive, focusing on its systematic, philosophical, and historical development.

## 206 Aesthetics (3)

A study of the aesthetic dimension of creation, of the nature and qualifying function of artistic activity and artifacts, and an introduction to general aesthetic theory and its history. Prerequisite: Philosophy 201.

## 301 Ancient Philosophy: The Dawn of Western Thought (3)

A study of the pagan roots of the thought patterns that shape our contemporary world. The course is 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)

A study of the medieval thought patterns that shaped our contemporary world. The course is 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)

A survey of philosophical problems and movements in the Western world from the end of the 15 th century to the middle of the 19 th century. Readings in primary sources.
304 History of Contemporary Philosophy (3) 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)
An analysis of the origin and development of Christian philosophy since the Reformation, in the context of Western thought. Prerequisite: Philosophy 201. Philosophy majors are advised
to complete the history of philosophy sequence before taking Philosophy 309.
310 Systematics of Christian Philosophy (3) An 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: Philosophy 201.

320 Philosophy of the Social Sciences (3) A study of contemporary views of society (e.g., behaviorism, symbolic interactionism, neoMarxism), 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: Philosophy 201; preferably junior or senior standing, with at least one course in economics, psychology, sociology, or political science.

## 333 Philosophy of the Environment (3)

A historical and systematic study of the structure and normed character of the various relationships between human beings and their environment. Prerequisites: Philosophy 201; junior or senior standing.

## 341- Special Topics (3)

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)

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: Philosophy 201. Open to juniors and seniors in all disciplines.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Philosophy 391.

## Physical Science

For descriptions of the SECONDARY minor and the ELEMENTARY field of specialization, see the "Teacher Education Program" section on pages 65-82.

## 107 Introduction to Physical Science (3)

An introductory survey of the physical sciences with particular emphasis upon astronomy and geology. Attention will be given to the relationship between scientific discovery and theory in these sciences and the Christian faith. This course meets three hours a week.

201 Perspectives in Physical Science (3)
The coherence existing in the physical aspect of creation is used to develop a Christian attitude toward physical science. Various schools of thought are examined; differences between Christian and non-Christian approaches are in cluded. Prerequisite: one year of high school physical science or a college course in one of the sciences. Open only to upperclassmen.

## Physics

General Major Physics 201, 202, 203, 206, 325, 326, 335, 336; Chemistry 301, 302; Mathematics 112, 113, 201, 204.

For descriptions of SECONDARY majors, minors, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## 115 General Physics (4)

An introduction to the study of the physical aspect of reality. Topics covered include mechanics, kinetic theory, heat, thermodynamics, waves, and sound. Three lectures and one laboratory period per week.
116 General Physics (4)
Continuation of Physics 115. Light, electricity and magnetism, and topics in modern physics, e.g. quantum theory, relativity, physics of the atomic nucleus. Three lectures and one laboratory period per week.

## 201 Introductory Physics I: Mechanics (4)

An introduction to the study of the physical aspect of reality for students intending to continue in the physical sciences and engineering. Statics, linear and rotational dynamics, and gravitation will be covered. Three lectures and one laboratory period per week. Pre- or corequisite: Mathematics 113.

202 Introductory Physics II: Fluids, Waves, Heat, Electricity, and Magnetism (4)
Continuation of Physics 201. Topics covered include fluid statics and dynamics, waves, heat and thermodynamics, and electricity and magnetism.

Three lectures and one laboratory per week. Prerequisite: Physics 201.
203 Introductory Physics III: Electricity and Magnetism, Electromagnetic Waves, Optics, and Modern Physics (3) Continuation of Physics 202. Topics covered include continuation of electricity and magnetism, electromagnetic waves, optics, quantum physics, and topics in modern physics. Three lectures per week. Prerequisite: Physics 202.

## 206 Electronics (4)

An introductory course. Topics include: definitions of voltage, current, resistance, capacitance, inductance; Kirchhoff's laws; simple nodal and mesh analysis; equivalent circuits; DC and AC analysis; diodes; bipolar and field effect transistors; biasing; small-signal analysis; and operational amplifiers. Laboratory exercises cover basic measurement techniques and typical applications of diodes, transistors, and operational amplifiers. Prerequisite: Mathematics 113. Corequisite: Mathematics 204.

## 301- Research (1)

305 Original research in experimental or theoretical physics on an approved topic supervised by
departmental staff. Prerequisites: Physics 116 or 202; permission of department.

## 325 Classical Mechanics (4)

Lagrangian and Hamiltonian dynamics, general rigid body motion, theory of vibrations and waves, relativistic particle mechanics are studied. Prerequisites: Physics 203; Mathematics 201, 204.

## 326 Electromagnetic Theory (4)

Review of vector calculus: divergence, curl, Gauss' and Stoke's theorems; electro- and magnetostatics: polarization, boundary conditions, Laplace and Poisson equations, magnetic vector potential, energy: Maxwell's equations for timevarying fields, wave propagation, Poynting's theorem. Prerequisites: Physics 203; Mathematics 201, 204.

## 335 Modern Physics (4)

Developments in modern physics: special relativity, atomic nature of matter and electricity, wave and particle aspects of electrons and light, quantum theory. Three lectures and one laboratory
period per week. Prerequisites: Physics 203; Mathematics 201, 204.

## 336 Modern Physics (3)

Continuation of Physics 335. A study of atomic and molecular structure, solid state physics, quantum statistics and nuclear physics. Three lectures per week. Prerequisites: Physics 335; Mathematics 201, 204.

341- Special Topics (3)
348 These courses cover areas in physics not already discussed in other courses. They are special interest courses offered on the basis of student demand and instructor competency and availability. The prerequisite(s) will depend on the topics covered.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permis. sion from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Physics 391.

## Political Science

General Major- Political Science 201, 212, 214, 222, 370; five elective courses in political science.
General Minor- Political Science 201, 212, 222 and three electives in political science. For descriptions of the SECONDARY minor and the ELEMENTARY field of specialization, see the "Teacher Education Program" section on pages 65-82.

## 201 Introduction to Politics (3)

An introduction to the political dimension of life from a biblically oriented perspective. This course examines the components (e.g., political culture, ideology, institutions, etc.) which 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.

210 International Relations (3)
An introduction to the contemporary relations among nations with a consideration of the issues of war and peace, international organizations, law, integration, economic interdependence, and relations among the superpowers.

## 212 American National Politics (3)

A general introduction to the American political process-its foundations, external influences, institutions, political actors, and policy output.

## 214 Community Politics (3)

This course 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.

220 Parties, Elections and Voting Behavior (3) An examination of contemporary forms of
political participation in the United States on the party system, voting behavior, the presidential selection process, and the influences on the American electoral process.

## 222 Public Policy (3)

This course provides a general introduction to the public policy process in the United States, including an exploration of the socio-economic 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.

## 233 Comparative Government and Policy (3)

An introduction to the politics and government of Western Europe and the Soviet Union with an emphasis on the relationship between the political culture, the political system, and policy output. Consideration is given to consociational democracy as an alternative to the majoritarian model, and its effects on public policy.

310 Foundations of Political Thought (3)
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.

## 311 Modern Political Thought (3)

The emergence and triumph of secular humanism as the foundation of a new conception of politics considered by an investigation of the work of Machiavelli, Hobbes, Locke, Rousseau, Hegel, Marx, and others through the 19th century.

312 Contemporary Political Ideologies (3) This course explores the competing views of the social order and the state embodied in the major ideologies and movements of the 20th century, such as communism, socialism, liberalism, fascism, nationalism, and contemporary American variations (e.g., neoconservativism, neoliberalism, feminism, New Left).

313 American Political Thought (3)
This course is a comparative study of the assump-
tions, promises, and problems in the American Liberal tradition. Special attention is given to the development of the Liberal tradition from its origin in the American Revolution through the Civil War.

## 322 American Constitutional Law (3)

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. (This course may apply toward the history major.)

## 332 Canadian Politics

This course surveys the history of Canadian politics from the Conquest (1760) to the Canada Act (1980). It is a study of the formation of structures and policies of government, developments in the distribution and use of political power, and the changing role of government. Primary attention is focused on the federal government with reference to provincial and municipal government where appropriate.

## 341- Special Topics (3)

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 Peace and Security in the Nuclear Age (3) In this advanced seminar course, the class examines various aspects of the arms race (historical development, strategic doctrine, effects on society, etc.) and discusses different perspectives (pacifism, just war) that shape policy in this area. Required of majors and open to students of all majors.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Political Science 391.

## Psychology

General Major-Psychology 201, 207, 301, 308; six courses in psychology. For descriptions of the SECONDARY minor and the ELEMENTARY field of specialization, see the "Teacher Education Program" section on pages 65-82.


#### Abstract

201 General Psychology (3) An introduction to the field of psychology. The course surveys the areas of motivation, perception, learning, personality, and development. Consideration is given to various philosophical presuppositions and underlying contemporary psychology, and an attempt is made to understand the various problems in terms of a biblical view of man.


## 205 Developmental Psychology I (3)

The study of the growth and development of the individual from conception through adulthood, focusing on personality, cognative, moral, and social development. This is the first course in a two-course sequence with particular emphasis on the prenatal through early adolescent development stages. Prerequisite: Psychology 201 or Education 101.
206 Developmental Psychology II (3)
A continuation of Psychology 205 with particular emphasis on the adolescent through adult stages of development. Prerequisite: Psychology 201. Recommended: Psychology 205.

## 207 Elementary Statistics (3)

An elementary course in statistical techniques and methods and their application to the field of psychology. Spreadsheet knowledge is suggested.

## 210 Social Psychology (3)

The study of individual psychological processes as they influence and are influenced by sociocultural situations, with extended treatment given to impression formation, nonverbal communication, attitudes and persuasion, conformity and commitment, group processes, interpersonal attraction and sexuality, social motives, and the problems of prejudice and discrimination. Prerequisite: Psychology 201.

## 221 Physiological Psychology (3)

An introduction to the physiological/biological processes involved in human psychology. Primary 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 alcoholism, drug addiction, homosexuality, physiology of sexual differences, psychosomatic disorders, and a Christian perspective on the mind-body-soul dilemma. Prerequisite: Psychology 201.

## 225 Abnormal Psychology (3)

A study of the development and symptoms of emotional and behavioral problems. Topics covered will include neurosis, schizophrenia, sexual deviations, affective disorders, personality disorders, psychosomatic 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.
245 Student Development Seminar (3)
A course developed especially to train Student Services staff. Topics covered include empathic listening skills, confrontation skills, leadership skills, stress management, time management, medical emergency techniques, etc. One-third of the course involves a week-long orientation retreat in the fall. Open only to resident directors and resident advisors. This course should not be included as part of the ten courses required for psychology major.

## 301 Experimental Psychology (4)

Application of experimental methodology primarily to the areas of learning and perception. Exercises in laboratory research and formal written reports will be required. The experimental method itself will be evaluated in light of current studies of experimenter bias and experimenter effects; the relationship between the experimental method and the Christian faith will be discussed. Three lectures and one laboratory period per week. Prerequisites: Psychology 201, 207.

302 Learning and Behavior Modification (3) The study of the basic processes of learning along with the major theories and research which have been used to investigate the learning process. The major positions in the field to be
examined will include classical conditioning, operant conditioning, and cognitive approaches to learning. A major emphasis will be to compare behavioristic and cognitive approaches to learning, assessing both in the light of God's Word. Extensive consideration will also be given to the use of behavior modification techniques and biofeedback in clinical and educational settings and Christian approaches to such techniques.

## 303 Theories of Personality (3)

Study of the structure and nature of personality as viewed by Freud, Jung, Adler, Fromm, Horney, Sullivan, Murray, Lewin, Allport, Rogers, behavioristic theories, and several Christianoriented theories. Prerequisite: Psychology 201.

## 304 Psychological Testing (3)

This course is designed to introduce the student to the theory and practice of psychological assessment. The course will cover the basic areas of testing theory, test construction, testing statistics, and test evaluation. Students will learn how to administer, score, and interpret test results. Students will be given practice in the fundamentals of report writing. The course will introduce the students to personality, vocational, interest, and intelligence testing. Prerequisites: Psychology 207; junior or senior standing. Recommended: Psychology 303.

308 History and Systems of Psychology (3) 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 (especially psychoanalysis, behaviorism, humanism, and phenomenology) and to recent attempts by Christians to "integrate" theology and psychology. Prerequisites: Psychology 201; Philosophy 201.

## 310 Fundamentals of Practice (3)

This course is cross listed with Social Work 310. Psychology 310 may be taken as an elective in the psychology major. Because of class size restrictions psychology majors will need permission of the course instructor to register for the course.

## 315 Introduction to Counseling (3)

Introductory course in counseling theory emphasizing 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: a minimum of three courses in psychology; junior or senior standing.

## 341- Special Topics (3)

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.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Psychology 391.

## Social Studies

General Major- History 201, 202; four history courses numbered 200 or above; Economics 201, 202; Political Science 201, 212; Sociology 201, 207, 210; Sociology 215 or 216 ; three courses from economics, history, political science, and sociology.

For the elementary field of specialization and endorsement in social studies, see the elementary part of the "Teacher Education Program" section on pages 65-82. Secondary endorsements are in American and world history.

## 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). The social work program is of such a nature that admission to the 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 second semester of the sophomore year prior to the spring break. Forms may be obtained from the chairperson of the Social Work Program Committee.

Completed application forms are reviewed by the Social Work Program Committee, and admission to the program is based on the following criteria:

1. A minimum cumulative grade point average of 2.20 with a minimum of 13 courses completed for credit.
2. A written statement of personal interest which indicates an ability to communicate effectively and a commitment to social service.
3. Acceptable physical and psychological health.

Upon review of the application, the committee will take one of the following actions:

1. Accepted-meets all criteria.
2. Accepted conditionally-some deficiencies but remediable.
3. Rejected-deficiencies beyond forseeable remediation.

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, which includes an intensive field work experience. This application should be filed during the second semester of the junior year, prior to the spring break. Forms may be obtained from the chairperson of the Social Work Program Committee.

The application will be reviewed by the Social Work Program Committee, and admission to the professional semester will be based on the student's meeting the following criteria:

1. A minimum cumulative grade point average of 2.50 .
2. Completion of the required courses as listed under the major: Social Work - page 112 of the catalog.
3. Senior standing (anticipated).
4. An acceptable recommendation from a faculty member.
5. A written statement which demonstrates acceptable communication skills and a mature and knowledgeable interest in social work.
6. An interview which 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:

1. Accepted-meets all criteria.
2. Accepted conditionally-some deficiencies but remediable.
3. Rejected-deficiencies beyond forseeable remediation.

The student will receive written notice of status.
The Social Work Program Committee reserves the right to refuse admission to, or continuation in the program to any student who does not maintain a 2.50 grade point average, or who, in the judgement of the committee, has physical, mental, or personality handicaps which 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 Program

General Education
14 courses

These courses are the same for all students.
Note: 1) Social Work majors must take Biology 101.
2) Spanish is the recommended foreign language.

Major
17 courses
Social Work 225 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Freshman
Social Work 216
Freshman or Sophomore
Sociology 215.
Social Work 226
Sociology 207. Freshman or Sophomore

Social Work 300 Sophomore

Social Work 303 Junior

Social Work 303
Social Work 310 Junior

Social Work 310 Junior

Social Work 311 Junior

Social Work 315 . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Sociology 307 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Senior
Social Work 304 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Senior
Social Work 312 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Senior
Social Work 325 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Senior
Social Work 374 (counts as four courses). . . . . . . . . . . . . . . . . . . . Senior
NOTE: Social Work 374 (Field Work Experience) must be taken at Dordt College to receive graduation credit toward the Social Work Major.

## Electives

9 courses

216 Racial and Ethnic Minorities in Society (3)
This course examines the historical and contemporary aspects of racism and prejudice in North America while increasing knowledge and ap-
preciation of the contributions and life styles of minority groups in culturally pluralistic societies. Human diversity, instead of something to be tolerated, is treated as an asset; and human rights, regardless of race or color, are to be respected.

Students assess their own prejudices in light of the course knowledge base and gain first-hand experience with minority subcultures. Knowledge, attitudes, and skills are integrated to provide social science, education, and other students an opportunity to increase knowledge of, and sensitivity to, cultural pluralism and strategies for interaction for use in the classroom, in various professions, and in a student's everyday living.
225 Introduction to Social Work (3)
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.
226 The History and Philosophy of Social Welfare and Social Work (3)
This course will examine 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. Prerequisite: Social Work 225 or permission of instructor.

## 300 Human Behavior and the Social En-

 vironment (3)Presentation of a theoretical and conceptual framework for understanding socio-psychobiological factors in human development across the life cycle. The focus is on the interrelationship between the individual, family, small groups, and society. Prerequisite: Social Work 226.
303 Child and Family Welfare Policy (3) 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: Social Work 315 or permission of instructor.

## 304 Aging and Social Work (3)

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, 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: Social Work 315 or permission of instructor.

## 310 Fundamentals of Social Work Practice (3)

 The focus is on acquiring the core interpersonal and problem-solving skills for social work practice. Development of self-awareness and selfknowledge 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. Prerequisite: Social Work 225 or permission of instructor.
## 311 Practice Methods I (3)

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 individuals and families with a variety of intervention strategies presented. Prerequisite: Social Work 310.

## 312 Practice Methods II (3)

A continuation of Social Work 310 and 311 with an emphasis on practice at the group, agency, and community levels. Prerequisites: Social Work 310 and 311.

## 315 Social Welfare Policy (3)

Through a series of outside readings and exercises, students apply scriptural principles and build critical skills in the area of social welfare policy. The value base for current social policy is examined and current ways of delivering human services are critiqued. Topics covered include how benefits are allocated, welfare reform, cost-effectiveness analysis, program development, public finance, block grants and grant writing, human service budgeting, and political advocacy. Prerequisite: Social Work 226 or permission of instructor.

## 325 Integrative Seminar in Social Work (3)

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.) Prerequisites: Social Work 312 and 315.

## 374 Field Work Experience (12)

The field work course is designed to provide the student with the opportunity to apply the knowledge, principles, and skills gained in the classroom. (Open only to senior social work majors.) Prerequisites: Social Work 312 and 315.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permis-
sion from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Social Work 391.

## Sociology

# General Major - Sociology 201, 207, 210, 301, 307; five courses from sociology and/or Social Work 303, 304, 315. <br> For descriptions of the SECONDARY minor and the ELEMENTARY field of specialization, see the "Teacher Education Program" section on pages 65-82. 

## 201 Principles of Sociology (3)

Sociology focuses on the social landscape which shapes how we think, feel, and behave. The course introduces the field of sociology and provides an overview of major sociological topics, such as culture, socialization, deviance, minorities, sex roles, the family, religion, and population. Students are encouraged to critique sociologial theory from a biblical basis and build a Christian sociological perspective.

## 207 Elementary Statistics (3)

An elementary course in statistical techniques and methods and their application to the social sciences. Spreadsheet knowledge is suggested.

## 210 Social Psychology (3)

A study of the individual in relation to social situations including treatment of social motivation, attitude development and change, conscience formation, conformity, and small group interaction. Prerequisite: Psychology 201 or Sociology 201.

## 215 Sociology of Deviance (3)

An analysis of the extent, pattern, and causes of deviancy in modern society in the light of the biblical view of man. Major attention is given to behavior which differs from social expectations in the areas of crime and the criminal justice system, drug use, alcoholism, mental disorders, and sexual deviance. Prerequisite: Sociology 201.

## 216 Racial and Ethnic Minorities in Society (3)

This course examines the historical and contemporary aspects of racism and prejudice in North America while increasing knowledge and appreciation of the contributions and life styles of minority groups in culturally pluralistic societies. Human diversity, instead of something to be tolerated, is treated as an asset; and human rights, regardless of race or color, are to be respected.

Students assess their own prejudices in light of the course knowledge base and gain first-hand experience with minority subcultures. Knowledge, attitudes, and skills are integrated to provide social science, education, and other students an opportunity to increase knowledge of, and sensitivity to, cultural pluralism and strategies for interaction for use in the classroom, in various professions, and in a student's everyday living.
301 Sociological Theory and History (3)
The development of sociology with emphasis on its European background and formative stage in 20th century United States. Appraisal of the major schools of sociological thought with special emphasis upon the theoretical development in contemporary sociology in Europe and North America. Prerequisite: Sociology 201.
302 Marriage and Family (3)
A study of contemporary marriage and family, which includes an analysis of how society affects family and marriage. The course actively seeks to place current issues and themes within a Christian perspective (sex roles, sexuality, work and marriage, divorce, remarriage). Prerequisite: junior or senior standing or permission of instructor.

## 307 Methods of Social Science Research (3)

 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: Sociology 207; junior or senior standing.341- Special Topics (3)
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.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with per-
mission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

392 Individual Studies (3)
Same as Sociology 391.

## Spanish

General Major- Spanish 201, 202, 206, 302; Linguistics 201; five courses from Spanish 101, 102, 207, 208, 301, 341-348, 391, 392; four semesters of Spanish conversation 251-258. Study abroad courses are recommended.
General Minor- Spanish 201, 202, 206, 302; one course from Spanish 102, 341-348, 391; three semesters of Spanish conversation 251-258. Study abroad courses are recommended.

For descriptions of secondary and elementary majors, minors, field of specialization, and teaching endorsements, see the "Teacher Education Program" section on pages 65-82.

## 101 Elementary Spanish (4)

Emphasis on the basic structure of the language, core vocabulary, and pronunciation. Assigned work in the language laboratory.

## 102 Elementary Spanish (3)

Continuation of Spanish 101. Prerequisite: one year of high school Spanish or Spanish 101.

## 201 Intermediate Spanish (3)

A review of the grammatical structure of Spanish, with an emphasis on the nature of language. Attention is given to listening, speaking, reading and writing skills, vocabulary, and culture. Prerequisite: two years of high school Spanish or Spanish 102.

## 202 Literary and Cultural Readings (3)

This course is designed to develop the reading skill and an appreciation for Spanish literature and culture. Emphasis upon contemporary literature. Permission will be granted for individual readings in academic areas of interest to the student. Prerequisite: Spanish 201 or equivalent.

## 206 Spanish Culture (3)

This course is designed to present various aspects of the way of life of the Hispanic people. Listening and speaking skills will be developed through the classroom activities. Prerequisite: Spanish 201 or equivalent.

## 207 World Literature (3)

See English 207. Students who wish this course to be listed as a Spanish course will be assigned their paper based on Spanish readings.

## 208 World Literature (3)

See English 208. Students who wish this course to be listed as a Spanish course will be assigned their paper based on Spanish readings.

## 251- Conversation (1)

258 The 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 a week; one hour of preparation per week. Prerequisite: Spanish 102.

## 301 Spanish Phonology (3)

See Linguistics 301 . The principles and universals of phonology will be studied. A direct application will be made to the Spanish language.

## 302 Advanced Spanish Grammar (3)

This course is designed for those who desire a better understanding of the structure of the language. The scope of grammar will be approached systematically. Prerequisite: Spanish 201 or equivalent.

## 341- Special Topics (3)

348 The topics for these courses will be chosen from
areas of literature, advanced language studies, culture, or teaching methods. The offering of the course as well as the content will reflect student interest and need. Prerequisite: departmental approval.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with per-
mission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Spanish 391.

## Special Education

See the "Teacher Education Program" section, noting "Field of Specialization" on pages $68-69$ and "Special Education Minor" on page 76.

## Theatre Arts

General MajorTheatre Arts 201, 202, 203, 204, 207, 208, 340; Communication 212; two courses from English 312, Theatre Arts 364, 365; one course from Theatre Arts 371, 373, 375, 377, 380; four courses from Theatre Arts 11-51.
General Minor- Theatre Arts 201, 310; one from 202 or 304; two from the following, of which not more than one may be from courses in Applied Theatre (TA 371-380): Education 262, Theatre Arts 203, 207, 208, 340, 364, 365 , 371-380, English 312.
For an elementary field of specialization, see the "Teacher Education Program" section on pages 65-82.

The following courses, called Theatre Arts Modules or TAM's, each acrue one credit hour for work on theatre department productions. The credit is a departmental credit. It is honored by the department and appears on the grade transcript, but it does not count as a course credit required for graduation.

## 11 Light/Sound Design and Tech (1)

13 Properties Master (1)
15 Production Design (1)
17 Makeup Design and Application (1)
19 Costuming (1)
21 Voice Instruction (1)
23 Individual Acting (1)
25 Ensemble Acting (1)
27 Stage Movement (1)
29 Music Performance (1)
31 Directing (1)
33 Stage Management (1)

## 35 House Management (1)

51 Choral Theatre (1)
201 Introduction to Theatre (3)
An introduction to the history and literature of theatre, with half the course devoted to workshops in acting, lighting, set design and construction, costuming, publicity, and makeup.
202 Fundamentals of Acting (3)
Experience with the fundamental principles of acting-victory, obstacle, tactic and expectationas well as development of the skills of relaxation, concentration, physicalization and character analysis.
203 Essentials of Stage Scenery (3)
An introduction to scenic design that includes design theory, design process, and the technical skills related to scenic design.

## 204 Introduction to Dance (3)

An introduction to the history, nature, and styles of dance.
205 Basic Dance Technique and Composition (3)
Provides students with the practice needed to
make dance language and dance movement expressive of imagined concepts. Prerequisite: TA 204.

## 207 Theatre History, Greek through Neoclassical (3)

History of the theatre, from Sophocles to Geothe, in all of its dimensions (stage design, acting, conventions, etc.). Readings of plays and literary criticism.

## 208 Theatre History, Romantic to Present

 (3)A continuation of Theatre Arts 207 with an emphasis on the rise of realism in the late 19th century and the reactions to realism in the 20th century. Readings of plays and literary criticism.

## 304 Repertory Theatre (3)

A course in practical theatre designed to teach skills related to staging a variety of short (often original) works in a variety of settings. The class works as an ensemble to develop and stage a production. In addition, but not as part of the course, some students may be invited by the college to tour during a week or two immediately following graduation. Repertory Theatre is open by audition only.

## 310 Directing (3)

A study of some of the problems that are part of the directing process and of the techniques for shaping that process. Course work includes directing a one-act play. Prerequisite: Theatre Arts 201.

340 Voice Production and Performance (3) A workshop approach to freeing the natural voice, removing the blocks that inhibit it, and integrating the voice with other parts of the actor's instrument: body, imagination, emotions, thoughts, experiences. Based on the work of Kristin Linklater.

## 341- Special Topics (3)

348 Each of these courses is designed to be a specialinterest 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.

364 Dramatic Literature: Greeks to the Realists (3)
A survey of dramatic literature from the Greeks to the 19th century realists. Special attention will
be given to the "religious" drama of the 15th and 16 th centuries.

365 Modern Drama: Realists to the Present (3) A study of dramatic literature from Ibsen to the present. The course will trace the positivistic, principial foundation of realism, and the subsequent revolts against realism.

## 371 Applied Theatre-Directing (3)

The course content in directing 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. Open only to majors and minors.

## 373 Applied Theatre-Acting (3)

The course content in acting 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. Open only to majors and minors.

## 375 Applied Theatre-Design (3)

The course content in design 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. Open only to majors and minors.

377 Applied Theatre-Technical Theatre (3) The course content in technical theatre 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. Open only to majors and minors.

## 380 Playwriting Workshop (3)

This course provides basic instruction in playwriting. Registration is by permission of the department. The course requirements will be met by two or three enrollments, normally in two or three consecutive semesters.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Theatre Arts 391.

# Theology 

General Major - Theology 101 and 10 courses from the following: Theology 201, 203, 204, 211-214, 215-219, 301, 302, 306, 307, 311, 341-348, 391, 392, History 315. Greek 201 or 202 may be substituted for a New Testament course.

General Minor- Missions and Evangelism: Theology 203, 301, and 302; two courses from Theology 306, 307, 311 ; one course to be decided in consultation with the theology department.
For elementary field of specialization see the "Teacher Education Program" section on pages 65-82.

## 101 Perspectives in Biblical Theology (3)

A survey of biblical revelation in its progressive unfolding of key ideas and institutions against their cultural- historical background and within their covenant setting. Emphasis is placed on the normativity of Scripture, which reaches its fullness and fulfillment in Christ, for all academic work.

## 201 History of Christian Confessions (3)

 A study of the history of the Church's response to God's Word as this response comes to expres. sion in the significant ecclesiastical confessions. Emphasis is placed on the historical context in which the confessions, particularly those of the Reformed churches, were made.203 Foundations of Missions and Evangelism A study of the biblical basis for missions and evangelism with a view to developing a theology of mission and relating this to contemporary problems of missions today.

204 Calvin's Institutes (3)
A study and discussion of the mature thought of John Calvin as found in the 1559 edition of his Institutes of the Christian Religion.

## 211- Old Testament

214 These courses are in-depth studies of crucial themes, books, literary genres, historical periods, and hermeneutical issues of the Old Testament in terms of an historical-redemptive approach to the Old Testament canon. Specific topics and content will be specified at the time of registration.

## 215- New Testament

219 These courses are in-depth studies of crucial themes, books, literary genres, historical periods, and hermeneutical issues of the New Testament in terms of an historical-redemptive approach to the New Testament canon. Specific topics and content will be specified at the time of registration.

## 301 History of Missions and Evangelism

 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 203.
## 302 Current Issues and Strategies in Missions and Evangelism

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. Prerequisite: Theology 203.

## 306 Liberation Theologies

A study of different liberation theologies in Latin America, Africa, and Asia. Special attention will be given to the cultural context, con-
fessional nature, and practical implications of these recent and influential Third World theological movements. Prerequisites: Theology 101 and Philosophy 201.

## 307 Major World Religions (3)

A 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 manifestations in culture and society.

## 311 Heresies and Sects (3)

A survey of various confessional aberrations and consequent rise of different sects. Special attention will be given to the connections between all of this and the implied anthropologies and views of reality, in general, and culture and society, in particular.

## 341- Special Topics (3)

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.

## 391 Individual Studies (3)

Open to qualified juniors and seniors with permission from the department. See the catalog section "Individual Studies" for application procedures and policies governing individual studies.

## 392 Individual Studies (3)

Same as Theology 391.


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Fred Haan (1978), Director of Printing and Media Center Services; B.A., Dordt College
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Darrel Raih (1979), Comptroller (on leave); B.A., Dordt College; M.B.A., University of South Dakota
Cornelius Rylaarsdam (1972), Director of Bookstore; Director of Purchasing; B.A., Calvin College Judy Van Berkel (1993), Comptroller; B.A., Dordt College; M.P.A., University of South Dakota

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Curtis Taylor (1992), Director of Residence Life; B.A., Calvin College; M.A., Michigan State University

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Carol Gabrielse (1992), Regional Admissions Counselor
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Garry Zonnefeld (1991), College Representative; B.A., Dordt College; M.A., University of South Dakota; Ed. Sp., Mankato State University

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Sally Jongsma (1984), Voice Editor; B.A., Trinity Christian College

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Joseph A. McDonald, Jr. (1992), Vice President for Information Services; B.A., Eastern College; M.S.L.S., Drexel Institute of Technology; Ph.D., Drexel University
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Dale Van Voorst (1991), Information Systems Coordinator and Programmer; B.A., Dordt College
Jacqueline F. Williams (1991), Systems Analyst

## The Faculty

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Henry J. De Groot, M.B.A., Professor of Business Administration, Emeritus 1982
Marvin De Young, Ph.D., Professor of Physics, Emeritus 1989
B. J. Haan, Th.B., President of the College, Emeritus 1982

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Cornelius J. Van Schouwen, Th.B., Associate Professor of Bible, Emeritus 1968

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Charles C. Adams (1979), Associate Professor of Engineering (on leave); B.S., New Jersey Institute of Technology; M.S., Rensselaer Polytechnic Institute; M.A., Montclair College
Pamela E. Adams (1988), Assistant Professor of Education (on leave); B.A., William Paterson College; M.Ed., Sioux Falls College
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Dallas J. Apol (1965), Professor of Foreign Language; B.A., Calvin College; M.A., University of Michigan; M.A., Instituto de Lenguas Romanicas; Ph.D., University of Minnesota
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Abraham H. Bos (1962), Associate Professor of German; Associate Academic Dean; B.A., Calvin College; M.A., University of South Dakota
Kenneth E. Bussema (1974), Professor of Psychology; B.S., Northern Arizona University; M.A., Northern Arizona University; Ed.D., Northern Arizona University
Douglas F. De Boer (1984), Assistant Professor of Engineering (on leave); B.S.E. University of Michigan; M.S.E., University of Michigan
Dennis L. De Jong (1985), Assistant Professor of Computer Science; B.A., Dordt College; M.S., Colorado State University
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Karen A. De Mol (1984), Professor of Music; B.A., Calvin College; M.M., University of Michigan; Ph.D., Northwestern University
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Simon du Toit (1992), Instructor of Theatre Arts; Certificate, London Academy of Music and Dramatic Art; M.F.A., York University; B.Ed., University of Toronto
Douglas Eckardt (1992), Registrar; B.A. Dordt College; M.A.R., Westminster Theological Seminary; M.A., University of Iowa
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