

4-1967

## Graduate Catalog Central Washington State College Ellensburg 1967

Central Washington University

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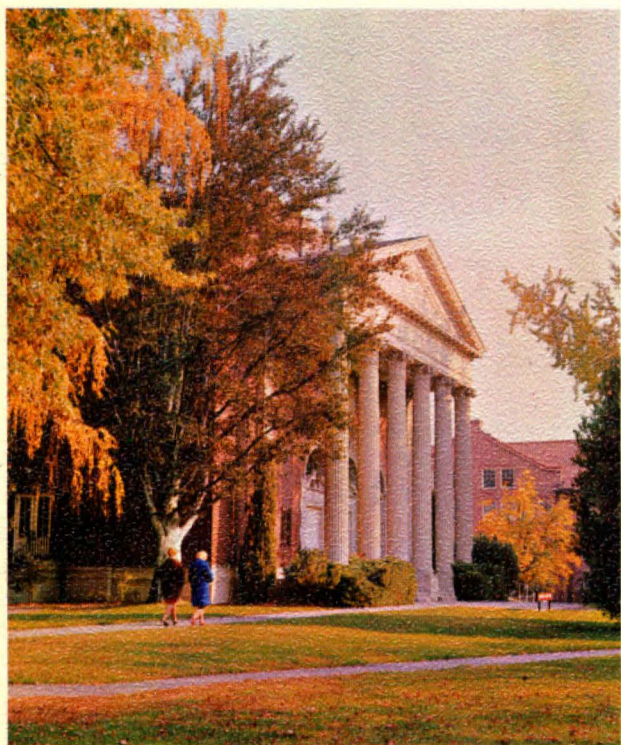
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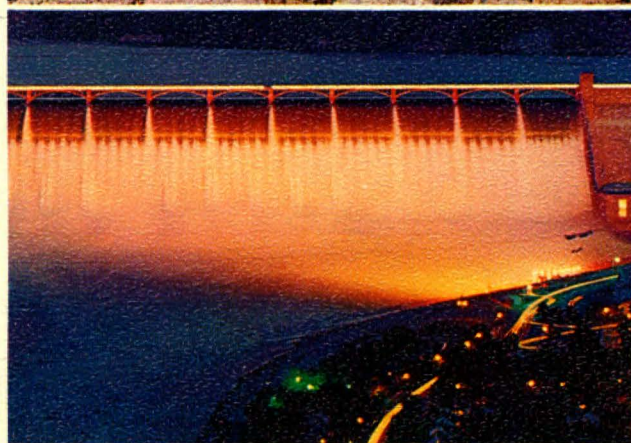
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GRADUATE CATALOG  
Central Washington  
State College/Ellensburg

1967





*Muzzall Hall (men) and Courson Hall (women) Residence Halls*



*Smyser Hall*



*Smyser and Barge Halls*

## GRADUATE CATALOG - CENTRAL WASHINGTON STATE COLLEGE

ELLENSBURG

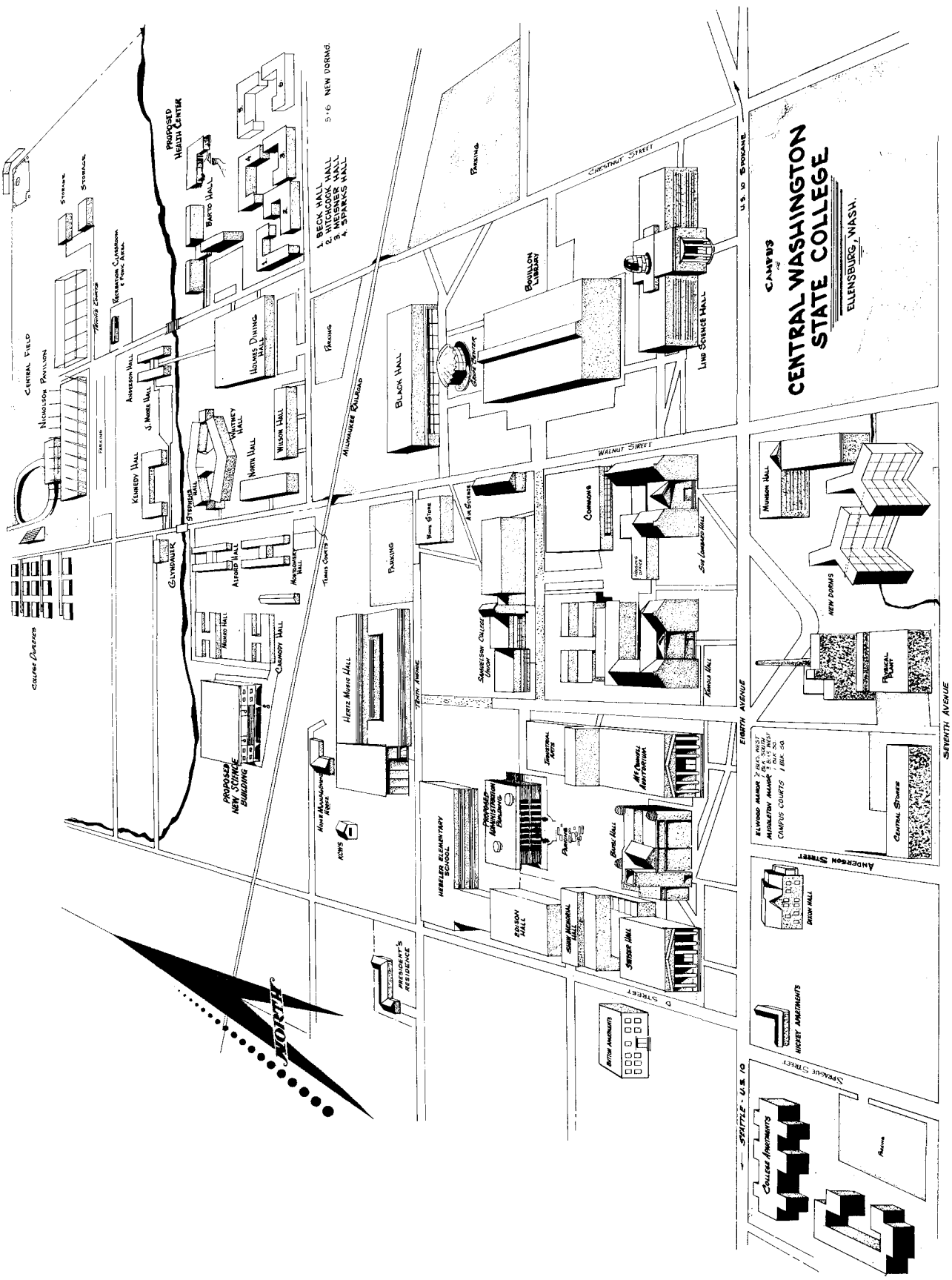
Accredited by the Northwest Association of Secondary and Higher Schools  
and the National Council for Accreditation of Teachers Education

VOL. 59, APRIL 1968, NO. 3, THE QUARTERLY

Prepared by the Office of Information for the Graduate Office, CWSC, Ellensburg, Wash. 98926.

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# Quarterly Calendar

## 1967-1968

### Fall Quarter, 1967

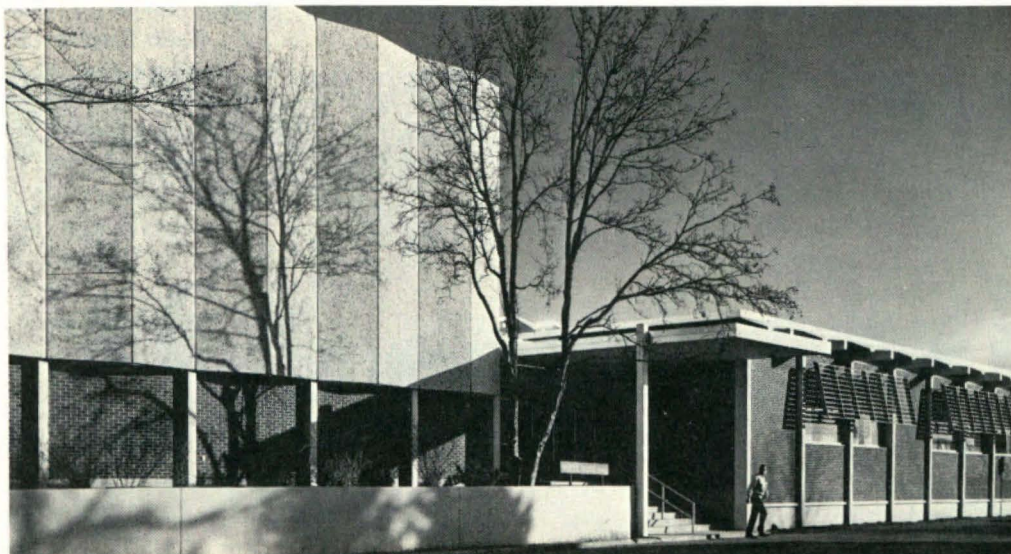
Last Day to File Transcripts and Application for Fall Quarter.....	Tuesday, August	1
Registration for Graduate Students.....	Monday, September	25
Instruction Begins.....	Thursday, September	28
Opening Date of Final Examinations.....	8 a.m. Monday, December	11
Fall Quarter Closes.....	5 p.m. Friday, December	15

### Winter Quarter, 1968

Last Day to File Transcripts and Application for Winter Quarter.....	Friday, December	1
Registration for All Students.....	Tuesday, January	2
	and Wednesday, January	3
Instruction Begins.....	Thursday, January	4
Opening Date of Final Examinations.....	8 a.m. Monday, March	11
Winter Quarter Closes.....	5 p.m. Friday, March	15

### Spring Quarter, 1968

Last Day to File Transcripts and Application for Spring Quarter.....	Friday, March	1
Registration for All Students.....	Monday, March	25
	and Tuesday, March	26
Instruction Begins.....	Wednesday, March	27
Opening Date of Final Examinations.....	8 a.m. Monday, June	3
Spring Quarter Closes.....	5 p.m. Friday, June	7



*Hertz Music Hall*



# Directory of Personnel

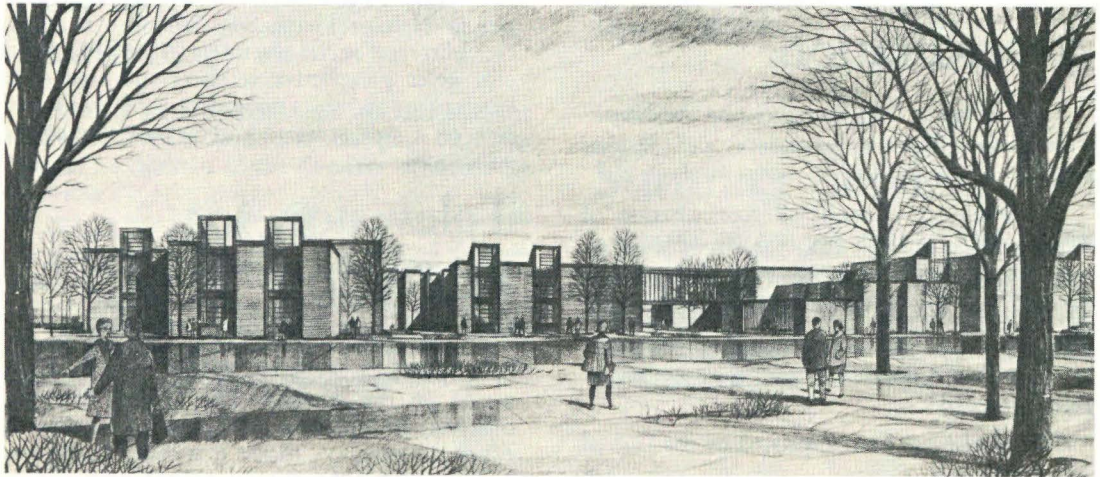
## College Board of Trustees

Mary Ellen Davis, Chairman	Kirkland
Joseph Panattoni, Vice Chairman	Ellensburg
James D. Kendall	Moses Lake
Roy P. Wahle	Bellevue
Archie S. Wilson	Richland

## Administration

President	James Eugene Brooks, Ph.D.
Assistant to the President	Donald Henry Baepler, Ph.D.
Director of Institutional Research	Robert Bower Smawley, Ed.D.
Secretary to the President	Mrs. Owen Paul
Dean of Faculty	Charles John McCann, Ph.D.
Dean of Arts and Sciences	Donald Frederick Warner, Ph.D.
Assistant Dean	Bernard Loyal Martin, Ph.D.
Dean of Education	John Wesley Crum, Ph.D.
Assistant Dean	Donald Myron Schliesman, Ed.D.
Dean of Graduate Studies and Summer School	Richard Anthony Nevé, Ph.D.
Department Chairmen	
Aerospace Studies	Earl Edward Winters, M.A.
Art	Louis Adolph Kollmeyer, Ed.D.
Biological Sciences	Philip Conrad Dumas, Ph.D.
Business Education	Eugene John Kosy, Ph.D.
Chemistry	Leonard Conrad Duncan, Ph.D.
Economics and Business Administration	Harold Southall Williams, Ph.D.
Education (Acting)	Edwin Frank Price, Ed.D.
English	Keith Rinehart, Ph.D.
Foreign Languages	Odette Golden, Ph.D.
Geography	Martin Richard Kaatz, Ph.D.
Hebeler Elementary School	William George Gaskell, Ed.D.
History	Walter Louis Berg, Ph.D.
Home Economics	Louise Agnes Tobin, M.S.
Mathematics (Acting)	Dale Robert Comstock, Ph.D.
Music	Wayne Snyder Hertz, Ed.D.
Philosophy	Chester Z. Keller, Ph.D.
Physical Education	Albert Harold Poffenroth, M.S.
Physics	Wilbur Vance Johnson, Ph.D.
Political Science and Anthropology	Robert Yee, Ph.D.
Psychology	Gerald Elmer Gage, Ed.D.
Sociology	Virgil Jerome Olson, Ph.D.
Speech and Drama	Jon Meyer Ericson, Ph.D.
Student Teaching	Ralph Donald Gustafson, Ed.D.
Technology and Industrial Education	Ronald Martin Frye, Ed.D.

- Director of Extension Services.....David P. Dillard, M.A.
- Director of Libraries.....George Fadenrecht, M.A.
  - Assistant Director of Libraries—Audiovisual.....Charles William Wright, M.S.
  - Assistant Director of Libraries—Public Services.....Clifford Peter Wolfsehr, M.A.
- Director of Research and Development.....Maurice Leon Pettit, Ph.D.
- Registrar and Director of Admissions.....Enos Edwin Underwood, M.Ed.
  - Associate Director of Admissions.....Milton Mathew McDermott, M.Ed.
  - Assistant Registrar.....Robert Vance Davidson, M.Ed.
  - Admissions Officer.....Lonald Lawrence Bridges, M.Ed.
  - Credentials Supervisor.....Patricia Anne Ross, B.A.
- Dean of Students.....Younger Theodore Witherspoon, Ph.D.
  - Dean of Men.....Don Everett Wise, Ed.D.
  - Dean of Women.....Marybelle Chase Rockey, M.A.
- Director of Placement.....Benjamin Dean Owens, M.S.
- Director of Alumni (Temporary).....Jack Randolph Spithill, M.A.
- Director of Counseling and Testing Services.....Robert Stanford Miller, Ed.D.
- Director of Student Activities and Student Union.....App Davis Legg, M.Ed.
- College Nurse.....Maxine Ruth Taylor, R.N.
- Business Manager.....William Arthur Hansen, M.B.A.
- Comptroller.....Lloyd Laurel Buckles, B.S.
- Director of Physical Plant.....Paul Barton Bechtel, B.S.
- Director of Staff Personnel.....Robert Lyle Howser, B.B.A.
- Director of Auxiliary Services.....Wendell Donald Hill, B.B.A.
  - Bookstore Manager.....Thomas Hruska
  - Director of Food Services.....Ray Morton Ayers
  - Accountant.....Vernon Lee LaBay
  - Internal Auditor.....Donald Clarence Burk, B.A.
  - Purchasing Agent.....Donald Paul Jongeward
- Director of College Relations and Financial Aid.....Perry Howard Mitchell, M.A.
  - Director of Information.....John Elliott Ludtka, M.S.
- Committee on Graduate Study
  - Richard A. Nevé, Ph.D., chairman; Walter L. Berg, Ph.D.; Frank McDonald Collins, Ph.D.; Philip C. Dumas, Ph.D.; Joseph Stanley Haruda, Ph.D.; Alexander H. Howard, Ph.D.; Roger G. Stewart, Ph.D.



*Fine and Applied Arts Complex*

# General Information

## Location

Central Washington State College, one of five State four-year institutions, is located in Ellensburg, the geographical center of the State of Washington.

Ellensburg, a city of 10,000 situated at the foot of the Cascade Mountains in the beautiful Kittitas Valley, is 105 miles southeast of Seattle and 36 miles north of Yakima.

## History

Central Washington State College was founded by the first Washington legislature in 1890 as Washington State Normal School. The School opened in 1891 with four faculty and 86 students. It occupied the second floor of the Washington Public School in Ellensburg.

In 1933 the legislature authorized the College to grant the B.A. degree. In 1937 the name was changed to Central Washington College of Education. The 1947 legislature authorized B.A. degrees in Arts and Sciences and the Master of Education degree. Since 1949 more than 1,000 master's degrees have been granted in 30 fields of specialization.

The latest name change—to Central Washington State College—was made in 1961. Dr. James E. Brooks became the eighth president of the College in that year. The 1963 legislature authorized M.A. and M.S. degrees and today, the faculty approaches 330 and the enrollment exceeds 5,000 students.

## Accreditation

The College is fully accredited by the Northwest Association of Secondary and Higher Schools.

The National Council for Accreditation of Teacher Education has fully accredited the College to prepare elementary and secondary school teachers and school service personnel (principals, guidance counselors and school psychologists) with the master's degree the highest degree approved.

Central also has been approved by the United States Attorney General as an institution for non-quota immigrant students.

## Bouillon Library

The library collections are housed in the highly functional Bouillon Library, designed for users of books as well as a storehouse of books. Its layout makes available to students and faculty the films, music, phonodiscs, art prints, and periodicals indispensable to modern education. A staff of experienced librarians, audiovisual experts, and other specialists are on duty to assure competent service.

The library book collection contains more than 105,000 volumes and more than 1,200 periodicals including newspapers—all available on open shelf.

**Audiovisual materials**, including 2,524 motion picture films, 1,272 filmstrips, 160 slide sets, 330 phonodiscs, 464 tapes, and representative teaching machine programs are available to students. In addition to these holdings, more than 5,000 musical recordings are available.

**Special Collections.** Archives, maps, and the Herbert C. Fish Memorial Library of Pacific Northwest History may be found in Bouillon Library.

**Instructional materials** are available through the audiovisual library. These materials include recordings, slides, charts, graphs, posters, photographs, and other special order materials.

**Curriculum Laboratory** houses materials such as courses of study, subject unit outlines, representative textbooks, and related materials invaluable to teachers and future teachers.

## Elementary School Library

Elementary School Library is located on campus in Hebel Elementary School. An attractive library, it serves the needs of the school and also gives prospective teachers and teacher-librarians opportunity to observe the important role of a well-equipped library in elementary education.

## Television for Education

Closed-circuit television connects the Ellensburg public schools by cable to observation rooms on the campus. The system, used for observations and demonstrations in the teacher education program, makes it possible to observe in more than 90 percent of the classrooms in the local public school system.

## Expenses†

### Tuition

	<i>Per Quarter</i>
Residents of Washington . . .	\$19.00
Out-of-state students . . . . .	57.00

### General Fees

All regular students enrolled during fall, winter, and spring quarters pay a general fee each quarter to assist in the support of such programs as library, student and alumni activities, construction and operation of facilities for student living and services, and other regular college functions. Fees are:

	<i>Per Quarter</i>
Residents of Washington . . .	\$ 69.00
Out-of-state students . . . . .	100.00

### Board and Room

(Charges for those who live in residence halls for the entire academic year.)

Quarter	Munro Hall	Other residence halls		
		(1)*	(2)**	(3)***
Fall . . .	\$257	\$284	\$290	\$298
Winter ..	212	235	240	245
Spring ..	174	192	196	201

### Total Annual

Charge ..	\$643	\$711	\$726	\$744
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The charges for each quarter for those who live in residence halls only Winter and Spring quarter or only Spring quarter will be the amounts listed above for Winter quarter. There is an additional charge of \$2.00 per week for those who do not have a roommate.

## Housing

Housing for both single and married students is available both on and off campus. Inquiries should be directed to the Director of Auxiliary Services.

†All costs are subject to change.

\* (1) Kamola, Sue Lombard, Munson, Wilson, Moore, Anderson, and Kennedy Halls.

\*\* (2) Stephens, Whitney, and Barto Halls.

\*\*\* (3) Beck, Sparks, Meisner, Hitchcock, Davis, Quigley, North, Courson, and Muzzal Halls.

NOTE: Summer fees and room and board costs are different. Write for Summer Session Bulletin.

## Graduate Assistants, Head Residents

Two types of part-time positions are available to graduate students.

**Graduate Assistantships:** Available to those working or planning to work for the master's degree. The assistants are paid from \$100 to \$275 a month, with the larger amount requiring more work and a lightened academic load. Assignments are made to faculty on the basis of applicant's background. Write to the Dean of Graduate Studies for further information and application forms.

**Head Resident Positions:** The residence hall program at Central is designed to create a climate of individual creative thought and action, at the same time developing a mature understanding of new found freedoms and the responsibilities of residence hall and college life.

Several head resident and assistant head resident positions are available to qualified single or married graduate students who plan to work on the master's degree. These positions pay from \$60 to \$275 per month for 10 months and include a furnished apartment. Head residents may take up to 10 hours of graduate credit each quarter. The head resident is responsible for the personnel functions of the hall and for certain administrative duties. Write to the Dean of Students for further information and application forms.

**Resident Assistantships:** There are a limited number of resident assistantships available for women. For further information write to Dean of Women.

## Summer Session

Central Washington State College provides substantial undergraduate programs and nearly complete graduate programs during the nine-weeks session. The summer bulletin, issued annually, may be secured by writing to the Director of Summer Session.

# Graduate Study

## Admission to Graduate Study

To enroll for graduate credit one must:

1. Have earned a bachelor's degree, or
2. Be within twelve (12) credits of earning a bachelor's degree and in the final quarter of undergraduate work.

(Courses not needed for the undergraduate degree may be taken for graduate credit if arrangements are made with the Dean of Graduate Studies during the first week of the quarter in which the work is taken.)

Students entering Central Washington State College for the first time must contact the Admissions Office for instructions and required forms.

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**NOTE:** Admission to the College as a graduate student gives the opportunity to enroll for graduate credit and should not be interpreted to mean admission to any of the Master's Degree Programs. See page 11 for general instructions, and page 12 for instructions regarding admission to the M.A. or M.S. programs and page 17 for instructions regard admission to M.Ed. program.

## Courses

Courses numbered 300 and 400 are open to graduate students, seniors, and juniors. Courses numbered 500 and 600 are open to graduate students only. Course descriptions are printed in the **General Catalog**. Courses are listed in this catalog beginning on page 28.

## The Graduate Study Programs

Central Washington State College offers several graduate study programs to meet the advanced educational needs of persons who hold a bachelor's degree. These include the master of arts, master of education, master of science, fifth-year, and principals' credentials.

## General Regulations

The following regulations apply to all master's programs. Refer to the Master of Arts and Sciences or the Master of Education for additional requirements (language, residence, thesis, etc.).

### Responsibility of Students

The graduate student is expected to know the requirements for the master's degree. The

Office of the Dean of Graduate Studies and the faculty will try to aid in all possible ways, but the responsibility for any errors of enrollment or interpretation of the requirements remains with the student.

### Advisement

The graduate student must be assigned an adviser by the department in which he is specializing. The adviser will serve until the student is approved for admission to the master's degree program.

After admission, the student's thesis committee is submitted to and approved by the Dean of Graduate Studies. The committee will consist of at least three persons. Two members must be from the student's major department. The student's graduate committee will be responsible for approving courses and other details to complete degree requirements, directing and approving the thesis, and conducting the final examination.

### Residence Requirement

A minimum of three quarters in residence is required, two of which must be at Central Washington State College following admission to the master's degree program. However, additional residence requirements may be required by some academic departments in their programs.

A quarter of residence is defined as the completion of a minimum of 10 credits of class load during the regular quarter or a full summer session.

Lesser amounts shall be counted according to their proportion of the minimum load of ten credits.

### Graduate Record Examination

All graduate students must take the Graduate Record Examination before admission to candidacy. This includes the verbal and quantitative tests, and the area of specialization. In addition, students planning on receiving a Master of Arts degree must take the Foreign Language Test. These tests are prepared by the Educational Testing Service and are administered quarterly on the campus through the Counseling and Testing Service.

### Student Load

Normal graduate load shall not exceed 15 credits. Any exceptions must be approved by the chairman of the major department and Dean of Graduate Studies.

### Transfer of Credit

A maximum of fifteen quarter credits for approved courses may be transferred from other institutions which offer graduate degrees. Ap-

proval of transfer credit shall be made by the major department and the Graduate Office only upon presentation of a written request by the student.

#### Maximum Time Limit

No credit earned more than six (6) years before the date of the degree award may be counted as part of the 45-credit requirement except as may be approved by formal action of the Graduate Study Committee.

#### Scholarship Standards

Grades for all courses taken as part of the degree program must average at least 3.0 (B). Credit will not be accepted for courses in which a grade lower than "C" is earned but such grades will be used in calculating the grade point average. If the grade point average remains below 3.0 after 30 credits of graduate work, candidacy for the degree will be terminated.

#### Final Examination

After a student has registered for courses which will complete the master's degree program, he must pass oral and/or written examinations covering courses, seminars, and thesis.

An application for final examination, approved by the committee, must be filed in the Office of the Dean of Graduate Studies at least three weeks in advance of the examination. Final examinations are conducted by the candidate's committee and are open to the faculty. However, the committee alone shall decide upon the merit of the candidate's performance.

#### Graduation

Commencement exercises are in June at the close of the regular school year. Candidates for the master's degree are expected to participate in the commencement exercises following the granting of the degree regardless of the quarter in which they complete degree requirements.

# Sequence of Procedures for Master's Degree

#### Prior to first quarter of graduate work:

1. Students not in residence at Central Washington State College must apply for admission to college through the Admissions Office.
2. File application for admission to master's degree program with the Graduate Office.
3. File two official copies of transcripts for each college previously attended (other than CWSC). One copy of each to the Admissions Office and one copy of each to the Graduate Office. (Note: The Admissions Office will not copy and distribute transcripts from other institutions.)

#### First quarter:

1. Complete the Graduate Record Examination.
2. Secure permission of the department in which master's degree will be completed.
3. Submit approved course of study (on appropriate forms) to Graduate Office. Three copies.
4. Make a tentative decision concerning the nature of the thesis and the faculty advisory committee. After final decision, the signatures of committee members are

submitted to the Dean of Graduate Studies for approval.

5. Complete requirements for admission to the master's degree program.
6. Submit thesis prospectus to committee for approval. The Thesis Problem Approval Form may meet departmental prospectus requirements.

#### Second Quarter:

1. Submit approved thesis prospectus to the Graduate Office.
2. If the thesis involves a survey or questionnaire, advance permission must be obtained. Check with the Graduate Office for correct procedure.
3. Secure a copy of the forms and information pertinent to completion of thesis and other degree requirements. Copies are available at the Graduate Office.

#### FINAL QUARTER:

1. Ask the Graduate Office for a complete evaluation to insure that all requirements are being met.
2. Pick up copy of FINAL QUARTER PROCEDURE FORMS from the Graduate Office.

# Master of Arts and Master of Science Degree Program

## Admission

Formal admission to the master's degree programs is based upon completion of several requirements:

1. Admission to graduate study by Admissions Office. See page 10. This is not the same as admission to the master's degree program.
2. Submission of application for admission to the master's degree program to the Graduate Office. (An application form will be found in the back of this bulletin.)
3. Receipt by the Graduate Office and also by the Registrar's Office of official copies of transcripts covering the baccalaureate degree and any courses taken subsequently.
4. Attainment of satisfactory scholastic level.
  - a. A grade point average of 3.0 or above for the final two years of his undergraduate program.
  - b. The student who does not meet the above requirement may register for a probationary quarter (minimum of 12 credits). If a g.p.a. of 3.0 or better is achieved, the student may petition his major department for recommendation to the Dean of Graduate Studies for admission to the Master of Arts or Master of Science degree programs. Courses taken during the probationary quarter must be at the 500 level or in the field of specialization. These courses may be approved for the Master of Arts or Master of Science degree.
5. Approved course of study by an adviser in the area of specialization submitted to the Graduate Office.
6. Special departmental regulations completed as specified.

## Credits Required

The candidate must complete a minimum of 45 credits in the 300, 400, 500, and 600 groups.

## Thesis Requirement

Each candidate shall satisfy the six-credit thesis requirement. Requirements may vary among departments and departmental regulations should be noted. The thesis shall demon-

strate the student's ability to do individual study and to report in writing.

The thesis must conform to standards of typing theses approved by the Graduate Study Committee. Three (3) copies of the completed thesis must be deposited with the Dean of Graduate Studies and the necessary binding fees paid by the student. After binding, two copies remain in the library and one copy is delivered to the student.

## Foreign Language Requirement

The Educational Testing Service (E.T.S.) Foreign Language Examination will be used to fulfill the language requirement for all M.A. programs (and M.S. degrees requiring a language).

## Correspondence and Extension Courses

Credits earned by correspondence or extension shall not apply toward the M.A. degree or the M.S. degree.

## Master of Arts

### Art

#### Purpose of the Program

To provide graduate level study in the creative and academic areas of the graphic and plastic arts. This study would enable graduate students to (1) pursue some area in art as a professional artist, (2) work as an employee of business and industry, and (3) teach at the secondary, college, or university level.

#### Admission

In addition to general regulations for admission to Master of Arts degree program, admission to the program for Master of Arts in Art will be governed by:

- A. Undergraduate major, or equivalent, in art from an accredited or approved college.
- B. Screening by the Art Department, including appraisal of the candidate's objectives, past experience, and possible promise of success; review of creative work of applicant; and approval by the department to begin the program.

**The Program**

All candidates shall complete 45 credits. A minimum of 33 credits, exclusive of thesis, must be in the field of art with 4-6 credits from other fields.

Required Courses:	<i>Credits</i>
Art 564 Research Procedures in Art.....	3
Art history, aesthetics and criticism in Art..	9
Major area of concentration in Art.....	12
Minor area and departmental electives in Art 9-11	9-11
Art 600 Thesis.....	6
Electives in fields other than Art.....	4- 6
	45

The major and minor areas of concentration will be taken from painting, print, drawing, design, sculpture, pottery, jewelry, history of art, and photography.

A minimum of 18 studio credits exclusive of thesis must be taken.

Any variation from the above program in very special situations may be petitioned for action by the Department of Art.

**Thesis**

The thesis may be the usual written type dealing with research in the fields of art or by original creative work of acceptable professional standards accompanied by a typewritten text, adequately discussing and illustrating the creative work. Candidates selecting the creative thesis may choose any one of the following fields: painting, print making, drawing, design, sculpture, jewelry, pottery, photography.

**Foreign Language**

See requirement for all M.A.-M.S. candidates, page 12.

**Final Examination**

The written examination will be developed on the basis of the candidate's graduate program presented for the degree; the oral examination will concentrate on the thesis but may also cover other work in the student's graduate program.

A selection of the candidate's work shall be prepared and may be presented in public exhibit.

Examples of each student's creative works are to remain in the permanent possession of the college.

**English**

**Admission**

Those requirements established by general regulations covering the Master of Arts degree apply. The student will normally be expected to have completed an undergraduate major in

English, but some others may be accepted provisionally by the English Department.

**The Program**

1. Course Requirements:

- a. A minimum of 33 credits in English, including at least 16 credits at the 500 level and 6 credits for thesis.
- b. With the approval of his major adviser, the student may elect a maximum of 12 credits in courses other than English.
- c. Undergraduate courses. Courses on the 400 level, taken under advisement, will be accepted in the program, with the requirements of additional reading and an additional long paper.

2. Procedure Requirements:

- a. Courses are to be chosen with the help of the major adviser (The Chairman of the Department of English or a faculty member designated by him).
- b. Completion of a pattern of graduate and undergraduate studies including substantially the following:  
History and structure of the language, Chaucer, Shakespeare, English and American literature, Criticism, and an approved intensive study.

**Thesis**

- (1) Every M.A. candidate in English must present a satisfactory thesis proposal to his major adviser and advisory committee.
- (2) The final thesis must be written in a form according to graduate school requirements.
- (3) The final thesis must secure the approval of the student's major adviser and advisory committee.

**Foreign Language**

See requirement for all M.A.-M.S. candidates, page 12.

**Examination**

Comprehensive written examination on reading lists.

**Courses in the Program**

1. Undergraduate courses.  
English courses on the 400 level, taken under advisement, will be accepted in the program, with the requirements of additional reading and an additional long paper.
2. Graduate courses. *Credits*  
Eng. 501. Research in English..... 4  
Eng. 541. 1, 2, 3, 4, 5, 6, 7, 8, 9. 4 ea.  
Studies in the English Language.  
Directed reading, discussion and writing on a special topic or area of study in language and rhetoric, as



- announced in the *College Schedule*. Under different titles, Studies in English Language may be repeated for additional credit.
- Eng. 545. 1, 2, 3, 4, 5, 6, 7, 8, 9. Proseminar in English Literature. ①. . . . . 4 ea.  
Directed reading, discussion, and writing on a special topic or area of study in genres, periods, or major authors, as announced in the *College Schedule*. Under different proseminar titles, the Proseminar in English Literature may be repeated for additional credit.
- Eng. 575. 1, 2, 3, 4, 5, 6, 7, 8, 9. Proseminar in American Literature. ①. . . . . 4 ea.  
Directed reading, discussion, and writing on special topic or area of study in genres, periods, or major authors, as announced in the *College Schedule*. Under different proseminar titles, the Proseminar in American Literature may be repeated for additional credit.
- Eng. 591. 1, 2, 3. Literary criticism. Plato through Arnold. . . . . 4 ea.
- Eng. 596. 1, 2, 3. Individual Study. . . . . 1-4 ea.
- Eng. 599. 1, 2, 3. English Graduate Seminar . . . . . 4 ea.  
Areas of study announced in the *College Schedule*. Under different seminar titles, the Graduate Seminar may be repeated for additional credit.
- Eng. 600. Thesis. . . . . 6

## Music

### Purpose of the Program

To increase the candidate's professional competence and his ability for continued self-directed study, and to provide opportunity for greater depth in his chosen area of concentration.

### Admission

In addition to general regulations for admission to the Master of Arts degree program, admission to the program for Master of Arts in Music will be governed by:

- A. Graduation with a bachelor's degree from an accredited or approved music school or a college with a major in music.
- B. Placement examinations in the fields of applied music and theory. If necessary, the student will be required to enroll in a review theory course, without graduate credit.

### The Program

All candidates shall complete 45 credits. Thirty-three credits exclusive of thesis and/or composition, must be in the field of music, with 3-6 credits elected from fields of other than

music. Areas of concentration include theory, composition, history and literature, and performance (the candidate must enroll for 2 credits of private instruction in his major area of concentration each quarter). While subject matter in these areas will be selected under the direction of a graduate adviser, the following courses are required:

	Credits
Methods of Musical Research. . . . .	3
History and Literature of Music. . . . .	6
Theory (Analytical techniques, with emphasis on harmony, counterpoint, and form). . . . .	9
Major area of concentration in music. . . . .	9-12
Music 600 Thesis. . . . .	6
Electives in Music. . . . .	3-6
Electives in other fields. . . . .	3-6
	45

### Thesis

In fulfilling the thesis requirements for the Master of Arts degree in Music, the candidate, under advisement of a committee of three members of the music faculty, has three options:

1. A thesis demonstrating the candidate's ability to do scholarly and significant research in the field of music.
2. A recital with a covering paper.
3. An original composition with a covering paper.

### Foreign Language

See requirement for all M.A.-M.S. candidates, page. 12.

### Examination

The candidate must satisfactorily pass oral and/or written examinations based on the course work and thesis.

## Speech Pathology and Audiology

### Purpose of the Program

The Certificates of Clinical Competence of the American Speech and Hearing Association require a master's degree or equivalent. Careers in clinical service centers, hospitals, public schools, colleges and universities, industry, and research centers now commonly require this certification. The graduate program has been designed to meet the certification requirements while giving the student a broad academic and clinical background. It may also prepare a student for study at the doctoral level. The program is flexible enough to allow the student to pursue his own interests and needs.

### Admission

The standard requirements for admission to the college graduate programs, plus a background in speech pathology and audiology.

①Proseminars provide intensive acquaintance with the field studied. Emphasis is on wide reading in the literary works themselves, though the student is introduced to some of the pertinent literary criticism.

Students without this background will be given opportunity to make it up, but must expect to spend more than the usual time in completing the degree program.

### The Program

The course of study will be planned in consultation with the student's adviser. A total of at least 33 credits in speech pathology and audiology, including a thesis, is required. Up to 12 credits may be selected, with advisement, from courses carrying graduate credit in anthropology, biology, education, linguistics, mathematics, physics, psychology, and sociology.

### Thesis

A six-credit thesis is required. At a final oral examination the student must defend his thesis and is subject to questioning over his fields of study.

### Foreign Language

See requirement for all M.A.-M.S. candidates, page 12.

## Master of Science Biology

### Purpose of the Program

Several objectives will be met through the offering of the Master of Science degree in Biology. (1) This degree will provide an expanded curriculum which will prepare students to engage themselves in biological careers not normally open to students with an undergraduate major in biology. (2) The program may prepare students for further graduate work leading to the Ph.D. degree. (3) The program will offer more intensive training for secondary and junior college teachers of biology.

### Admission

In addition to standard requirements for admission to the master's degree program, students are expected to have an appropriate undergraduate background in biology. Normally the undergraduate preparation should be the equivalent of the Arts and Sciences Biology, Botany, or Zoology majors listed in the Central Washington State College *General Catalog*. Deficiencies in the student's undergraduate training, as determined by the Department of Biology at the time of the student's admission to the graduate program, must be removed without graduate credit during the first year of graduate work.

### The Program

The course work leading to the Master of Science degree in Biology will total 45 credits

in Biology and related subjects. The individual's program will be established in consultation with the student's adviser and will be approved by the Department of Biology. In selecting related subjects (e.g. chemistry, physics, mathematics) the student's background and interests will be considered. Bio. Sci. 598 and 599, seminars, are required of all graduate students.

### Thesis

A six-hour thesis is required. At present the following areas may be selected for thesis problems: Plant Taxonomy, Plant Morphology, Plant Anatomy, Physiology, Algology, Ecology, Parasitology, Protozoology, Embryology, Invertebrate Zoology, Microbiology, Mammalogy, Ornithology, Paleontology, Behavior, Ichthyology, Herpetology, and Anatomy.

The thesis must represent original research in one of the areas listed above. The thesis topic must be approved by the Department of Biology prior to the initiation of the project. Before a student engages in thesis research he must select or be assigned a thesis adviser who also will serve as the chairman of the student's graduate committee.

### Examination

A candidate must pass a final and/or written examination on all work offered for the degree, on his thesis, and on his field of specialization.

## Chemistry

### Admission to the Program

In addition to requirements listed under general regulations, a student must have satisfied the requirement for a baccalaureate degree in chemistry or must have completed acceptable courses in each of the major areas of chemistry. Students with bachelor's degrees in physics, mathematics, or biology who have had the basic courses in chemistry (analytical, inorganic, organic and physical) will also be eligible for admission to graduate study in chemistry.

Background curriculum should include courses in physics, mathematics through calculus, and preferably a foreign language. A student may be admitted on a provisional basis even though he has not satisfied all requirements. Any deficiencies must be removed during the first year of graduate work.

### The Program<sup>①</sup>

Twenty-one credits from the following areas: (minimum of 3 credits in each area)

Organic Chem. 461, 462, 463, 464, 496, 497, 561, 596

<sup>①</sup>The described program is typical but variations are possible with consent of the Department of Chemistry and the Dean of Graduate Studies.

Physical Chem. 486, 496, 497, 581.1, 581.2, 581.3, 596  
 Analytical Chem. 445, 452, 454, 496, 497, 550, 596  
 Inorganic Chem. 470, 471, 472, 496, 497, 570.1, 570.2, 596  
 Biochemistry 496, 497, 500, 501, 502, 505, 596  
 3 credits seminar—Chem. 598.1, 598.2, 598.3  
 3–9 credits selected by advisement from the above courses for specialization.  
 6 credits—Thesis Chemistry 600  
 6–12 credits in supplementary fields outside the major by advisement.

### Thesis

The six-credit thesis is to be an original experimental effort selected from one of the areas of specialization within the chemistry major. Before a student initiates his thesis research he must select or be assigned a major adviser. This adviser will serve as chairman of the student's graduate committee and director of the research project. The thesis topic may be selected by the student or assigned by the major adviser. The student must submit a detailed outline of his proposed research for approval before initiating the project.

### Foreign Language

See requirement for all M.A.-M.S. candidates, see page 12.

### Examination

A candidate must pass a final oral examination on all work offered for the degree. This examination may include a review of course work in addition to the work presented in the thesis. The final examination will be open to all faculty members, but the success or failure will be based only on the decision of the examining committee. The recommendations of other staff members may be taken in advisement if necessary.

## Psychology

### Purpose of the Program

The Master of Science Degree in Psychology has as its goals (1) to provide a thorough advanced study of theoretical positions, issues, and empirical findings in the major areas of psychology; and (2) to provide thorough training in experimentation and research techniques. Emphasis is on development of skills needed to design and conduct independent research studies and the ability to analyze, synthesize, and evaluate research findings.

Attainments of the foregoing may act as training for (1) doctoral study in psychology; (2) Junior College and College teaching of psychology; (3) research positions in industry, government, etc.; (4) work in other fields of applied psychology requiring no more than a master's degree.

### Admission

Regular admittance to candidacy for the M.S. degree in Psychology requires completion of an undergraduate degree in psychology or approval by the department. For approval, the background must include one course in statistics, one course in experimental psychology and one course in history and systems of psychology. Without the equivalent of an undergraduate major in Psychology, admittance to the program will be provisional.

### Description of the Program

At least 45 quarter hours of credit are required with the following course requirements:

	<i>Credits</i>
Psychology 568-569 Experimental Design (3 credits each).....	6
Psychology 562 Theories of Learning....	5
Psychology 590.1, 590.2, and 590.3 Current Issues in Psychology (select two of three).....	6
Philosophy 480 Philosophy of Science..	5
One course from the following:	
Psy. 552 Human Growth and Development, Advanced .....	3
Psy. 453 Theories of Personality.....	5
Psy. 473 Experimental Psychology of Thinking .....	4
Psy. 478 Experimental Physiological Psychology .....	4
Electives from 400 and 500 level supporting courses selected with adviser.....	12–14
Psychology 600 Thesis.....	6
	45

### Thesis

Every M.S. candidate in psychology must present a satisfactory thesis prospectus to his chairman and committee, conduct appropriate research, and write up the research according to graduate school requirements and the American Psychological Association Publication Manual. At the time of the final oral examination and thesis defense the candidate will also present an abstract appropriate for presentation to a professional meeting or journal.

### Foreign Language

All candidates will be encouraged to increase their proficiency in one or more foreign languages (desirably initiated at the undergraduate level) or to initiate such study. No proficiency examination or course credit in foreign language will be required for the M.S. Degree in Psychology.

### Examination

A final oral examination is required of each candidate. At this time he must defend his thesis research and is subject to questioning over his fields of study.

# Master of Education Degree Program

The Master of Education degree program has been developed mainly for elementary and secondary school teachers and school service personnel. Since the program may also prepare for junior college teaching and for advanced graduate work, the student should seek advice from the department in which he wishes to specialize. Every candidate for the Master of Education degree selects a field of specialization either (1) in an academic area with work beyond the undergraduate major or (2) in a professional area designed to prepare for specialized service in the public schools. Complete information regarding the various fields of specialization will be found later in this bulletin.

## Admission to M.Ed. Program

Formal admission to the master's degree program is based upon completion of several requirements:

1. Admission to graduate study by Admissions Office. See page 12. This is not the same as admission to the master's degree program.
2. Application for admission to the master's degree program. (An application form will be found in the back of this bulletin.)
3. Receipt by the Graduate Office and also by the Registrar's Office of official copies of transcripts covering the baccalaureate degree and any courses taken subsequently.
4. Attainment of satisfactory scholastic level.
  - a. A grade point average of 3.0 or above for the final two years of his undergraduate program.
  - b. The student who does not meet the above requirement may register for a probationary quarter (minimum of 10 credits). If a g.p.a. of 3.0 or better is achieved the student may petition his major department for recommendation to the Dean of Graduate Studies for admission to the Master of Education degree program. Courses taken during the probationary quarter must be at the 500 level or in the field

of specialization. These courses may be approved for the Master of Education degree.

5. Approved course of study by an adviser in the area of specialization submitted to the Graduate Office.

## Credits Required

The candidates must complete a minimum of 45 quarter credits in the 300, 400, 500, and 600 groups. Not less than 27 credits or 60 percent of the total required for the degree must be in the 400, 500, or 600 groups.

## Required Professional Courses

Education 507, *Introduction to Graduate Study*, is required of all students earning a Master of Education degree. It is recommended that this course be taken in the first quarter of residence. Other required courses are Education 570, *Educational Foundations*, Psychology 552, *Human Development—Advanced*, and Education 600, *Thesis*.

## Area of Specialization

The area of specialization shall consist of 20 to 30 credits earned in courses approved by the department involved and including thesis. The course of study will follow the design outlined later in this bulletin or as approved by the department and the Dean of Graduate Studies.

## Electives

The remainder of credits needed to complete the required 45 credits should be carefully planned on the basis of needs of the candidate. All programs should contain work of both professional and academic nature.

## Thesis Requirement

Each candidate for the Master of Education degree will complete a thesis demonstrating his ability to do independent study and to report in writing. Faculty responsible for individual fields of specialization will determine the types of theses acceptable in the area. The student will submit a prospectus to his committee and

have it approved before work is begun and the committee will determine whether the project will be a three-credit for a six-credit thesis at that time.

The thesis report must conform to standards of format and typing approved by the Graduate Study Committee. Three (3) copies of the completed thesis must be deposited with the Dean of Graduate Studies and the necessary binding fees paid by the student. After binding, two copies remain in the library and one copy is delivered to the student.

### Restricted Use of Questionnaire for Thesis Studies

A graduate student who plans to use a questionnaire in connection with his master's degree thesis or project study must have prior approval of his committee and the Dean of Graduate Studies.

### Credits from Extension Course, Workshops, and Correspondence Courses

A maximum of 9 credits earned by extension may be applied toward a Master of Education degree but will not apply toward satisfying the residence requirement. Not more than two workshops with a combined maximum of 8 credits can be accepted as part of a Master of Education program. Credits earned in correspondence courses may not be applied to the master's degree.

### Teaching Certificate and Experience

The Master of Education degree candidate must have met requirements for a teaching certificate and, with the exception of certain school psychologist candidates, must have completed at least one year of successful teaching experience.

## Fields of Specialization for Master of Education Degree

In order to undertake a field of specialization, the student must have completed a minimum of background courses including basic undergraduate preparation for the specified field of specialization. This minimum should be adequate to enable the student to do successfully the work required.

- Ed. 599A Seminar in Educational Administration ..... 3
- Psych. 444 Tests and Measurements..... 4
- (c) Related Courses .....9-10  
Elect a minimum of 9 credits from education and psychology courses.
- (d) Background Courses ..... 5-6  
Elect a minimum of 5 credits from among eligible courses in philosophy, history, political science, sociology, literature, or others dealing with Western culture.

### Administration

#### Elementary Principal

	<i>Credits</i>
(a) Required	
Ed. 587 Educational Administration .....	5
Ed. 579 Elementary School Principal.....	5
Ed. 551 Elementary School Curriculum....	3
Ed. 600 Thesis.....	3 or 6
(b) Elect from the following to complete 30 credits in (a) and (b)*.....	11 or 14
Ed. 467 Philosophy of Education.....	3
Ed. 468 History of Education.....	2
Ed. 476 School and Community.....	3
Ed. 487 Group Processes and Leadership..	3
Ed. 508 Comparative Education.....	3
Ed. 562 Evaluation of the School Program	3
Ed. 576 Personnel Relations in Schools....	3
Ed. 578 Instructional Aids: Administration	3
Ed. 582 Internship in School Administration	5
Ed. 585 School Supervision.....	5
Ed. 589 School Plant Planning.....	5
Ed. 590 Public School Finance.....	5

#### Junior High Principal

	<i>Credits</i>
(a) Required	
Ed. 587 Educational Administration.....	5
Ed. 580 Junior High School Principal....	5
Ed. 452 Junior High School Curriculum... 3	
Ed. 600 Thesis .....	3 or 6
(b) Elect from the following to complete 30 credits in (a) and (b)*.....	11 or 14
Ed. 467 Philosophy of Education.....	3
Ed. 468 History of Education.....	2
Ed. 476 School and Community.....	3
Ed. 487 Group Processes and Leadership..	3
Ed. 508 Comparative Education.....	3
Ed. 562 Evaluation of the School Program	3
Ed. 578 Instructional Aids: Administration	3
Ed. 582 Internship in School Administration	5
Ed. 585 School Supervision.....	5
Ed. 589 School Plant Planning.....	5

(Continued on next page.)

*(Junior High Principal—Continued)*

- Ed. 590 Public School Finance..... 5
- Ed. 599A Seminar in Educational Administration ..... 3
- Psych. 444 Tests and Measurements..... 4
- (c) Related Courses .....9-10  
Elect a minimum of 9 credits from education and psychology courses.
- (d) Background Courses ..... 5-6  
Elect a minimum of 5 credits from among eligible courses in philosophy, history, political science, sociology, literature, or others dealing with Western culture.

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**Senior High Principal**

- |  |                |
|--|----------------|
| (a) Required   | <i>Credits</i> |
| Ed. 587 Educational Administration.....  | 5              |
| Ed. 581 High School Principal.....   | 5              |
| Ed. 552 Senior High School Curriculum..  | 3              |
| Ed. 600 Thesis .....   | 3 or 6         |
| (b) Elect from the following to complete 30 credits in (a) and (b)*.....             | 11 or 14       |
| Ed. 467 Philosophy of Education.....   | 3              |
| Ed. 468 History of Education.....  | 2              |
| Ed. 476 School and Community.....  | 3              |
| Ed. 487 Group Processes and Leadership   | 3              |
| Ed. 508 Comparative Education.....   | 3              |
| Ed. 562 Evaluation of the School Program   | 3              |
| Ed. 576 Personnel Relations in Schools..   | 3              |
| Ed. 578 Instructional Aids: Administration   | 3              |
| Ed. 582 Internship in School Administration .....                                    | 5              |
| Ed. 585 School Supervision.....  | 5              |
| Ed. 589 School Plant Planning.....   | 5              |
| Ed. 590 Public School Finance.....   | 5              |
| Ed. 599A Seminar in Educational Administration .....                                 | 3              |
| Psych. 444 Tests and Measurements.....   | 4              |
| (c) Related Courses .....  | 9-10           |
| Elect a minimum of 9 credits from education and psychology courses.                  |                |
| (d) Background Courses .....   | 5-6            |
| Elect a minimum of 5 credits from among eligible courses in philosophy, history, po- |                |

litical science, sociology, literature, or others dealing with Western culture.

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NOTE: The M.Ed degree does not necessarily qualify the student for the Provisional Principal's Credential. Applicants must meet the requirements for the credential as listed on page 27.

\*Whenever the best interests of the student may be served by making substitutions for courses listed in (b) the student may request the Dean of Graduate Studies to make such substitutions upon the approval of the student's adviser.

## Supervision

### Curriculum Director

- |   |                |
|---|----------------|
| Required Courses  | <i>Credits</i> |
| Ed. 487 Group Processes and Leadership....                            | 3              |
| Ed. 555 Program of Curriculum Improvement .....                       | 3              |
| Ed. 562 Evaluation of the School Program..                            | 3              |
| Ed. 585 School Supervision .....                                      | 5              |
| Ed. 600 Thesis .....  | 3 or 6         |
| Elect at least one of the following:.....                             |                |
| Ed. 451 Core Curriculum .....   | 3              |
| Ed. 452 Junior High School Curriculum...                              | 3              |
| Ed. 551 Elementary School Curriculum...                               | 3              |
| Ed. 552 Senior High School Curriculum....                             | 3              |
| Related Fields: Elect a minimum of six hours from the following:..... | 6              |
| Ed. 316 Instructional Materials: Utilization..                        | 5              |
| Ed. 358 Introduction to Guidance.....                                 | 3              |
| Ed. 362 Educational and Psychological Statistics .....                | 4              |
| Ed. 434 Activities in the Secondary School..                          | 3              |
| Ed. 450 Instructional Materials: Production.                          | 3              |
| Ed. 464 Community Youth Programs.....                                 | 3              |
| Ed. 476 School and Community.....                                     | 3              |
| Ed. 545 Directed Observation in a Core Class                          | 4              |
| Ed. 574 Adult Education .....   | 3              |
| Ed. 577 In-Service Programs.....                                      | 3              |
| Ed. 599C Seminar in Curriculum.....                                   | 2              |
| Psych. 444 Tests and Measurements.....                                | 4              |
| Soc. 360 The Community .....  | 2              |

26 or 29

## Subject Teaching

### Art Education

Prerequisite—undergraduate major, or equivalent, in Art.

Evaluation of previous creative work approved by the Department of Art.

- |   |                |
|---|----------------|
| Required Courses                            | <i>Credits</i> |
| Art 599 Seminar in Art Education.....       | 2              |
| Art History, select through advisement..... | 6-9            |
| Ed. 600 Thesis .....                        | 3-6            |

The thesis may be the usual written type or take the form of original creative work of acceptable professional standard accompanied by a typewritten text, illustrated and adequately discussing the creative work.

Select through advisement from the following: 9-19

- Painting—Art 360, 361, 362, 363, 460, 560
- Drawing—Art 450, 458, 550
- Sculpture—Art 380, 480, 580
- Crafts—Crafts 342, 343, 344, 346, 349
- Pottery—Crafts 362, 462, 562
- Jewelry—Crafts 347, 447, 547
- Art Education—Art 325, 425, 430, 431, 432, 445, 545
- Photography—Art 390, 490
- Individual Study—Art 496, 497, 498, 596, 597, 598; Crafts 496, 497, 498, 596, 597, 598

A selection of the candidate's work shall be prepared and may be presented in public exhibition.

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## Biology

Prerequisite—undergraduate major in Biology.

Required Courses	<i>Credits</i>
Bio. Sci. 470 Ecology .....	5
Bio. Sci. 598 Biology Seminar .....	1
Bio. Sci. 599 Biology Seminar .....	1
Ed. 600 Thesis .....	3 or 6
Select one course from the following:.....	4-5
Bot. 464 Fresh-Water Algae .....	4
Zool. 345 Ornithology .....	5
Zool. 361 Advanced Invertebrate Zoology...	5
Zool. 445 Avifauna of Washington.....	4
Zool. 472 Natural History of the Vertebrates	5
Select one course from the following:.....	3-5
Bio. Sci. 370 Microbiology .....	5
Bio. Sci. 565 Experimental Genetics.....	4
Bio. Sci. 570 Cellular Physiology.....	5
Bot. 360 Plant Physiology .....	5
Bot. 460 Plant Pathology .....	3
Bot. 463 Mycology .....	4
Zool. 348 General Vertebrate Embryology..	5
Zool. 380 Parasitology .....	5
Zool. 470 Advanced Physiology .....	5
Zool. 548 Experimental Embryology .....	5
Select by advisement from the following to complete 30 credits in the field of specialization—300, 400, or 500 courses in Biology, Botany, and Zoology, Geology 347 or 449 (not both) .....	7-13

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## Business Education

Courses to be selected on the basis of individual needs and interests after consultation with the adviser and the Chairman of the Department of Business Education.

## Chemistry

Prerequisite—undergraduate major in Chemistry.

The field of specialization will consist of 30 credits, including a 3 or 6 credit thesis, selected by advisement from Chemistry or related fields. The following courses will be required unless credit in these courses or their equivalents has been previously earned.

	<i>Credits</i>
Chem. 350 Inorganic Chemistry .....	3
Chem. 365 Biochemistry .....	5
Chem. 383 Physical Chemistry .....	3
Chem. 452 Instrumental Analysis .....	4

## English

Students who have had a major in English as undergraduates will be expected to strengthen their knowledge of the subject by taking courses in areas where they have had the least work.

Students who have had a minor in English as undergraduates will be expected first to meet the requirements of the undergraduate major. Then they should strengthen their knowledge of the subject by 20 or 30 additional hours of English, chosen with the help of the adviser (the Chairman of the Department of English or a faculty member designated by him).

Graduate students concentrating in English are also required to select two reading lists, one in a literary period and one in a genre or literary type, and to pass a written examination given by the Department of English. Candidates should notify the Department of English of their intent to take the examination, six weeks prior to the time when they wish to be examined.

## Family Life Education

Designed for public school teachers who will offer units or courses in various aspects of family relations or for others who may in some way be dealing with family problems. Open to anyone with the appropriate prerequisites and valid bachelor's degree.

Required Courses	<i>Credits</i>
H. Ec. 394 Modern Problems of the Family	3
H. Ec. 433 Family Life Education	
OR Ed. 433 Family Life Education.....	3
H. Ec. 590 Research in Family Relations..	3
Ed. 600 Thesis .....	3 or 6
In consultation with the major adviser, select at least fifteen credits from the following courses, including at least 6 credits at the 400-500 level:	
Soc. 348 Marriage and the Family.....	4
Bio. Sci. 365 Genetics .....	4
Phil. 345 Ethics .....	5
Ed. 358 Introduction to Guidance.....	3
H. Ec. 349 Family Clothing .....	2
H. Ec. 381 Family Finance .....	3
H. Ec. 391 Consumer Buying OR	
Bus. Ed. 375 Consumer Education .....	3
Psy. 350 Emotional Growth of Children...	3
Soc. 355 Culture and Personality.....	3
Psy. 447 Psychology of Adolescence.....	3
H. Ec. 490 Nursery School Lab OR	
Ed. 410 Teaching Nursery School or Kindergarten .....	3
H. Ec. 492 Child Care and Family Dynamics	3
Psy. 460 Counseling Parents of Exceptional Children .....	3
Psy. 571 Family Counseling .....	3
H. Ec. 595 Problems of the Aging.....	2
Ed. 596, Psych. 596, Soc. 496, H. Ec. 496 Individual Study .....	1-6
Appropriate seminar and workshops, with approval.	

# Health and Safety Education

Prerequisite—undergraduate major in Health and Physical Education or in Health and Safety Education.

Required Courses	<i>Credits</i>
P.E. 558 Methods of Research in Health and Physical Education .....	3
H. Ed. 470 School and Community Health Safety Ed. 437 General Safety Education..	3
H. Ed. 499 Seminar in Health and Safety Education .....	2
Ed. 600 Thesis .....	3 or 6
Select one of the following courses:.....	3-5
Bio. Sci. 360 Organic Evolution .....	3
Bio. Sci. 365 Genetics .....	3
Bio. Sci. 370 Microbiology .....	5
Zool. 470 Advanced Physiology .....	5
Select one of the following courses:.....	3
H. Ed. 518 Health Ed. in the Elementary Schools .....	3
H. Ed. 525 Health Ed. in the Secondary Schools .....	3
H. Ed. 580 Administration and Supervision of Health and Safety Education.....	3
Safety Ed. 455 Driver and Traffic Safety Ed.	3
Select one of the following courses:.....	3-5
Psych. 346 Social Psychology .....	4
Psych.447 Psychology of Adolescence.....	4
Ed. 433 Family Life Education.....	3
Remainder of the required twenty-four credits may be selected from any of the above courses of from others with the consent of the adviser.	

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# History

Prerequisite—undergraduate major in History.

Required Courses	<i>Credits</i>
Hist. 501 Historiography .....	3
Hist. 505 Research Seminar in History....	3
Ed. 600 Thesis .....	6
Guided upper division and graduate courses with no more than 5 credits from 300 level courses.	
Electives .....	18
<hr/> 30	

NOTE: Students are advised to take courses dealing with both Eastern and Western Hemispheres.

# Home Economics

Prerequisite—undergraduate major in Home Economics Education.

Required Courses	<i>Credits</i>
Ed.600 Thesis .....	3 or 6
Select from the following, with emphasis on one or two areas .....	14-17

Family Economics and Home Management	
Home Ec. 581 Advanced Family Finance	2
Family Relations and Child Development	
Home Ec. 590 Research in Family Relations .....	3
Home Ec. 595 Problems of Aging .....	2
Food and Nutrition	
Home Ec. 447 Nutrition and Society....	3
Home Ec. 487 Experimental Foods II..	2
Home Ec. 587 Gourmet Cooking .....	3
Home Economics Education	
Home Ec. 520 Supervision in Vocational Home Ec. Education.....	2
Home Ec. 521 Problems in Curriculum Development in Home Ec. Education..	2
Home Ec. 522 Survey of Literature in Home Ec. Education.....	2
Home Ec. 530 Demonstration Techniques	3
Home Ec. 599 Seminar in Home Ec. Education .....	1-3
Housing and Home Furnishings	
Home Ec. 536 Advanced Home Furnishings .....	5
Home Ec. 575 History of Home Furnishings .....	3
Textiles and Clothing	
Home Ec. 455 New Developments in Textiles .....	3
Home Ec. 550 Recent Developments in Clothing Construction .....	2
Home Ec. 551 Social Implications of Clothing .....	2
Home Ec. 555 Original Design.....	5
Select with advisement, in supporting areas in social science, art, English, or science....	10

27-30

NOTE: Endorsement for vocational home economics certification is not accomplished through the master's degree unless the 66 hour broad area major is also completed.

# Junior High School Broad Area

Candidates who wish to prepare for or improve their preparation for teaching in block-of-time, common learnings, core curriculum or other unified studies programs in junior high schools should elect this program.

Prerequisite — undergraduate Junior High School Broad-Area Major in Language Arts and Social Science or equivalent preparation.

Junior High School Area.....	<i>Credits</i>
At least six credits in advanced work dealing with junior high school curriculum, organization, methods and students. Such courses as Ed. 451, Ed. 452, Ed. 545, Ed. 599CC, and Psych. 447 should be considered.	6
Language Arts and Social Science Areas.....	24-27
At least 24 credits in graduate or upper division courses designed to strengthen the student's knowledge of the teaching areas in the junior high school block-of-time program. Candidates will be advised by a junior high school specialist and will take work in areas in which they have had the least work as undergraduates.	
Ed. 600 Thesis .....	3-6



# Mathematics

Required Courses	<i>Credits</i>
Math. 461.1 and 461.2 Abstract Algebra or approved substitutes (3 credits each) . . . .	6
Math. 471.1 and 471.2 Advanced Analysis or approved substitutes (3 credits each) . . . .	6
Math. 455.1 and 455.2 Principles of Geometry or approved substitutes (3 credits each) . . . . .	6
Ed. 600 Thesis . . . . .	3 or 6
Select with advisement, from the following to complete 30 credits in the field of specialization—300, 400, 500 courses in Mathematics . . . . .	6 or 9
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# Master Teacher

Designed for elementary classroom teachers. Candidates in this area of specialization may qualify for positions as demonstration teachers, master teachers, school supervisors, and laboratory school teachers. Prerequisites—undergraduate minor in professionalized subjects or its equivalent.

Select at least one course in curriculum from the following . . . . .	<i>Credits</i>
Ed. 470 Nongraded Elementary School . . . .	2-3
Ed. 551 Elementary School Curriculum . . . .	2
Ed. 555 Program of Curriculum Improvement . . . . .	3
Select at least two courses in evaluation and guidance from the following . . . . .	4-7
Ed. 358 Introduction to Guidance . . . . .	3
Ed. 362 Educational and Psychological Statistics . . . . .	4
Ed. 459 Teacher-Counseling . . . . .	3
Ed. 460 Parent-Teacher Conferences . . . . .	2
Ed. 462 Construction and Use of Classroom Tests . . . . .	2
Ed. 547 *Supervision of Student Teachers . .	3
Ed. 562 Evaluation of the School Program	3
Ed. 600 Thesis . . . . .	3 or 6
Select the balance of credits from these courses in methods and materials . . . . .	7-14
Art 325 Arts and Crafts, Primary . . . . .	3
Art 425 Arts and Crafts, Intermediate . . . .	3
Art 430 Art in the Elementary School . . . .	3
Ed. 421 Modern Reading Program, Primary	3
Ed. 422 Modern Reading Program, Intermediate . . . . .	3
Ed. 427 Modern Arithmetic Program, Primary . . . . .	3
Ed. 428 Modern Arithmetic Program, Intermediate and Upper Grades . . . . .	3
Ed. 438 Individualizing Instruction . . . . .	2
Ed. 447 Classroom Teaching Problems . . . .	3
Ed. 450 Instructional Aids: Production . . . .	3
Eng. 320 Children's Literature . . . . .	2
Music 323 Choral Music Education . . . . .	3
Music 325 Instrumental Music Education . . .	3
Music 326 Music in the Classroom . . . . .	3

\*Ed. 547 must be taken by laboratory school teachers. Master teachers who cooperate in student teaching programs should also take Ed. 547.

P.E. 332 Theory and Practice in Dance (Elem.) . . . . .	3
P.E. 334 Physical Education Activities for the Elementary School . . . . .	3
Sci. Ed. 322 Science Education in the Elementary School . . . . .	3
Soc. Sci. 420 Methods and Materials in the Social Science—Elementary . . . . .	3
Speech 362 Practice in Creative Dramatics .	3
Speech 466 Oral Interpretation of Children's Literature . . . . .	3
	23

# Music

Required Courses	<i>Credits</i>
Music 490 Harmonic Analysis . . . . .	3
Music 482 Instrumental Administration Techniques, OR	
Music 491 Choral Interpretation and Techniques . . . . .	3
Music 590 Supervision of Public School Music . . . . .	3
Music 364, 464, 564A, B, C, D, E, F, or G, Applied Music . . . . .	3
Ed. 600 Thesis (may be recital or composition, with covering paper) . . . . .	3 or 6
Select three hours from the field of Music History and Literature . . . . .	3
Music 450 Literature of Bach . . . . .	3
Music 452 Literature of Beethoven . . . . .	3
Music 458 Survey of Vocal Solo Literature	3
Music 471 History of Orchestral Music . . . .	3
Music 475 History of Chamber Music . . . .	3
Music 476 History of Choral Music . . . . .	3
Select three hours from the field of Theory . .	3
Music 441 Keyboard Harmony and Improvisation . . . . .	3
Music 443 Counterpoint II . . . . .	3
Music 444 Canon and Fugue . . . . .	3
Music 472 Orchestration . . . . .	3
Music 474 Modern Literature Analysis . . . .	3
Music 483 Composition I . . . . .	3
Music 484 Band Arranging I . . . . .	3
Music 492 Choral Composition and Arranging I . . . . .	3
Music 494 Elements of Music . . . . .	3
Select three hours from the field of Music Education . . . . .	3
Music 418 Piano Pedagogy . . . . .	1
Music 423 Rhythm for the Elementary School . . . . .	3
Music 424 General Music in the Junior High School . . . . .	2
Music 425A, B, C, D, E, F, or G Methods of Teaching Individual Lessons . . . . .	1
Music 440 Workshops . . . . .	1-6
Music 480 Double Reed Making . . . . .	1
Music 481 Instrument Repair . . . . .	1
Music 485 The Marching Band . . . . .	3
Music 499 Seminar in Music Education . . . .	1-4
Music 541 Conducting III—Choral . . . . .	3
Music 554D, E Advanced Technique Class, Woodwind and Brass . . . . .	1
Music 560 Psychology and Guidance in Music Education . . . . .	3
Music 562 Trends in Music Education . . . .	3
Music 596 Individual Study . . . . .	1-6

## Physical Education

Prerequisite—undergraduate major in Health and Physical Education or major in Physical Education.

Required Courses	<i>Credits</i>
P.E. 470 Trends in Modern Physical Education .....	3
P.E. 558 Methods of Research in Health and Physical Education .....	3
P.E. 599 Seminar-Philosophy and Literature in Physical Education.....	3
Ed. 600 Thesis .....	3 or 6
Select one of the following: .....	3
P.E. 444 Management of Equipment.....	3
P.E. 445 Physical Education Facilities....	3
P.E. 466 Supervision and Evaluation of Program Planning .....	3
P.E. 581 Advanced Administration of Physical Education in High School and Colleges .....	3
Select one of the following: .....	1-6
Spec. Ed. 440CCC Camping for Crippled Children Workshop .....	1-6
Rec. 460 The School Recreation Program..	2
Rec. 571 Modern Trends in Outdoor Education .....	3
P.E. 471 Philosophy of Elementary School Physical Education .....	3
P.E. 561 Dance in Education.....	3
Remainder of the required twenty-four credits may be selected from any of the above courses or from others with the consent of the adviser.	

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## Science

Prerequisite—completion of courses specified in the Science major.

Course Requirements—30 credits in science courses and thesis to be selected by advisement of the student's committee and from not more than two of the following areas: Chemistry, Physics, Biology, and Geology. (A minimum g.p.a. of 3.0 must be maintained in all science work applicable to the master's degree and a satisfactory examination on course work must be written.)

## Social Science

Thirty credits in Social Sciences are required and will include credits for the thesis and electives in Social Sciences. (At least 15 hours must be in a field other than the undergraduate major. For students with a broad Social Science major, undergraduate, at least 20 hours must be taken in one field.)

## Special Education

Prerequisite—undergraduate minor in Special Education or experience which would make it possible for part or all of those course requirements to be waived.

Required Courses	<i>Credits</i>
Spec. Ed. 414 Curriculum and Problems of Instruction for Mentally Handicapped....	4
Psych./Spec. Ed. 463 Special Diagnostic Techniques .....	3
Spec. Ed. 467 Maladjusted Children .....	3
Spec. Ed. 499 Seminar in Special Education	4
Ed. 600 Thesis .....	3 or 6
Guided selection from the following, to bring total of 20 to 30 credits:	
Speech 445 Psychology of Speech.....	2
Art 445 Art for Handicapped Children....	5
P.E. 361 Physical Ed. for Handicapped Children .....	3
Spec. Ed. 440CCH Crippled Children's Workshop OR	
Spec. Ed. 440CCC Camping for Crippled Children .....	4
Psych. 350 Emotional Growth of Children.	3
Spec. Ed. 596 Individual Study .....	3
Psych. 449 Abnormal Psychology .....	4
Spec. Ed. 585 Administration and Supervision of Special Education Programs.....	4
Spec. Ed. 446 Directed Observation .....	3
Spec. Ed. 425 Educating the Slow Learner.	3
Spec. Ed. 338 Remedial Reading .....	3

## Speech and Drama

Courses emphasizing Speech Pathology and Audiology, or Theatre and Drama can be selected after consultation with the adviser and the Chairman of the Department of Speech and Drama.

## Technology and Industrial Education

Prerequisite—undergraduate major in Technology and Industrial Education.

Required Courses	<i>Credits</i>
T-IE 559 Seminar in Industrial Education..	2
Ed. 600 Thesis .....	3 or 6
Select three credits from the following: .....	3
T-IE 374 Basic Electronics .....	3
T-IE 474 Intermediate Electronics .....	3
Select five credits from the following: .....	5
T-IE 455 General Metals II .....	5
T-IE 555 Advanced Studies in Metal Work	5
Select five credits from the following: .....	5
T-IE 450 Advanced Furniture Construction	5
T-IE 550 Advanced Studies in Woodworking .....	5
Select three credits from the following: .....	3
T-IE 365 Engineering Drawing .....	3
T-IE 466 Architectural Drawing .....	3
Select with advisement, additional courses in Technology and Industrial Education....	4-8

25-30

NOTE: A minimum of 4 credits must be selected outside the field of Technology and Industrial Education.

# Special Services

## Audiovisual Instructional Aids

Required Courses	<i>Credits</i>
Ed. 316 Instructional Aids: Utilization....	5
Ed. 450 Instructional Aids: Production....	3
Ed. 578 Instructional Aids: Administration	3
Ed. 600 Thesis .....	3 or 6
Select at least nine credits from the following courses .....	9
Ed. 417 Radio and Television in the Classroom .....	2
Ed. 449 Audiovisual Electronics .....	3
Ed. 451 Core Curriculum .....	3
Ed. 487 Group Processes and Leadership..	3
Ed. 550 Production of Photographic Instructional Materials .....	4
Ed. 551 Elementary School Curriculum....	3
Ed. 552 Senior High School Curriculum...	3
Ed. 555 Program of Curriculum Improvement .....	3
Ed. 577 In-Service Programs .....	3
Ed. 579 Elementary School Principal.....	5
Ed. 580 Junior High School Principal.....	5
Ed. 589 School Plant Planning.....	5
Ed. 590 Public School Finance.....	5
Art 385 Serigraphy .....	3
Art 390 Advanced Photography .....	3
Lib. Sci. 360 Cataloging and Classification	4
Lib. Sci. 470 School Library Administration .....	3
	23 or 26

## Reading Specialist

Prerequisite—completion of Education 322, Teaching of Reading; Education 420, Teaching the Language Arts; and English 320, Children's Literature or Pre-Adolescent and Adolescent Literature.

Required Courses	<i>Credits</i>
Spec. Ed. 338 Remedial Reading .....	3
Psych. 420 Psychology of Reading.....	5
Ed. 426 Studies and Problems in Reading..	3
Ed. 600 Thesis .....	3 or 6
Select one of the following:	
Ed. 419 Reading Readiness .....	2
Ed. 421 Modern Reading Program, Primary	3
Ed. 422 Modern Reading Program, Intermediate .....	3
Select one of the following:	
Ed. 416 Programmed Learning .....	3
Ed. 438 Individualizing Instruction .....	2
Select one of the following:	
Ed. 423 Reading Problems in the Secondary School .....	3
Ed. 424 Reading in Content Fields .....	3
Complete a minimum of 28 credits in the field of specialization. Selection may be made from the following or from any course not already taken above.	
Eng. 340 Introduction to Linguistics.....	5
*Ed 585 School Supervision .....	5

\*Recommended if candidate plans to become a Reading Supervisor.

## School Counseling

In addition to general regulations for the Master of Education degree, admission to the M.Ed. program in School Counseling will be based upon (1) approval of the Chairman, Department of Psychology, and (2) previous educational and vocational history.

Prerequisite—completion of the following courses: Ed. 358, Introduction to Guidance; Psych. 362, Educational and Psychological Statistics; Psych. 444, Tests and Measurements; Psych. 452, Experimental Psychology of Learning.

One-year (45 credits) and two-year (90 credits) graduate programs in school counseling have been designed. A Master of Education degree is granted upon completion of the one-year program. The policy statements of the American Personnel and Guidance Association and the Associations for Counselor Education and Supervision indicate an adequate program for preparation of school counselor should include two years of graduate education. We support these statements to the extent that we provide provisional endorsement for employment in school counseling upon completion of the M.Ed. degree but full recommendation is contingent upon completion of a two year program.

## Elementary School

FIRST YEAR:	<i>Credits</i>
Psych. 453 Theories of Personality.....	5
Ed. 487 Group Processes and Leadership..	3
Ed. 507 Introduction to Graduate Study...	3
Psych. 552 Human Development, Advanced	3
Ed. 559E Practicum in Counseling.....	4
Psych. 560 Theory and Practice of Counseling .....	5
Psych. 562 Theories of Learning .....	5
Psych. 564 Individual Testing: Children..	5
Ed. 570 Educational Foundations .....	3
Psych. 598.1, 598.2, 598.3 Seminar in Counseling and School Psychology.....	3
Ed./Psych. 600 Thesis .....	6
	45
SECOND YEAR:	<i>Credits</i>
Psych./Spec. Ed. 463 Diagnostic Techniques	3
Ed./Phil. 467 Philosophy of Education....	3
Ed./Psych. 469 Advanced Educational and Psychological Statistics .....	4
Ed. 558 Administration of Pupil Personnel Program .....	3
Ed. 559E Practicum in Counseling .....	8
Psych. 561 Group Counseling .....	3
Psych. 571 Family Counseling .....	3
Psych. 584.1, 584.2, 584.3 Supervised Field Experience in Counseling .....	3
Electives .....	15
	45

**Secondary and College**

**FIRST YEAR:**

	<i>Credits</i>
Psych. 453 Theories of Personality.....	5
Ed. 487 Group Processes and Leadership..	3
Ed. 507 Introduction to Graduate Study....	3
Psych. 552 Human Development, Advanced	3
Ed. 559SC Practicum in Counseling.....	4
Psych. 560 Theory and Practice of Counsel- ing .....	5
Psych. 562 Theories of Learning.....	5
Psych. 565 Individual Testing: Adolescent and Adult .....	5
Ed. 570 Educational Foundations .....	3
Psych. 598.1, 598.2, 598.3 Seminar in Coun- seling and School Psychology.....	3
Ed./Psych. 600 Thesis .....	6
	45

**SECOND YEAR:**

	<i>Credits</i>
Ed./Phil. 467 Philosophy of Education....	3
Psych./Ed. 469 Advanced Educational and Psychological Statistics .....	4
Psych./Ed. 471 Vocational Development Theory .....	4
Ed. 558 Administration of Pupil Personnel Program .....	3
Ed. 559SC Practicum in Counseling.....	8
Psych. 561 Group Counseling .....	3
Psych. 564 Individual Testing: Children..	5
Psych. 571 Family Counseling .....	3
Ed. 584.1, 584.2, 584.3 Supervised Field Experience in Counseling.....	3
Electives .....	9
	45

**RECOMMENDED ELECTIVES:**

	<i>Credits</i>
Ed. 419 Reading Readiness .....	2
Spec. Ed. 338 Remedial Reading .....	3
Spec. Ed. 429 Remedial Arithmetic.....	2
Spec. Ed. 343 Educating the Exceptional Child .....	3
Ed. 438 Individual Instruction .....	2
Ed. 460 Parent-Teacher Conference .....	2
Ed. 471 Vocational Development Theory..	4
Ed. 562 Evaluation of School Program....	3
Ed. 574 Adult Education .....	3
Ed. 577 In-Service Program .....	3
Ed. 595 The Community Junior College..	3
Psych. 347 Method of Attitude and Opinion Measurement .....	3
Psych. 420 Psychology of Reading.....	5
Psych. 445 Clinical and Counseling Psychol- ogy .....	5
Psych. 457 Psychology of the Exceptional Child .....	3
Psych. 565 Individual Testing: Adolescent and Adult .....	5
Psych./Ed. 416 Programmed Learning.....	3
Psych./Ed. 488 Group Dynamics and the Individual .....	3
Soc. 445 Social Stratification .....	3
Soc. 455 Collective Behavior .....	5
Soc. 470 Contemporary Social Thought....	4

**School Librarian**

Persons pursuing this Master of Education degree specialization must either have com-

pleted the undergraduate Instructional Materials Minor or complete the requirements listed in that minor prior to or concurrently with this specialization.

	<i>Credits</i>
Library 460 Advanced Cataloging and Clas- sification .....	3
Library 418 Reference in Subject Areas...	4
Library 470 School Library Administration	3
Education 450 Instructional Aids: Produc- tion .....	3
Education 555 Program of Curriculum Im- provement .....	3
Education 600 Thesis .....	3 or 6
Select at least 3 or 6 credits from the follow- ing courses:	
Library 490 Historical Survey of Books and Libraries .....	3
Speech 446 Oral Reading of Children's Literature .....	3
Art 342 Exhibit Techniques .....	2
Library 485 Research and Bibliography..	2
Education 577 In-Service Programs ....	3
Education 550 Production of Photo- graphic Instructional Materials.....	3
	25

**School Psychology**

Prerequisite—undergraduate major in psychol-  
ogy or its equivalent.

The new State Board of Education standards for school psychologists require 15 or more credits of professional education courses including (1) directed laboratory experience, (2) education of exceptional children, (3) organization of school system facilities and their relation to community facilities. These requirements make it possible for the College to recommend for school psychologists' positions those who have special training in this field but who do not have full teacher certification. This program also can be completed through the regular teacher education program.

A *provisional* school psychologist's certificate may be granted when course work for the Master of Education degree, exclusive of thesis, has been completed. A standard school psychologist's certificate may be granted after one year of supervised experience, a second year of successful experience as a school psychologist, and completion of the master's degree.

	<i>Credits</i>
Ed. 507 Introduction to Graduate Study...	3
Ed. 570 Educational Foundations .....	3
Psych. 444 Tests and Measurements.....	4
Psych. 449 Abnormal Psychology .....	4
OR	
Psych. 457 Psychology of Exceptional Chil- dren .....	3
Psych. 453 Theories of Personality .....	5
Psych. 560 Theories of Counseling.....	4

(Continued on next page.)

*(School Psychology—Continued)*

Psych. 564 Mental Testing: Individual Child	5	niques	3
Psych. 565 Mental Testing: Individual Adolescent and Adult	5	Psych. 559 Practicum in School Psychology	15
Psych. 552 Human Growth and Development: Advanced (opt.)	3	Psych. 562 Theories of Learning	5
Psych./Ed. 487 Group Leadership and Group Processes	3	Psych. 566 Personality Assessment	5
Psych./Spec. Ed. 463 Special Diagnostic Techniques	3	Psych. 598.1, 598.2, 598.3 Seminar in Counseling and School Psychology (1 credit each qtr.)	3
		Ed. 600 Thesis	6
		(At least 45 quarter hours must be taken during graduate study.)	

# Fifth Year of Study for Standard Teaching Certificate

Graduation from Central Washington State College with a Bachelor of Education degree entitles the student to the Provisional Teaching Certificate, a license to teach in the schools of Washington for three years. It is renewable for an additional three-year period before being converted to the Standard Teaching Credential.

The philosophy of the fifth year of teacher education is interpreted to mean that the year will consist of 45 quarter credits of work taken after completion of requirements for the Provisional Teaching Certificate. Credits counted toward completion of fifth-year requirements must be identified with one of the following objectives of the fifth year:

- a. To strengthen areas of weakness discovered during the first year of teaching.
- b. To begin preparing for a future specialized educational role.
- c. To fulfill institutional requirements by taking:
  - (1) Fifteen credits in subject matter area(s) related to his teaching field(s) and/or his major. An academic major must be completed during the fifth year if not completed as part of the undergraduate program.
  - (2) Seven and one-half credits from an approved list of professional courses.
- d. Any undergraduate requirements that were delayed by special action.
- e. Electives to broaden one's general education.

Some points to be remembered are:

1. Renewal for the second three-year period requires completion of a minimum of 12 quarter credits and one year of successful teaching.
2. Conversion to the Standard Teaching Certificate requires completion of a fifth year of teacher education. Two years of suc-

cessful teaching experience are also required. Of the total credits earned:

- a. Normally not more than 15 credits may be applied to 5th year requirements prior to the first year of teaching. Such credits must be approved upon petition to the Assistant Dean of Education.
  - b. A maximum of 12 credits may be earned by correspondence and/or extension.
  - c. At least one-half of the total credits must be 300 level or above.
  - d. Twenty-two and one-half (22½) credits are to be earned in residence in a single institution.
3. The student may choose any accredited college for completion of his fifth year. If the college chosen is in Washington, that college will be responsible for recommendation for the Standard Certificate. If the college chosen is outside Washington, Central Washington State College must be consulted prior to development of the program and will be responsible for recommending the certificate.
  4. A candidate may begin the fifth year following issuance of the Provisional Teaching Certificate or during the quarter in which requirements for the certificate are completed.
  5. The State Board of Education allows six calendar years for conversion of the Provisional Teaching Certificate to the Standard Teaching Certificate. Therefore, a time limit of six years is observed on course work credited toward completion of the fifth year. Any exceptions must be approved upon petition to the Assistant Dean of Education.

6. Qualified students may organize their fifth year of study to include work toward the Master of Education, Master of Arts or Master of Science degree. Such programs should be carefully planned with the Dean of Graduate Studies and the Assistant Dean of Education.
7. The fifth-year program outlined above is

designed for the student who is progressing normally through Washington's current teacher education program, who holds a valid Provisional Teaching Certificate, and who is seeking a regular Standard Teaching Certificate. Others should consult the Credentials Supervisor in the Registrar's Office concerning requirements.

## Special Certificates

Preparation for certain special certificates, authorized by the State Board of Education, is available at Central Washington State College. Among these certificates are the Principals' Credentials and the School Psychologist's Credential.

Those interested in other special certificates should write to the Department of Certification, c/o State Board of Education, Olympia, Washington.

# Principal's Credentials: Elementary, Secondary, and General

Central Washington State College has been authorized to recommend issuance of provisional and Standard Principal's Credentials valid for service as vice principal or principal of elementary, junior high, and/or high schools. The program includes study in school administration, supervision, and curriculum along with in-the-school administrative experiences; and meets requirements established by the State Board of Education.

Requirements for the provisional credential include:

1. Possession of a valid teacher's certificate.
2. Admission to the master's degree program.
3. A minimum of nine credits beyond the fifth year.
4. A minimum of 24 credits beyond the bachelor's degree in an approved program including course work in administration, supervision, curriculum, etc.

5. Field experiences of such nature that the candidate has become personally involved in the duties and responsibilities connected with the principalship. (Internship.)
6. A minimum of three years successful teaching experience at the appropriate level or levels.

Requirements for the standard credential include:

1. Three years experience as a principal.
2. Twelve credits earned after issuance of the provisional credential and after consultation with the Superintendent of Schools and the college.
3. Completion of a master's degree.

Persons seeking further information are invited to correspond with the office of the Director of Administrative Interns, Education Department.

# Course Listing\*

300 Level and Above

## Anthropology

- Anthro. 343. Ethnology of Africa. 4 credits.  
Anthro. 344. Ethnology of Asia. 4 credits.  
Anthro. 347. Indian Cultures of North America. 4 credits.  
Anthro. 360. Methods in Archaeology. 4 credits.  
Anthro. 361. Old World Prehistory. 4 credits.  
Anthro. 365. North American Archaeology. 4 credits.  
Anthro. 373. Studies in Primate Social Behavior. 4 credits.  
Anthro. 377. Theories of Race. 2 credits.  
Anthro. 445. Peasant Societies and Cultures. 4 credits.  
Anthro. 447. Religion of Primitive Societies. 4 credits.  
Anthro. 448. Non-Western Political and Economic Organization. 4 credits.  
Anthro. 451. History and Theory of Anthropology. 4 credits.  
Anthro. 454. Cultural Change. 4 credits.  
Anthro. 457. Applied Anthropology. 4 credits.  
Anthro. 471. Fossil Man. 4 credits.  
Anthro. 484. Ethnology and Cultural Problems of Southeast Asia. 2 credits.  
Anthro. 496. Individual Study. 2-4 credits.

## Art

- Art 321. Mural Design. 2 credits. Prerequisite, Art 170, 260.  
Art 325. Arts and Crafts, Primary. 3 credits. Prerequisite, Art 100 or 101.  
Art 342. Exhibit Techniques. 2 credits.  
Art 348. Ancient and Medieval Art. 3 credits.  
Art 349. Art and Modern Living. 2 credits.  
Art 354. Costume Design. 3 credits.  
Art 360. Oil Painting. 3 credits. Prerequisite, Art 261.  
Art 361. Oil Painting, 3 credits. Prerequisite, Art 360 or consent of instructor.  
Art 362. Water Color. 3 credits. Prerequisite, Art 263.  
Art 363. Advanced Water Color. 3 credits. Prerequisite, Art 362.  
Art 371. Advanced Layout and Design. 5 credits. Prerequisites, Art 271, 277.  
Art 372. Production Techniques in Advertising Art. 5 credits. Prerequisite, Art 371.  
Art 373. Interior Design. 3 credits. Prerequisite, Art 150, 170.  
Art 377. Advanced Lettering. 2 credits. Prerequisite, Art 277.  
Art 380. Sculpture. 3 credits. Prerequisite, Art 280.  
Art 385. Serigraphy. 3 credits. Prerequisite, Art 150 and 170.  
Art 386. Collagraph. 3 credits. Prerequisite, Art 170 and 250 or 251.  
Art 387. Intaglio Printmaking. 3 credits. Prerequisite, Art 287.  
Art 390. Photography. 3 credits. Prerequisite, Art 290.  
Art 425. Arts and Crafts, Intermediate. 3 credits. Prerequisite, Art 100 or 101.  
Art 430. Art in the Elementary School. 3 credits. Prerequisite, Art 100 or 101 or permission of instructor.  
Art 431. Art in the Junior High School. 3 credits.  
Art 432. Art in the High School. 3 credits.  
Art 440. Workshop. 1-6 credits.  
Art 445. Art for Handicapped Children. 3 credits.  
Art 448. Renaissance through Nineteenth Century Art. 3 credits.  
Art 450. Advanced Drawing. 3 credits. Prerequisite, Art 250.  
Art 451. Contemporary Art. 3 credits.  
Art 452. Art of the Americas. 2 credits.  
Art 453. Art in the United States. 3 credits.  
Art 456. Art of the Orient and Near East. 3 credits.  
Art 457. African and Oceanic Art. 2 credits.  
Art 458. Life Drawing. 2 credits. Prerequisite, two courses of drawing.  
Art 460. Advanced Painting. 3 credits. Prerequisite, Art 360.  
Art 470. Advanced Design. 3 credits. Prerequisite, Art 270.  
Art 480. Advanced Sculpture. 3 credits. Prerequisite, Art 380.  
Art 485. Advanced Serigraphy. 3 credits. Prerequisite, Art 385.  
Art 486. Advanced Collagraph. 3 credits. Prerequisite, Art 386.  
Art 487. Advanced Intaglio Printmaking. 3 credits. Prerequisite, Art 287, 387.  
Art 490. Advanced Photography. 3 credits. Prerequisite, Art 390.  
Art 495. Travel Study. 2-8 credits.  
Art 496, 497, 498. Individual Study. 2 credits each.

\*Descriptions in General Catalog.

- Art 499. Art Seminar. 2 credits. Prerequisite, art major or permission of instructor.
- Art 545. Administration of the School Art Program. 3 credits.
- Art 548. Art Since 1945. 3 credits.
- Art 550. Advanced Life Drawing. 3 credits.
- Art 560. Advance Studies in Painting. 2-5 credits. Prerequisite, Art 460 or equivalent.
- Art 561. Media and Techniques. 3 credits.
- Art 564. Research Procedures in Art. 3 credits.
- Art 570. Advanced Studies in Design. 2-5 credits.
- Art 580. Advanced Studies in Sculpture. 2-5 credits. Prerequisite, Art 480.
- Art 586. Relief Print. 2 credits. Prerequisite, Art 285 and an additional printmaking course.
- Art 587. Advanced Studies in Intaglio. 3 credits. Prerequisite, Art 487.
- Art 595. Seminar in Aesthetics and Criticism. 3 credits.
- Art 596, 597, 598. Individual Study. 2 credits each.
- Art 599. Seminar in Art Education. 2 credits.
- Art 600. Thesis. 6 credits.

## Aviation

- Av. 351. Introduction to Aviation. 2 credits.
- Av. 352. Air Navigation. 3 credits.
- Av. 353. Meteorology. 3 credits.
- Av. 354. Theory of Flight. 2 credits.
- Av. 355. Aircraft Structures, Categories, and Power Plants. 5 credits. Prerequisite, Aviation 354.
- Av. 371. Elementary Flight Laboratory. 1 credit. Prerequisite, Aviation 351 (may be taken concurrently).
- Av. 372. Intermediate Flight Laboratory. 1 credit. Prerequisites, Aviation 352 (may be taken concurrently), and 371.
- Av. 422. Aerospace Education. 3 credits. Prerequisites, 10 credits in aviation or permission.
- Av. 440.0-9. Workshop, Aviation and Space Education. 1 to 6 credits.

## Biological Science

- Bio. Sci. 347. Paleontology. 5 credits. Prerequisite, ten hours of biology
- Bio. Sci. 365. Genetics. 4 credits. Prerequisite, Bio. Sci. 102.
- Bio. Sci. 370. Microbiology. 5 credits. Pre-

- requisite, Bio. Sci. 102 and Chem. 162 or 172.
- Bio. Sci. 395. Impact of Science on Society. 4 credits.
- Bio. Sci. 447. Invertebrate Paleontology. 5 credits. Prerequisite, Zool. 152.
- Bio. Sci. 449. Paleobotany. 5 credits. Prerequisite, Bot. 162.
- Bio. Sci. 470. Ecology. 5 credits. Prerequisite, Bot. 263 and Zool. 152, or permission.
- Bio. Sci. 480. Limnology. 5 credits. Prerequisite, Chem. 162 or 172; and Bot. 162 or Zool. 152; or permission.
- Bio. Sci. 485. Modern Developments in Evolution. 3 credits. Prerequisite, Bio. Sci. 365 and Bot. 360 or Zool. 372.
- Bio. Sci. 490. Biological Principles for Teachers. 5 credits.
- Bio. Sci. 496, 497. Individual Study. 2 to 4 credits, each course.
- Bio. Sci. 565. Experimental Genetics. 4 credits. Prerequisites, 15 credits in biology including Bio. Sci. 365 and permission of the instructor.
- Bio. Sci. 570. Cellular Physiology. 5 credits. Prerequisites, Zool. 372 and Chem. 360.
- Bio. Sci. 575. Microbial Physiology. 5 credits. Prerequisites, Bio. Sci. 370 and Chem. 365.
- Bio. Sci. 576. Comparative Morphology and Physiology of the Higher Bacteria. 4 credits. Prerequisites, Bio. Sci. 370 and Chem. 360 or 361.
- Bio. Sci. 596, 597. Individual Study. 2 to 4 credits each course.
- Bio. Sci. 598, 599. Biology Seminar. 1 credit each.
- Bio. Sci. 600. Thesis. 6 credits.

## Botany

- Bot. 341. General Plant Ecology. 5 credits. Prerequisite: Botany 162.
- Bot. 350. Ornamental Trees and Shrubs. 3 credits. Prerequisite, Bot. 161 or permission of instructor.
- Bot. 358. Plant Anatomy. 5 credits. Prerequisite, Bot. 161.
- Bot. 360. Plant Physiology. 5 credits. Prerequisite, Bot. 161 and Chem. 360.
- Bot. 363. Plants of Washington. 3 credits. Prerequisite, Bot. 161 or permission of the instructor.
- Bot. 375. Plant Geography. 4 credits. Prerequisite, permission of instructor.
- Bot. 441. Advanced Plant Ecology. 5 credits. Prerequisite, Bot. 341.
- Bot. 448. Advanced Plant Physiology. 4 credits. Prerequisite, Bot. 360.



- Bot. 449. **Problems in Plant Physiology.** 2 credits. Prerequisite, Bot. 360.
- Bot. 450. **Agrostology.** 3 credits. Prerequisite, Bot. 263.
- Bot. 451. **Selected Studies in Botany.** 3 credits. Prerequisite, 10 hours of botany.
- Bot. 460. **Plant Pathology.** 3 credits. Prerequisites, Bot. 161 and 162.
- Bot. 461. **The Plant Kingdom.** 5 credits. Prerequisite, Bio. Sci. 102.
- Bot. 462. **Comparative Morphology of Vascular Plants.** 5 credits. Prerequisite, 10 credits in botany.
- Bot. 463. **Mycology.** 4 credits. Prerequisite, Bot. 161 and 162.
- Bot. 464. **Fresh-Water Algae.** 4 credits. Prerequisite, eight credits of biology including one course in botany.
- Bot. 496, 497. **Individual Study.** 2 to 4 credits, each course.
- Bot. 600. **Thesis.** 6 credits.

## Business Administration

- Bus. Admr. 310. **Machine Accounting.** 2 credits. Prerequisite, Bus. Admr. 251.
- Bus. Admr. 320. **Managerial Accounting Analysis.** 3 credits. Prerequisite, Bus. Admr. 252.
- Bus. Admr. 324. **Financial Accounty Analysis.** 3 credits. Prerequisite Bus. Admr. 252.
- Bus. Admr. 325. **Transportation and Distribution Management.** 4 credits.
- Bus. Admr. 335. **Principles of Production.** 4 credits.
- Bus. Admr. 341. **Business Law.** 5 credits.
- Bus. Admr. 346. **Advanced Business and Economic Statistics.** 3 credits.
- Bus. Admr. 350. **Intermediate Accounting I.** 5 credits.
- Bus. Admr. 351. **Intermediate Accounting II.** 5 credits.
- Bus. Admr. 356. **Income Tax Accounting.** 5 credits.
- Bus. Admr. 359. **Federal Taxation.** 5 credits.
- Bus. Admr. 366. **Principles of Marketing.** 4 credits.
- Bus. Admr. 368. **Marketing Middleman.** 4 credits.
- Bus. Admr. 370. **Business Finance.** 4 credits. Prerequisite, Bus. Admr. 251.
- Bus. Admr. 372. **Real Estate.** 4 credits.
- Bus. Admr. 374. **Investments for Beginners.** 2 credits.
- Bus. Admr. 377. **Principles of Insurance.** 5 credits.

- Bus. Admr. 379. **Collective Bargaining.** 3 credits.
- Bus. Admr. 380. **Management Decision Making.** 5 credits.
- Bus. Admr. 381. **Personnel Management.** 4 credits.
- Bus. Admr. 383. **Business Cycles.** 4 credits. Prerequisite, Bus. Admr. 246; and junior standing.
- Bus. Admr. 410. **Applications of Digital Computers.** 4 credits. Prerequisites, Math. 150, Bus. Admr. 252, and 346 or permission of the instructor.
- Bus. Admr. 435. **Production Management.** 4 credits. Prerequisite, Bus. Admr. 335.
- Bus. Admr. 450. **Advanced Accounting.** 5 credits. Prerequisite, Bus. Admr. 252.
- Bus. Admr. 453. **Accounting Theory.** 5 credits. Prerequisite, Bus. Admr. 351.
- Bus. Admr. 454. **Auditing.** 5 credits. Prerequisite, Bus. Admr. 351.
- Bus. Admr. 456. **Advanced Income Tax Accounting.** 5 credits. Prerequisite, Bus. Admr. 356.
- Bus. Admr. 461. **Principles of Advertising and Sales Management.** 5 credits. Prerequisite, Bus. Admr. 366.
- Bus. Admr. 468. **Marketing Problems.** 4 credits. Prerequisite, Bus. Admr. 366.
- Bus. Admr. 469. **Market Research.** 4 credits. Prerequisites, Bus. Admr. 246 and 366.
- Bus. Admr. 475. **Investments.** 4 credits. Prerequisite, Bus. Admr. 370.
- Bus. Admr. 496, 497. **Individual Study.** 2 or 3 credits each course.

## Business Education

- Bus. Ed. 321. **Methods in Business Education.** 5 credits.
- Bus. Ed. 371. **Office Management.** 3 credits.
- Bus. Ed. 373. **Practical Duplication Techniques.** 2 credits.
- Bus. Ed. 375. **Consumer Education.** 3 credits.
- Bus. Ed. 378. **Advanced Office Practice.** 3 credits.
- Bus. Ed. 390. **Automated Office Practice.** 4 credits.
- Bus. Ed. 392. **Records Management.** 3 credits.
- Bus. Ed. 420. **Methods and Materials for Teaching Bookkeeping and Accounting.** 3 credits.
- Bus. Ed. 424. **Methods for Teaching Shorthand and Transcription.** 3 credits.
- Bus. Ed. 425. **Typewriting Methods.** 3 credits.

- Bus. Ed. 426. Methods and Materials in Basic Business Subjects. 3 credits.  
 Bus. Ed. 440. Workshop. 1 to 6 credits.  
 Bus. Ed. 445. Coordination of Work Experience in the Office and Distributive Occupations. 3 credits.  
 Bus. Ed. 496. Individual Study. 2 credits.  
 Bus. Ed. 520. Tests and Measurements in Business Education. 3 credits.  
 Bus. Ed. 522. Methods for Teaching Secretarial Procedures. 3 credits.  
 Bus. Ed. 524. The High School Business Education Program. 3 credits.  
 Bus. Ed. 526. Mach. Shorthand for Teachers. 5 credits. (pending final approval)  
 Bus. Ed. 528. Improvement of Instructor in Typing. 3 credits (pending final approval)  
 Bus. Ed. 550. Principles of Business Education. 3 credits.  
 Bus. Ed. 580. Seminar in Business Education. 3 credits.  
 Bus. Ed. 595. Research in Business Education. 3 credits.

## Chemistry

- Chem. 350. Inorganic Chemistry. 3 credits. Prerequisite, Chem. 383.  
 Chem. 360. Elementary Organic Chemistry. 5 credits. Prerequisite, 8 credits in college chemistry.  
 Chem. 361, 362, 363. Organic Chemistry. 5 credits, each course. Prerequisite, Chemistry 163 or 172.  
 Chem. 364. Physiological Chemistry. 5 credits. Prerequisite, Chem. 360.  
 Chem. 365. Biological Chemistry. 5 credits. Prerequisite, Chem. 360 or Chem. 362, or 363.  
 Chem. 381, 382, 383. Physical Chemistry. 3 credits, each course. Prerequisite, Chem. 251 and Math. 171.2.  
 Chem. 445. Modern Methods of Chemical Analysis. 5 credits.  
 Chem. 452. Instrumental Analysis. 4 credits. Prerequisites, Chem. 383, and Physics 163.  
 Chem. 454. Introduction to Spectroscopy. 3 credits. Prerequisite, Chem. 363 and 383. (May be taken concurrently.)  
 Chem. 461, 462. Theoretical Organic Chemistry. 3 credits each course. Prerequisite, Chem. 363 and 383.  
 Chem. 463. Qualitative Organic Chemistry. 3 credits. Prerequisite, Chem. 363.  
 Chem. 464. Organic Preparations. 3 credits. Prerequisite, Chem. 363.  
 Chem. 470. Radiochemistry. 5 credits. Prerequisites, Chem. 383 or permission.

- Chem. 471. Introduction to Ligand Field Theory. 3 credits. Prerequisite, Chem. 350.  
 Chem. 472. Inorganic Preparations. 3 credits. Prerequisite, Chem. 350.  
 Chem. 481, 482, 483. Intermediate Physical Chemistry. 3 credits each course. Prerequisite, Chem. 363 and 383; Physics 163 and Math. 271.3. (The latter may be taken concurrently.)  
 Chem. 486. Electrochemistry. 3 credits. Prerequisite, Chem. 383.  
 Chem. 496, 497. Individual Study. 2 to 4 credits, each course.  
 Chem. 500, 501, 502. Advanced Biochemistry. 4 credits each course. Prerequisite for Chem. 500, Chem. 365 or permission.  
 Chem. 505. Biochemical Methods. 3 credits. Prerequisite, Chem. 500, 501, 502.  
 Chem. 550. Theoretical Instrumental Analysis. 3 credits. Prerequisite, Chem. 452.  
 Chem. 561. Physical Organic Chemistry. 3 credits. Prerequisite, Chem. 482 and Chem. 462.  
 Chem. 570.1, 570.2. Advanced Inorganic Chemistry. 3 credits each course. Prerequisite, Chem. 350 and Chem. 482.  
 Chem. 581.1, 581.2, 581.3. Advanced Topics in Physical Chemistry. 3 credits, each course.  
 Chem. 596. Individual Study. 3 credits.  
 Chem. 598.1, 598.2, 598.3. Graduate Seminar. 1 credit each course.  
 Chem. 600. Thesis. 6 credits.

## Crafts\*

- Crafts 342. Advanced Wood. 2 credits. Prerequisite, Crafts 242.  
 Crafts 343. Advanced Plastics and Glass. 2 credits. Prerequisite, Crafts 243.  
 Crafts 344. Advanced Crafts—Metal and Leather. 3 credits. Prerequisite, Crafts 144.  
 Crafts 346. Advanced Fabrics. 2 credits. Prerequisite, Crafts 246.  
 Crafts 347. Jewelry. 3 credits.  
 Crafts. 348. Lapidary. 2 credits  
 Crafts 349. Enameling. 2 credits.  
 Crafts 362. Pottery. 3 credits. Prerequisite, Crafts 262.  
 Crafts 447. Advanced Jewelry. 2 credits. Prerequisite, Crafts 347.  
 Crafts 462. Advanced Pottery. 3 credits. Prerequisite, Crafts 362.  
 Crafts 496, 497, 498. Individual Study. 2 credits each.  
 Crafts 547. Advanced Studies in Jewelry. 2-5 credits. Prerequisite, Crafts 447.

\*See also Technology and Industrial Education.

- Crafts 562. **Advanced Studies in Ceramics.** 2-5 credits.  
 Crafts 596, 597, 598. **Individual Study.** 2 credits each.

## Economics

- Econ. 345. **Current Issues in Economics.** 2 credits. Prerequisite, Econ. 252.  
 Econ. 346. **Comparative Economic Systems.** 5 credits. Prerequisite, Econ. 252.  
 Econ. 351. **Intermediate Price Theory.** 3 credits. Prerequisite, Econ. 252.  
 Econ. 354. **Economics of the Pacific Northwest.** 3 credits.  
 Econ. 355. **Economics of Labor.** 5 credits. Prerequisite, Econ. 252.  
 Econ. 356. **Government and Business.** 4 credits. Prerequisite, Econ. 252.  
 Econ. 385. **International Economics.** 5 credits.  
 Econ. 444. **Economic Education.** 3 credits.  
 Econ. 445. **Current Economics.** 3 credits.  
 Econ. 446. **Introduction to Econometrics.** 3 credits. Prerequisite, Bus. Admr. 346.  
 Econ. 447. **Advanced Econometrics.** 3 credits. Prerequisite, Bus. Admr. 446; or Business Statistics and a course in calculus (Math. 175); or Math. 175 and 311 and a course in economics.  
 Econ. 450. **History of American Labor Relations.** 3 credits.  
 Econ. 453. **History of Economic Thought.** 3 credits. Prerequisite, Econ. 252 and senior standing.  
 Econ. 470. **Money and Banking.** 5 credits.  
 Econ. 480. **Public Finance.** 5 credits. Prerequisite, Econ. 252.  
 Econ. 481. **State and Local Government Finance.** 5 credits. Prerequisite, Econ. 480.  
 Econ. 484. **Economic Development.** 4 credits. Prerequisites, Econ. 252 and senior standing.  
 Econ. 485. **Managerial Economics.** 3 credits. Prerequisites, Econ. 252, 257, 470, Accounting 251 and senior standing.  
 Econ. 488. **National Income Analysis.** 4 credits. Prerequisite, Econ. 252 and junior standing.  
 Econ. 490. **Monetary Theory and Policy.** 4 credits. Prerequisite, Economics 470 and/or Economics 488.  
 Econ. 495. **Research Seminar in Economics.** 2 credits.  
 Econ. 496, 497. **Individual Study.** 2 or 3 credits, each course.

## Education

- Ed. 307. **Introduction to Education.** 4 credits.  
 Ed. 316. **Instructional Aids: Utilization.** 5 credits.  
 Ed. 322. **Teaching of Reading.** 3 credits.  
 Ed. 323. **Teaching of Arithmetic.** 3 credits.  
 Ed. 330. **Air Age Education.** 3 credits.  
 Ed. 358. **Introduction to Guidance.** 3 credits.  
 Ed. 362. **Educational and Psychological Statistics.** 4 credits.  
 Ed. 410. **Teaching Nursery School and Kindergarten.** 3 credits.  
 Ed. 416. **Programed Learning.** 3 credits.  
 Ed. 417. **Radio and Television in the Classroom.** 2 credits.  
 Ed. 419. **Reading Readiness.** 2 credits.  
 Ed. 420. **Teaching the Language Arts.** 4 credits.  
 Ed. 421. **Modern Reading Program, Primary.** 3 credits.  
 Ed. 422. **Modern Reading Program, Intermediate.** 3 credits.  
 Ed. 423. **Reading Problems in the Secondary School.** 3 credits.  
 Ed. 424. **Reading in Content Fields.** 3 credits.  
 Ed. 426. **Studies and Problems in Reading.** 3 credits.  
 Ed. 427. **Modern Arithmetic Program. (Primary)** 3 credits.  
 Ed. 428. **Modern Arithmetic Program. (Intermediate and Upper Grades.)** 3 credits.  
 Ed. 431. **Intercultural Education.** 3 credits.  
 Ed. 433. **Family Life Education.** 3 credits. Prerequisite, Psy. 295 or equivalent and Ed. 314 or take Ed. 314 concurrently.  
 Ed. 434. **Activities in the Secondary Schools.** 3 credits.  
 Ed. 438. **Individualizing Instruction.** 2 credits.  
 Ed. 440. **Workshop.** 1 to 6 credits.  
 Ed. 441. **Studies in Education.** 1-6 credits. Prerequisite, teaching experience.  
 Ed. 446. **Directed Observation.** 3 credits. Prerequisite, teaching experience or junior standing.  
 Ed. 447. **Classroom Teaching Problems.** 3 credits. Prerequisite, teaching experience.  
 Ed. 449. **Audiovisual Electronics.** 3 credits. Prerequisite, Ed. 316.  
 Ed. 450. **Instructional Aids: Production.** 3 credits. Prerequisite, Ed. 316.  
 Ed. 451. **Core Curriculum.** 3 credits.  
 Ed. 452. **Junior High School Curriculum.** 3 credits.

- Ed. 459. **Teacher-Counseling.** 3 credits. Prerequisite, Ed. 358.
- Ed. 460. **Parent-Teacher Conferences.** 2 credits.
- Ed. 462. **Construction and Use of Classroom Tests.** 2 credits.
- Ed. 464. **Community Youth Programs.** 3 credits.
- Ed. 467. **Philosophy of Education.** 3 credits.
- Ed. 468. **History of Education.** 2 credits.
- Ed. 469. **Advanced Psychological and Educational Statistics.** 4 credits. Prerequisite, Ed. 362.
- Ed. 470. **Nongraded Elementary School.** 2 credits.
- Ed. 471. **Vocational Development Theory.** 4 credits. Prerequisite, Ed. 358, and recommended prerequisite of Psy. 444.
- Ed. 476. **School and Community.** 3 credits.
- Ed. 487. **Group Processes and Leadership.** 3 credits.
- Ed. 488. **Group Dynamics and the Individual.** 3 credits. Prerequisite, Ed. 487.
- Ed. 492. **Contemporary Movements.** 3 credits.
- Ed. 496. **Individual Study.** 1 to 3 credits.
- Ed. 499. **Seminar in Education.** 3 credits.
- Ed. 507. **Introduction to Graduate Study.** 3 credits.
- Ed. 508. **Comparative Education.** 3 credits.
- Ed. 516. **Instructional Aids: Advanced Theory and Practice.** 3 credits. Prerequisite, Ed. 316.
- Ed. 545. **Directed Observation in a Core Class.** 3 credits. Prerequisite, teaching experience.
- Ed. 546. **Advanced Laboratory Experience.** 2-5 credits.
- Ed. 547. **Supervision of Student Teachers.** 3 credits. Prerequisite, one year of teaching experience.
- Ed. 550. **Production of Photographic Instructional Materials.** 4 credits. Prerequisite, Ed. 316, a high school or college course in basic photography, and recommended prerequisite, Ed. 450.
- Ed. 551. **Elementary School Curriculum.** 3 credits.
- Ed. 552. **Senior High School Curriculum.** 3 credits.
- Ed. 555. **Program of Curriculum Improvement.** 3 credits.
- Ed. 558. **Administration of the Pupil Personnel Program.** 3 credits. Prerequisite, Ed. 358 or consent.
- Ed. 559, E, I, or SC. **Practicum in Counseling.** 4-12 credits. Prerequisite, Departmental approval.
- Ed. 562. **Evaluation of the School Program.** 3 credits.
- Ed. 570. **Educational Foundations.** 3 credits.
- Ed. 574. **Adult Education.** 3 credits.
- Ed. 576. **Personnel Relations in Schools.** 3 credits.
- Ed. 577. **In-Service Programs.** 3 credits.
- Ed. 578. **Instructional Aids: Administration.** 3 credits. Prerequisite, Ed. 316.
- Ed. 579. **Elementary School Principal.** 5 credits. Prerequisite, one year of teaching experience.
- Ed. 580. **Junior High School Principal.** 5 credits. Prerequisite, one year of teaching experience.
- Ed. 581. **High School Principal.** 5 credits. Prerequisite, one year of teaching experience.
- Ed. 582. **Internship in School Administration.** 5 credits.
- Ed. 583. **Field Project in School Administration.** 1-15 credits.
- Ed. 585. **School Supervision.** 5 credits. Prerequisite, one year of teaching experience.
- Ed. 587. **Education Administration.** 5 credits. Prerequisite, one year of teaching experience.
- Ed. 588. **Federal, State and County Education.** 3 credits.
- Ed. 589. **School Plant Planning.** 5 credits.
- Ed. 590. **Public School Finance.** 5 credits.
- Ed. 595. **The Community Junior College.** 3 credits.
- Ed. 596. **Individual Study.** 1-6 credits.
- Ed. 599A. **Seminar in Educational Administration.** 3 credits.
- Ed. 599C. **Seminar in Curriculum.** 2 credits.
- Ed. 599CC. **Seminar in Core Curriculum.** 2 credits.
- Ed. 600. **Thesis.** 3 or 6 credits.

## English

- Eng. 320. **Children's Literature.** 3 credits.
- Eng. 339. **The English Language.** 3 credits. Prerequisite, Eng. 240.
- Eng. 342. **Creative Writing.** 3 credits.
- Eng. 344. **Advanced Composition.** 3 credits.
- Eng. 347, 348, 349. **The English Novel.** 3 credits each quarter.
- Eng. 351, 352, 353. **Shakespeare.** 3 credits each quarter.
- Eng. 361, 362, 363. **Drama of the English Renaissance.** 3 credits each quarter.
- Eng. 370, 371, 372. **American Fiction.** 3 credits, each quarter.
- Eng. 377. **American Poetry I.** 3 credits.
- Eng. 384. **The Short Story.** 3 credits.
- Eng. 428. **Teaching Composition and Literature in the Secondary Schools.** 4 credits. Prerequisite, 24 credits in English including 3 credits in linguistic requirements but excluding the required composition sequence.

Exceptions will be made only for students enrolled in Junior High School Broad Area, Social Science, and Language Arts majors.

- Eng. 440. Workshop. 1 to 6 credits.  
 Eng. 442. The History of the English Language. 3 credits.  
 Eng. 443. Rhetorical Theory and Practice. 3 credits.  
 Eng. 445. Approaches to English Grammar. 3 credits.  
 Eng. 447. The Age of Chaucer. 3 credits.  
 Eng. 448. Chaucer. 3 credits.  
 Eng. 453. Milton. 3 credits.  
 Eng. 459. Modern British Poetry. 3 credits.  
 Eng. 460, 461, 462. The English Renaissance. 3 credits each quarter.  
 Eng. 463, 464, 465. The Restoration and Eighteenth Century. 3 credits each quarter.  
 Eng. 466, 467, 468, 469. The Nineteenth Century. 3 credits each quarter.  
 Eng. 474. Colonial American Literature. 3 credits.  
 Eng. 475. American Literature of the Revolutionary Period. 3 credits.  
 Eng. 476. The Romantic Movement in American Literature. 3 credits.  
 Eng. 477. American Poetry II. 3 credits.  
 Eng. 479. Restoration and Eighteenth Century Drama. 3 credits.  
 Eng. 480. Twentieth Century Literature. 3 credits.  
 Eng. 485. The Continental Novel. 3 credits.  
 Eng. 491. Literary Criticism. 3 credits.  
 Eng. 492. Modern Literary Criticism. 3 credits.  
 Eng. 496, 497, 498. Individual Study. 1 to 3 credits each course.  
 Eng. 499. English Seminar. 3 credits.  
 Eng. 501. Research in English. 4 credits.  
 Eng. 541. 1.2.3.4.5.6.7.8.9. Studies in the English Language. 4 credits each.  
 Eng. 545. 1.2.3.4.5.6.7.8.9. Proseminar in English Literature. 4 credits each.  
 Eng. 575. 1.2.3.4.5.6.7.8.9. Proseminar in American Literature. 4 credits each.  
 Eng. 591. 1.2.3 Literary Criticism 4 credits  
 Eng. 596. 1.2.3. Individual Study. 1 to 4 credits each.  
 Eng. 599. 1.2.3. English Graduate Seminar. 4 credits each.  
 Eng. 600. Thesis. 6 credits.

## Foreign Languages

Foreign Language Education 328. Methods and Materials for the Teaching of Modern Foreign Languages. 3 credits. Prerequisite, French 253, or Spanish 253 or German 253.

## French

- Fr. 351, 352, 353. Survey of French Literature. 3 credits each quarter. Prerequisite, Fr. 253 or equivalent.  
 Fr. 361, 362, 363. Intermediate Conversation and Composition. 2 credits each quarter. Prerequisite, Fr. 263 or equivalent.  
 Fr. 371. 17th Century French Literature. 5 credits. Prerequisite, French 352.  
 Fr. 375. 18th Century French Literature. 5 credits. Prerequisite, Fr. 352.  
 Fr. 426. Medieval French Literature. 5 credits. Prerequisite, Fr. 351.  
 Fr. 427. French Renaissance Literature: Prose and Poetry. 4 credits. Prerequisite, Fr. 351 or equivalent.  
 Fr. 430. French Romanticism. 3 credits. Prerequisite, Fr. 353.  
 Fr. 435. French Realism and Naturalism. 5 credits. Prerequisite, Fr. 353.  
 Fr. 441. French Grammar for Teachers. 3 credits. Prerequisite, two years of college French or equivalent.  
 Fr. 450. Contemporary French Novel. 5 credits. Prerequisite, Fr. 353.  
 Fr. 452. Contemporary Theater. 5 credits. Prerequisite, Fr. 353.  
 Fr. 455. French Poetry of the 19th and 20th Centuries. 3 credits. Prerequisite, Fr. 353.  
 Fr. 461, 462, 463. Advanced Conversation and Composition. 2 credits each quarter. Prerequisite, Fr. 363.  
 Fr. 480. The "Avant-garde" Literature of France. 4 credits. Prerequisite, Fr. 353 or equivalent.  
 Fr. 496, 497, 498. Individual Study. 2 credits each course. Prerequisite, Fr. 351, 352, 353 and permission of instructor and department chairman.

## Geography

- Geog. 337. Middle America. 3 credits.  
 Geog. 345. Industrial Geography. 3 credits. Prerequisite, Geog. 245 or consent of instructor.  
 Geog. 346. Political Geography. 3 credits.  
 Geog. 350. Conservation of Natural Resources. 3 credits.  
 Geog. 352. Geography of Anglo-America. 5 credits.  
 Geog. 365. Geography of Africa. 5 credits.  
 Geog. 371. Geography of Europe. 5 credits.  
 Geog. 380. Geography of Hot, Wet Lands. 3 credits.  
 Geog. 384. Introductory Cartography. 5 credits.

- Geog. 386. **Geomorphology.** 3 credits. Prerequisites, introductory physical geography or geology or permission of instructor.
- Geog. 388. **Climatology.** 3 credits. Prerequisite, Geog. 107 or instructor's permission.
- Geog. 408. **Advanced Cultural Geography.** 3 credits. Prerequisite, Geography 108, or consent of instructor.
- Geog. 410. **Interpretation of Aerial Photographs.** 3 credits. Prerequisite, Geography 384, or consent of instructor.
- Geog. 415. **Geography of Oceania.** 3 credits.
- Geog. 421. **Practical Aids in Teaching Geography.** 2 credits. Prerequisite, ten credits in geography.
- Geog. 425. **Field Methods in Geography.** 5 credits. (Geog. 384 recommended.)
- Geog. 444. **Geography Behind the News.** 2 credits.
- Geog. 445. **Natural Resources Policy.** 4 credits.
- Geog. 470. **Geography of South America.** 3 credits.
- Geog. 472. **Geography of the Soviet Union.** 3 credits.
- Geog. 474. **Geography of China.** 2 credits.
- Geog. 475. **Geography of Asia.** 5 credits.
- Geog. 480. **Geography of the Polar Regions.** 3 credits.
- Geog. 481. **Urban Geography.** 5 credits. Prerequisite, Geog. 245 or consent of instructor.
- Geog. 484. **Geography of Southeast Asia.** 2 credits.
- Geog. 490. **History of Geographic Thought.** 3 credits.
- Geog. 494. **Seminar—Problems in Resource Allocation.** 3 credits. Prerequisite, permission of the instructor.
- Geog. 495. **Research Seminar in Geography.** 2 credits.
- Geog. 496. **Individual Study.** 2 credits.
- Geog. 595. **Seminar—Research in Geography.** 3 credits.

## Geology

- Geol. 345. **Principles of Geology.** Offered only during summer quarters. Not open to majors and minors in Geology.
- Geol. 347. **Paleontology.** 5 credits. Prerequisite, ten hours of biology.
- Geol. 350. **Washington Geology.** 3 credits. Geol. 355.
- Geol. 355. **Field Geology.** 4 credits. Prerequisite, permission of the instructor.
- Geol. 360. **Structural Geology.** 4 credits. Prerequisite, Geol. 145 and 146.
- Geol. 447. **Invertebrate Paleontology.** 5 credits. Prerequisite, Zool. 152.

- Geol. 449. **Paleobotany.** 5 credits. Prerequisite, Bot. 162.
- Geol. 450. **Stratigraphy.** 4 credits.
- Geol. 455. **Paleoclimatology.** 4 credits.
- Geol. 460. **Sedimentation.** 4 credits. Prerequisites, Geol. 245 and 247.
- Geol. 465. **Mineral Deposits.** 4 credits. Prerequisites, Geol. 245 and 247.
- Geol. 470. **Optical Mineralogy.** 5 credits. Prerequisite, Geol. 247.
- Geol. 475. **Petrography.** 5 credits. Prerequisite, Geol. 470.
- Geol. 496, 497. **Individual Study.** 2 to 4 credits, each course.

## German

- Ger. 351, 352. **Introduction to the Classical Period.** 3 credits per quarter. Prerequisite, Ger. 253.
- Ger. 353. **Introduction to the German Novel.** 3 credits. Prerequisite, Ger. 253.
- Ger. 357. **Goethe: *Faust*, Part I.** 3 credits. Prerequisite, Ger. 253.
- Ger. 361, 362, 363. **Intermediate Conversation and Composition.** 2 credits each quarter. Prerequisite, Ger. 263.
- Ger. 430. **German Romanticism.** 3 credits. Prerequisite, Ger. 353 or permission.
- Ger. 432. **German Lyric Poetry.** 3 credits. Prerequisite, Ger. 353 or permission.
- Ger. 441. **German Grammar for Teachers.** 3 credits. Prerequisite, 2 years of college German or equivalent.
- Ger. 448. **Goethe: *Faust*, Part II.** 3 credits. Prerequisite, Ger. 357 or permission.
- Ger. 450. **The German Novel of the 19th and 20th Centuries.** 5 credits. Prerequisite, Ger. 353 or permission.
- Ger. 456. **German Drama of the 19th Century.** 3 credits. Prerequisite, Ger. 353 or permission.
- Ger. 457. **Contemporary German Drama.** 3 credits. Prerequisite, Ger. 353 or permission.
- Ger. 461, 462, 463. **Advanced Conversation and Composition.** 2 credits each course. Prerequisite, Ger. 363.
- Ger. 469. **History of the German Language.** 5 credits. Prerequisite, Ger. 253.
- Ger. 496, 497, 498. **Individual Study.** 2 credits each course. Prerequisite, Ger. 351, 352, 353 and permission of instructor and department chairman.

## Health Education

- H. Ed. 321. **Methods and Materials in Health Education.** 3 credits. Prerequisite, H. Ed. 100, H. Ed. 207.

- H. Ed. 345. Advanced First Aid. 2 credits. Prerequisite, H. Ed. 245.
- H. Ed. 347. Home Care for the Sick. 2 credits. Prerequisite, junior standing.
- H. Ed. 349. Anatomy and Kinesiology. 5 credits. Prerequisite, Zool. 270.
- H. Ed. 450. Physiology of Exercise. 3 credits. Prerequisite, H. Ed. 349.
- H. Ed. 470. School and Community Health. 3 credits.
- H. Ed. 499. Seminar in Health Education and Safety Education. 2 credits.
- H. Ed. 518. Health Education in Elementary Schools. 3 credits.
- H. Ed. 525. Health Education in Secondary Schools. 3 credits.
- H. Ed. 560. Applied Physiology for Teachers. 3 credits.
- H. Ed. 580. Administration and Supervision of Health and Safety Education. 3 credits. Prerequisite, H. Ed. 321 and P.E. 460.
- H. Ed. 596. Individual Study. 1-6 credits.

## History

- Hist. 302. The Ancient Near East and Greece. 3 credits.
- Hist. 303. The History of Rome. 500 B.C.-500 A.D. 3 credits.
- Hist. 310. Introduction to History of Science. 5 credits. Prerequisite, high school algebra and geometry, 5 hours of history, and junior standing; or consent of instructor.
- Hist. 331. Colonial Africa. 3 credits.
- Hist. 332. Independent Africa. 3 credits.
- Hist. 335. The Rise of India. 5 credits.
- Hist. 346. The West in American History. 5 credits.
- Hist. 348. Economic History of the United States. 5 credits.
- Hist. 351. Selected American Biographies: Pre-Civil War. 3 credits.
- Hist. 352. Selected American Biographies: Post-Civil War. 3 credits.
- Hist. 355. 20th Century U.S.: 1898-1933. 4 credits.
- Hist. 356. 20th Century U.S.: 1933 to the present. 5 credits.
- Hist. 361. Survey of English History: The Tudor-Stuart Period. 3 credits.
- Hist. 362. Survey of English History: 1715 to the Present. 3 credits.
- Hist. 369. History of Canada. 5 credits.
- Hist. 371. Medieval History. 5 credits.
- Hist. 373. English Constitutional History. 5 credits.
- Hist. 374. Renaissance and Reformation. 3 credits.
- Hist. 375. The French Revolution. 3 credits.
- Hist. 385. Modern Asia. 5 credits.
- Hist. 388. Economic History of Europe Since 1760. 5 credits.
- Hist. 391. The South American Republics. 5 credits.
- Hist. 393. Mexico and the Caribbean Area Since 1900. 3 credits.
- Hist. 421. Methods and Materials in History—Secondary. 2 credits.
- Hist. 444. The Civil War and Reconstruction. 5 credits.
- Hist. 445. The American Colonial Mind. 3 credits.
- Hist. 446. Colonial American Institutions. 5 credits.
- Hist. 447. The American Revolution. 3 credits.
- Hist. 455. Intellectual History of the United States. 5 credits.
- Hist. 463. American Diplomatic History: Pre-1900. 3 credits. Prerequisite, ten hours of American History or consent of instructor.
- Hist. 464. American Diplomatic History: Post-1900. 3 credits. Prerequisite, ten hours of American History or consent of instructor.
- Hist. 465.1. The Hapsburg Empire, 1806-1867. 4 credits.
- Hist. 465.2. The Dual Monarchy, 1867-1918. 4 credits.
- Hist. 467. Diplomatic History of Europe: 1815-1914. 5 credits.
- Hist. 470. The Moslem World. 3 credits.
- Hist. 473. Russia to the Twentieth Century. 3 credits.
- Hist. 474. Twentieth Century Russia. 3 credits.
- Hist. 475. History of Modern France. 5 credits.
- Hist. 477. Modern Germany. 5 credits.
- Hist. 478. The British Empire and Commonwealth. 3 credits.
- Hist. 479. Europe in the Twentieth Century. 5 credits.
- Hist. 480. The World Since 1945. 3 credits.
- Hist. 481. Understanding History. 3 credits.
- Hist. 485. European Intellectual and Cultural History: 1500-1815. 5 credits.
- Hist. 486. European Intellectual and Cultural History Since 1815. 5 credits.
- Hist. 496, 497. Individual Study. 2 credits, each course.
- Hist. 501. Historiography. 3 credits.
- Hist. 505. Research Seminar in History. 3-5 credits.

# Home Economics

- H. Ec. 320. **Methods in Home Economics Education.** 3 credits. Prerequisites, Ed. 314, which may be taken concurrently; and 40 credits in Home Economics (30 credits and permission for those enrolled in 45 credit major.)
- H. Ec. 330. **Nutrition Activities in the Elementary School.** 1 credit. Prerequisite, H. Ec. 200.
- H. Ec. 349. **Family Clothing.** 2 credits.
- H. Ec. 365. **Home Furnishings.** 4 credits. Prerequisite, Art. 170 or H. Ec. 156; H. Ec. 150 or permission of instructor.
- H. Ec. 376. **Household Equipment.** 3 credits.
- H. Ec. 377. **Family Housing.** 3 credits.
- H. Ec. 381. **Family Finance.** 3 credits. Prerequisite, recommended Econ. 242.
- H. Ec. 385. **Family Meal Planning and Service.** 3 credits. Prerequisite, H. Ec. 185, 200.
- H. Ec. 386. **Food Selection for the Family.** 3 credits. Prerequisite, H. Ec. 185.
- H. Ec. 391. **Consumer Buying of Household Goods.** 3 credits. Prerequisite, H. Ec. 155, 185, or permission of instructor.
- H. Ec. 394. **Modern Problems of the Family.** 3 credits. Prerequisite, H. Ec. 294.
- H. Ec. 415. **Principles of Draping.** 4 credits. Prerequisite, H. Ec. 150, 155, 156 and 250 or equivalent.
- H. Ec. 421. **Methods in Adult Education in Home Economics.** 2 credits. Prerequisite, H. Ec. 320.
- H. Ec. 422. **Evaluation in Home Economics Education.** 3 credits. Prerequisite, H. Ec. 320, and teaching experience or permission of department chairman.
- H. Ec. 430. **Homemaking for the Handicapped.** 3 credits. Prerequisite, H. Ec. 200, 270, 376, or permission of instructor.
- H. Ec. 433. **Family Life Education.** 3 credits. Prerequisite, H. Ec. 294 and Ed. 314 or take Ed. 314 concurrently.
- H. Ec. 440. **Workshop.** 1-6 credits. Prerequisite, senior standing and 3-5 credits in the area for which the workshop is planned or permission.
- H. Ec. 445. **Problems in Human Nutrition.** 2 credits. Prerequisite, H. Ec. 200.
- H. Ec. 447. **Nutrition and Society.** 3 credits. Prerequisite, H. Ec. 200.
- H. Ec. 450. **Tailoring.** 3 credits. Prerequisites, H. Ec. 150 and 250.
- H. Ec. 455. **New Developments in Textiles.** 3 credits.
- H. Ec. 460. **Advanced Weaving.** 3 credits. Prerequisite, H. Ec. 260 or permission.
- H. Ec. 470. **Home Management Laboratory.** 5 credits. Prerequisite, H. Ec. 200, 270, 376, 385, and 3rd quarter junior standing.
- H. Ec. 485. **Experimental Foods I.** 2 credits. Prerequisite, H. Ec. 185 and at least 5 hours of chemistry.
- H. Ec. 487. **Experimental Foods II.** 2 credits. Prerequisites, H. Ec. 485.
- H. Ec. 490. **Nursery School.** 3 credits. Prerequisite, H. Ec. 200, 294, and 290 or Psychology 309.
- H. Ec. 491. **Laboratory Experience With Infants.** 3 credits. Prerequisite, H. Ec. 200, Psych. 100, H. Ec. 290 or Psych. 309.
- H. Ec. 492. **Child Care and Family Dynamics.** 3 credits. Prerequisite, H. Ec. 290 or Psych. 309.
- H. Ec. 496. **Individual Study.** 1-6 credits.
- H. Ec. 499. **Seminar in Home Economics Education.** 1 credit.
- H. Ec. 520. **Supervision in Vocational Home Economics Education.** 2 credits.
- H. Ec. 521. **Problems in Curriculum Development in Home Economics Education.** 2 credits.
- H. Ec. 522. **Survey of Literature in Home Economics Education.** 2 credits.
- H. Ec. 530. **Demonstration Techniques.** 3 credits. Prerequisites, H. Ec. 155, 270, 376, 385.
- H. Ec. 536. **Advanced Home Furnishing.** 5 credits. Prerequisites, H. Ec. 156, 365, 377.
- H. Ec. 550. **Recent Developments in Clothing Construction Techniques and Methods of Teaching.** 2 credits.
- H. Ec. 551. **Social Implications of Clothing.** 2 credits.
- H. Ec. 555. **Original Design.** 5 credits. Prerequisite, H. Ec. 150, 155, 156, 250, and Art 170, completion of undergraduate major in Home Economics, or permission of instructor.
- H. Ec. 575. **History of Housing and Furnishing.** 3 credits. Prerequisite, H. Ec. 275, 365, 377.
- H. Ec. 581. **Advanced Family Finance.** 2 credits. Prerequisites, H. Ec. 270, 381.
- H. Ec. 587. **Gourmet Cooking.** 3 credits. Prerequisites, H. Ec. 185, 200, 385, 386.
- H. Ec. 590. **Research in Family Relations.** 3 credits. Prerequisite, H. Ec. 295 and 394.
- H. Ec. 595. **Problems of the Aging.** 2 credits. Prerequisite, H. Ec. 294, 394.
- H. Ec. 599. **Seminar in Home Economics Education.** 1-3 credits. Prerequisite, completed broad area major in Home Economics and teaching experience.



## Journalism

- Journ. 360. Feature Writing and Editorial Writing. 2 credits.  
 Journ. 364. News Photography. 2 credits.  
 Journ. 365. High School Publications. 3 credits.  
 Journ. 369. The Press and Society. 3 credits.

## Library Science

- Lib. 418. Reference in Subject Areas. 4 credits. Prerequisite, Lib. 318.  
 Lib. 420. Reading Materials for Adolescents. 3 credits.  
 Lib. 440. Workshop—or—Clinic. 1 to 6 credits.  
 Lib. 445. Understanding and Application of Library Resources. 3 credits.  
 Lib. 460. Advanced Cataloging and Classification. 3 credits. Prerequisite, Lib. 360.  
 Lib. 470. School Library Administration. 3 credits.  
 Lib. 485. Research and Bibliography. 2 credits.  
 Lib. 490. Historical Survey of Books and Libraries. 3 credits.

## Mathematics

- Math. 311. Statistical Techniques. 3 credits. Prerequisite, Math. 163 or permission.  
 Math. 324. Methods and Materials in Mathematics—Secondary. 3 credits.  
 Math. 356. Introduction to Topology. 3 credits. Prerequisite, Math. 261.2.  
 Math. 376.1, 376.2, 376.3. Applied Differential Equations. 3 credits each course. Prerequisites, Math. 271.3 or permission.  
 Math. 380. Principles of Digital Computers and Programing. 3 credits. Prerequisite, Math. 150, 271.2.  
 Math. 411.1, 411.2, 411.3. Theory of Statistics. 3 credits each course. Prerequisite, 271.3 or permission.  
 Math. 422.1, 422.2. Modern Programs in Mathematics. 3 credits each course. Prerequisite, junior standing or permission.  
 Math. 430. Introduction to Theory of Numbers. 3 credits. Prerequisite, two years of college mathematics or permission.  
 Math. 455.1, 455.2, 455.3. Principles of Geometry. 3 credits each course. Prerequisites, Math. 261.2 (May be taken concurrently.) or permission.

- Math. 461.1, 461.2, 461.3. Abstract Algebra. 3 credits each course. Prerequisites, Math. 261.2. (May be taken concurrently.)  
 Math. 471.1, 471.2, 471.3. Advanced Analysis. 3 credits, each course. Prerequisite, Math. 261.2, (or taken concurrently) 271.3 for 471.2, 471.1 for 471.2, 471.2 for 471.3.  
 Math. 481.1, 481.2, 481.3. Numerical Analysis. 3 credits each course. Prerequisite, Math. 271.3; Math. 380 for Math. 481.1; Math. 376.2 for Math. 481.3.  
 Math. 495.1, 495.2, 495.3. Problem Seminar. 1 to 3 credits each course. Prerequisite, permission.  
 Math. 496, 497. Individual Study. 2-4 credits each course.  
 Math. 498.1, 498.2, 498.3. Seminar. 1 to 3 credits each course. Prerequisite, permission.  
 Math. 551.1, 551.2, 551.3. Topology. 3 credits each course. Prerequisite, Math. 461.3 and 471.3 or equivalent. Permission.  
 Math. 561.1, 561.2, 561.3. Modern Algebra. 3 credits each course. Prerequisites, Math. 461.3, or equivalent and permission.  
 Math. 571.1, 571.2, 571.3. Theory of Analytic Functions. 3 credits each course. Prerequisite, Math. 471.3 or equivalent and permission.  
 Math. 598.1, 598.2, 598.3. Graduate Seminar. 1-3 credits each course. Prerequisite, permission.  
 Math. 599.1, 599.2, 599.3. 1-3 credits each course. Permission.  
 Math. 600. Thesis. 3-6 credits. Prerequisite, graduate standing.

## Music

- Mus. 321. Music Education for the Elementary School. 3 credits. Prerequisite, Music 146 and suitable skill in piano and voice.  
 Mus. 323. Choral Music Education. 3 credits. Prerequisite, Mus. 321 and suitable conducting and performance skill in piano and voice.  
 Mus. 324. Elementary Piano for the Classroom Teacher. 1 credit.  
 Mus. 324. Instrumental Music Education. 3 credits. Prerequisite, Mus. 321 and suitable conducting and performance skill in piano or instrument.  
 Mus. 326. Music in the Classroom. 3 credits.  
 Mus. 327. Song Literature for Elementary Grades. 2 credits.  
 Mus. 340. Form Analysis. 3 credits. Prerequisite, Mus. 246.

- Mus. 341. **Conducting I.** 3 credits. Prerequisite, Mus. 146. Open to music majors and minors only.
- Mus. 342. **Conducting II.** 3 credits. Prerequisite, Mus. 341.
- Mus. 343. **Counterpoint I.** 3 credits. Prerequisite, Mus. 246.
- Mus. 347, 348, 349. **Chamber Groups.** 1 credit each.
- Mus. 350. **Ear Training and Sight-Singing.** 2 credits. Prerequisite, Mus. 146.
- Mus. 354, 355, 356. **Vocal and Instrumental Class Instruction.** 1 credit each.
- Mus. 364, 365, 366. **Applied Music.** 1 credit each.
- Mus. 367, 368, 369. **Choir.** 1 credit each.
- Mus. 367M, 368M, 369M. **Men's Glee Club.** 1 credit each.
- Mus. 367W, 368W, 369W. **Women's Glee Club.** 1 credit each.
- Mus. 377, 378, 379. **Orchestra.** 1 credit each.
- Mus. 387, 388, 389. **Band.** 1 credit each.
- Mus. 418, 419, 420. **Piano Pedagogy.** 1 credit each.
- Mus. 421. **Observation of Music Teaching.** 1 credit.
- Mus. 423. **Rhythms for the Elementary School.** 3 credits. Prerequisite, Mus. 321.
- Mus. 424. **General Music in the Junior High School.** 2 credits. Prerequisite, Mus. 323, or permission.
- Mus. 425, 426, 427. **Methods of Teaching Individual Lessons.** 1 credit each. Prerequisite, permission.
- Mus. 430. **Diction in Singing Foreign Languages.** 3 credits. Prerequisite, permission.
- Mus. 440. **Workshop—; or—Clinic.** 1 to 6 credits.
- Mus. 441. **Keyboard Harmony and Improvisation.** 3 credits.
- Mus. 443. **Counterpoint II.** 3 credits. Prerequisite, Mus. 343.
- Mus. 444. **Canon and Fugue.** 3 credits. Prerequisite, Mus. 443.
- Mus. 446. **The Madrigal Choir.** 3 credits.
- Mus. 447, 448, 449. **Chamber Groups.** 1 credit each.
- Mus. 450. **Literature of Bach.** 3 credits. Prerequisites, Mus. 270, 272, 274, 340, and 343.
- Mus. 452. **Literature of Beethoven.** 3 credits. Prerequisites, Mus. 270, 272, 274, 340, and 343.
- Mus. 458. **Survey of Solo Vocal Literature.** 3 credits. Prerequisite, permission.
- Mus. 464, 465, 466. **Applied Music.** 1 credit each.
- Mus. 467, 468, 469. **Choir.** 1 credit each.
- Mus. 467M, 468M, 469M. **Men's Glee Club.** 1 credit each.
- Mus. 467W, 468W, 469W. **Women's Glee Club.** 1 credit each.
- Mus. 471. **History of Orchestral Music.** 3 credits. Prerequisite, Mus. 270, 272, and 274.
- Mus. 472. **Orchestration I.** 3 credits. Prerequisite, Mus. 340 and 343.
- Mus. 474. **Modern Literature Analysis.** 3 credits. Prerequisites, Mus. 270, 272, 274, 340 and 343.
- Mus. 475. **History of Chamber Music.** 3 credits. Prerequisites, Mus. 270, 272 and 274.
- Mus. 476. **History of Choral Music.** 3 credits. Prerequisites, Mus. 270, 272 and 274.
- Mus. 477, 478, 479. **Orchestra.** 1 credit each course.
- Mus. 480. **Reed Making for Double Reed Instruments.** 1 credit.
- Mus. 481. **Instrument Repair.** 1 credit.
- Mus. 482. **Instrumental Administration Techniques.** 3 credits.
- Mus. 483. **Composition I.** 3 credits. Prerequisites, Mus. 340 and 343.
- Mus. 484. **Band Arranging I.** 3 credits. Prerequisite, Mus. 340 and 343.
- Mus. 485. **The Marching Band.** 3 credits.
- Mus. 486. **Stage Band Arranging.** 3 credits. Prerequisite, Mus. 343.
- Mus. 487, 488, 489. **Band.** 1 credit each course.
- Mus. 490. **Harmonic Analysis.** 3 credits. Prerequisites, Mus. 340, 343.
- Mus. 491. **Choral Interpretation and Techniques.** 3 credits.
- Mus. 492. **Choral Composition and Arranging I.** 3 credits. Prerequisite, Mus. 340, 343.
- Mus. 494. **Elements of Music.** 3 credits. Prerequisite, Mus. 246.
- Mus. 495. **Senior Project.** 2 credits.
- Mus. 496, 497, 498. **Individual Study.** 2 credits each course.
- Mus. 499. **Seminar in Music Education.** 1 to 4 credits.
- Mus. 520. **Methods of Teaching Theory.** 3 credits. Prerequisite, permission.
- Mus. 521. **Methods of Musical Research.** 3 credits.
- Mus. 525. **Administration of College Music Departments.** 3 credits.
- Mus. 530. **Early Keyboard Music Through 1750.** 3 credits. Prerequisite, permission.
- Mus. 533. **Chamber Music Performance.** 3 credits.
- Mus. 535. **Techniques of Musical Analysis.** 3 credits.
- Mus. 541. **Conducting III—Choral.** 3 credits. Prerequisite, Mus. 342, and 491.

- Mus. 545. Modern Counterpoint.** 3 credits. Prerequisite, Mus. 246, 443.
- Mus. 546. Advanced Madrigal Choir.** 3 credits. Prerequisite, Mus. 446.
- Mus. 547, 548, 549. Chamber Groups.** 1 credit each course. Prerequisite, permission.
- Mus. 551. Accompaniment and Song.** 2 credits. Prerequisite, permission.
- Mus. 554D. Advanced Technique Class—Woodwind.** 1 credit.
- Mus. 554E. Advanced Technique Class—Brass.** 1 credit. Prerequisite, one section of Mus. 154E or equivalent.
- Mus. 560. Psychology and Guidance in Music Education.** 3 credits.
- Mus. 561. Opera Workshop.** 2 credits. Prerequisite, permission.
- Mus. 562. Trends in Music Education.** 3 credits.
- Mus. 564, 565, 566. Applied Music.** 1 credit each course.
- Mus. 567, 568, 569. Choir.** 1 credit each course.
- Mus. 567M, 568M, 569M. Men's Glee Club.** 1 credit each.
- Mus. 567W, 568W, 569W. Women's Glee Club.** 1 credit each course.
- Mus. 570. History of Vocal Art.** 3 credits. Prerequisite, permission.
- Mus. 573. History of Opera.** 3 credits. Prerequisites, Mus. 270, 272 and 274.
- Mus. 577, 578, 579. Orchestra.** 1 credit each course.
- Mus. 580. Orchestration II.** 3 credits. Prerequisite, Orchestration I.
- Mus. 583. Composition II.** 3 credits. Prerequisite, Composition I.
- Mus. 584. Composition III.** 3 credits. Prerequisite, Composition I.
- Mus. 585. Band Arranging II.** 3 credits. Prerequisite, Mus. 484.
- Mus. 587, 588, 589. Band.** 1 credit each course.
- Mus. 590. Supervision of Public School Music.** 3 credits.
- Mus. 592. Advanced Choral Composition and Arranging.** 3 credits. Prerequisite, Mus. 492.
- Mus. 596. Individual Study.** 1 to 6 credits.
- Mus. 599. Seminar in the History of Music.** 3 credits.
- Mus. 600. Thesis.** 6 credits.

## Philosophy

- Phil. 301. Indian Philosophy.** 4 credits. Prerequisite, Phil. 207 or consent of the instructor.
- Phil. 345. Ethics.** 5 credits.
- Phil. 346. Aesthetics.** 5 credits.
- Phil. 350. Philosophy of Religion.** 5 credits.
- Phil. 352. History of Western Philosophy I.** 4 credits. Prerequisite, Phil. 207.
- Phil. 353. History of Western Philosophy II.** 4 credits. Prerequisite, Phil. 207.
- Phil. 354. History of Western Philosophy III.** 4 credits. Prerequisite, Phil. 353.
- Phil. 355. Contemporary Thought.** 4 credits.
- Phil. 356. American Philosophy.** 4 credits. Prerequisite, one course in philosophy or permission.
- Phil. 357. Contemporary Analytic Philosophy.** 4 credits. Prerequisite, Phil. 355 or permission.
- Phil. 358. Existentialism.** 4 credits. Prerequisite, Phil. 354 or 383 or consent of the instructor.
- Phil. 360. Introduction to Symbolic Logic.** 3 credits. Prerequisite, Introduction to Logic or consent of the instructor.
- Phil. 361. Theory of Knowledge.** 4 credits. Prerequisite, at least two courses in philosophy or permission of the instructor.
- Phil. 362. Continental Rationalism.** 4 credits. Prerequisite, one course in Philosophy.
- Phil. 363. British Empiricism.** 4 credits. Prerequisite, one course in Philosophy.
- Phil. 380. Plato.** 4 credits. Prerequisite, Phil. 352.
- Phil. 382. Aristotle.** 4 credits. Prerequisite, Phil. 352.
- Phil. 383. Kant.** 4 credits. Prerequisite, Phil. 353. In addition, Phil. 352 is recommended, though not required.
- Phil. 450. Philosophy of History.** 4 credits.
- Phil. 465. Advanced Ethics.** 4 credits. Prerequisite, Phil. 345 or consent of instructor.
- Phil. 467. Philosophy of Education.** 3 credits. (Same as Ed. 467.)
- Phil. 480. Philosophy of Science.** 5 credits. Prerequisites, Phil. 207, senior standing and a science or philosophy minor.
- Phil. 481. Philosophy of the Social Sciences.** 4 credits. (Same as Soc. 481.)
- Phil. 493. Undergraduate Thesis.** 2-2 credits. Prerequisite, advanced standing, and consent of instructor. To be taken in two consecutive quarters. Credit granted at conclusion of 2nd quarter.
- Phil. 496. Individual Study.** 3-6 credits. Prerequisite, g. p. a. of 3.0 in philosophy plus consent of instructor and department chairman.
- Phil. 499.1, 499.2, 499.3. Seminar in Philosophy.** 3 credits each course. Prerequisite, philosophy major or permission.

# Physical Education

- P.E. 301. **Choreography.** 3 credits. Prerequisite, P.E. 201.1 or consent of instructor.
- P.E. 320. **Aquatic Instruction.** 2 credits. Prerequisite, P.E. 45 or current life saving certificate, and 18 years of age.
- P.E. 321. **Football Coaching.** 2 credits.
- P.E. 322. **Wrestling Coaching.** 2 credits.
- P.E. 323. **Basketball Coaching.** 2 credits.
- P.E. 324. **Track Coaching.** 2 credits.
- P.E. 325. **Baseball Coaching.** 2 credits.
- P.E. 326. **Theory and Practice in Sports for Women.** 3 credits. Prerequisite, basic skills, team sports or permission.
- P.E. 327. **Theory and Practice in Dance. (Secondary Level.)** 3 credits. Prerequisites, P.E. 32 and 34, or P.E. 130; or permission.
- P.E. 330. **Methods and Materials for Formal Activities.** 1 credit. Prerequisite, competence in the activities.
- P.E. 331. **Methods and Materials in Individual and Dual Sports.** 1 credit.
- P.E. 332. **Theory and Practice in Dance (Elementary and Intermediate Level.)** 3 credits. Prerequisite, P.E. 130 or permission.
- P.E. 334. **Physical Education Activities for the Elementary School.** 3 credits. Prerequisites (men), international dance, basic skills, or permission; (women), basic skills, team sports, international dance, or permission.
- P.E. 335. **Physical Education Methods for Secondary School.** 3 credits.
- P.E. 336. **Methods and Materials for Teaching Team Sports.** 1 credit.
- P.E. 337. **Methods and Materials for Teaching Aquatics.** 1 credit.
- P.E. 338. **Methods and Materials for Teaching Rhythms.** 1 credit.
- P.E. 339. **Methods and Materials for Teaching Gymnastics.** 1 credit.
- P.E. 348. **Athletic Training.** 2 credits
- P.E. 348W. **Athletic Training for Women.** 2 credits.
- P.E. 352. **Sports Officiating for Women.** 2 credits.
- P.E. 353. **Sports Officiating for Men.** 3 credits.
- P.E. 361. **Physical Education for Handicapped Children.** 3 credits.
- P.E. 423W. **Coaching Women's Basketball.** 3 credits. Prerequisite, P.E. 326 or permission.
- P.E. 440. **Workshop Clinic.** 1 to 6 credits.
- P.E. 442. **Field Work in Physical Education.** 1 to 5 credits.
- P.E. 443. **The Intramural Program.** 2 credits.

- P.E. 444. **Management of Equipment.** 3 credits.
- P.E. 445. **Physical Education Facilities.** 3 credits.
- P.E. 448. **Advanced Athletic Training.** 3 credits.
- P.E. 450. **Sports Education.** 5 credits.
- P.E. 458. **Measurement in Physical Education.** 3 credits.
- P.E. 460. **Safety in Physical Education and Athletics.** 3 credits.
- P.E. 466. **Supervision and Evaluation of Program Planning.** 3 credits.
- P.E. 470. **Trends in Modern Physical Education.** 3 credits.
- P.E. 471. **Philosophy of Elementary School Physical Education.** 3 credits.
- P.E. 480. **Administration in Health and Physical Education.** 3 credits. Prerequisite, P.E. 207.
- P.E. 481. **Public Relations in Health, Physical Education and Recreation.** 2 credits.
- P.E. 499A. **Seminar in Athletics.** 2 credits.
- P.E. 499P. **Seminar in Physical Education.** 2 credits.
- P.E. 521. **Advanced Football Methods.** 3 credits.
- P.E. 523. **Advanced Basketball Coaching.** 3 credits.
- P.E. 524. **Advanced Track Coaching.** 3 credits. Prerequisite, track coaching experience or permission.
- P.E. 525. **Advanced Baseball Coaching.** 3 credits.
- P.E. 526. **Advanced Methods in Women's Team Sports.** 3 credits.
- P.E. 558. **Methods of Research in Health and Physical Education.** 3 credits. Prerequisites, Ed. 362, or P.E. 458, and Ed. 507.
- P.E. 559. **Analysis of Motion.** 3 credits. Prerequisite, P.E. 450.
- P.E. 561. **Dance in Education.** 3 credits. Prerequisite, P.E. 327.
- P.E. 581. **Advanced Administration of Physical Education in High School and Colleges.** 3 credits. Prerequisite, P.E. 480.
- P.E. 596. **Individual Study.** 1 to 6 credits.
- P.E. 599. **Seminar in Philosophy and Literature in Physical Education.** 3 credits.

# Physics

- Physics 324. **Methods and Materials in Teaching Physics.** 3 credits. Prerequisites, Physics 283 or Physics 341 and 344 or by permission.
- Physics 331. **Astronomy I: Solar System.** 4 credits.

- Physics 332. **Astronomy II: Stars and Galaxies.** 4 credits.
- Physics 337. **Meteorology.** 4 credits.
- Physics 341. **Modern Physics.** 4 credits. Prerequisite, Physics 161, 162, 163.
- Physics 344. **Modern Physics Laboratory.** 2 credits. Prerequisite, Physics 341.
- Physics 351, 352. **Mechanics.** 4 credits each course. Prerequisite, Physics 263 or 283 and Math. 271.3.
- Physics 363. **Physical Optics.** 4 credits. Prerequisite, Physics 382.
- Physics 371. **Physical Measurements.** 4 credits. Prerequisite, Physics 161, 162, 163.
- Physics 381, 382. **Electricity and Magnetism.** 4 credits each course. Prerequisite, Physics 263 or 283 and Math. 271.3.
- Physics 384, 385, 386. **Junior Physics Laboratory.** 1 credit each course. Prerequisite, Physics 381, 382, 383. (May be taken concurrently.)
- Physics 395. **Bio. Sci. 395. Impact of Science on Society.** 4 credits.
- Physics 401. **Concepts of Classical Physics.** 3 credits. Prerequisite, open to secondary school teachers.
- Physics 402. **Concepts of Modern Physics.** 3 credits. Prerequisite, open only to secondary school teachers.
- Physics 403. **Experiments in Modern Physics.** 2 credits. Prerequisite, open only to secondary school teachers.
- Physics 441, 442. **Solid State Physics.** 3 credits each course. Prerequisite, Physics 371.
- Physics 454. **Thermodynamics and Statistical Mechanics.** 4 credits. Prerequisites, Physics 352, and Math. 376.3.
- Physics 455, 456. **Atomic and Nuclear Physics.** 3 credits each course. Prerequisite, Physics 471.
- Physics 471. **Quantum Mechanics.** 4 credits. Prerequisites, Physics 352 and Math. 376.3.
- Physics 481, 482, 483. **Mathematical Physics.** 3 credits each course.
- Physics 484, 485. **Senior Physics Laboratory.** 1 credit each course. Prerequisite, Physics 384, 385, 386.
- Physics 496, 497, 498. **Individual Study.** 2-4 credits.
- Physics 499.1, 499.2, 499.3. **General Physics Seminar.** 1 credit each course. Prerequisite, Senior standing in Physics.
- Pol. Sci. 345. **Government, Science and Technology.** 2 credits.
- Pol. Sci. 348. **Contemporary American Political Parties.** 5 credits.
- Pol. Sci. 350. **Introduction to Public Law.** 4 credits.
- Pol. Sci. 352. **Public Administration.** 3 credits.
- Pol. Sci. 353. **The Legislative Process.** 3 credits.
- Pol. Sci. 374. **Modern World Problems.** 5 credits. Open primarily to teachers, or by permission.
- Pol. Sci. 375. **Comparative Political Systems: Asia.** 4 credits.
- Pol. Sci. 376. **International Organization.** 4 credits.
- Pol. Sci. 378. **Comparative Political Systems: Western Europe.** 4 credits.
- Pol. Sci. 379. **Comparative Political Systems: The Soviet Area.** 4 credits.
- Pol. Sci. 384. **International Politics.** 5 credits.
- Pol. Sci. 385. **The Political Development of International Communism.** 4 credits.
- Pol. Sci. 423. **Communism and the School Curriculum.** 2 credits. Open primarily to teachers, or by permission.
- Pol. Sci. 441, 442, 443. **Senior Seminars on American National Government.** 2 credits each course. Prerequisite, senior standing or consent of the instructor.
- Pol. Sci. 444. **Political Campaigns and Elections.** 3 credits.
- Pol. Sci. 448. **Non-Western Political and Economic Organization.** 4 credits.
- Pol. Sci. 461. **Political Theory I.** 4 credits.
- Pol. Sci. 462. **Political Theory II.** 4 credits.
- Pol. Sci. 463. **Political Theory III.** 4 credits.
- Pol. Sci. 465. **American Political Thought.** 4 credits.
- Pol. Sci. 466. **Current Issues of American Democracy.** 3 credits. Open primarily to teachers, or by permission.
- Pol. Sci. 470, 471, 472. **Senior Seminar in International Politics.** 2 credits each. Prerequisite, senior standing or consent of the instructor.
- Pol. Sci. 474. **International Law.** 3 credits.
- Pol. Sci. 475. **Communism in the Developing Areas.** 4 credits.
- Pol. Sci. 476. **Comparative Political Systems: The Developing Areas.** 4 credits.
- Pol. Sci. 480. **Introduction to Constitutional Law.** 3 credits.
- Pol. Sci. 481. **The Constitution and Human Rights.** 3 credits.
- Pol. Sci. 484. **Government and Politics of Southeast Asia.** 2 credits.

## Political Science

- Pol. Sci. 321. **The United Nations in the School Program.** 3 credits. Open primarily to teachers, to others by permission.

- Pol. Sci. 485. **International Relations in the Far East and Southeast Asia.** 4 credits.  
 Pol. Sci. 496. **Individual Study.** 2 credits.

## Psychology

- Psy. 305. **Existential Psychology.** 3 credits. Prerequisites, Psy. 100 and Phil. 207, or departmental approval.
- Psy. 346. **Social Psychology.** 4 credits. Prerequisite, Psy. 100.
- Psy. 347. **Methods of Attitude and Opinion Measurement.** 4 credits. Prerequisites, Psy. 362 and Psy. 346, or departmental approval.
- Psy. 350. **Emotional Growth of Children.** 3 credits. Prerequisite, Psy. 309.
- Psy. 362. **Elementary Statistics.** 4 credits.
- Psy. 373. **Psychology of Thought and Language.** 4 credits. Prerequisite, Psy. 100.
- Psy. 378. **Physiological Psychology.** 4 credits. Prerequisites, Psy. 201 and Zool. 270. Zoology 152 is recommended.
- Psy. 416. **Programed Learning.** 3 credits. Prerequisite, Psy. 310.
- Psy. 420. **Psychology of Reading.** 3 credits. Prerequisite, senior standing.
- Psy. 444. **Tests and Measurements.** 4 credits. Prerequisite, Psy. 362.
- Psy. 445. **Clinical and Counseling Psychology.** 5 credits. Prerequisite, senior standing.
- Psy. 447. **Psychology of Adolescence.** 3 credits. Prerequisite, Psy. 309.
- Psy. 449. **Abnormal Psychology.** 4 credits. Prerequisites, Psy. 309, 205.
- Psy. 450. **Experimental Psychology of Perception.** 4 credits. Prerequisite, Psy. 362, and recommended prerequisite, Zool. 270.
- Psy. 451. **Experimental Psychology of Motivation.** 4 credits. Prerequisites, Psy. 362 and recommended prerequisite, Zool. 270.
- Psy. 452. **Experimental Psychology of Learning.** 4 credits. Prerequisite, Psy. 362 and recommended prerequisite, Zool. 270.
- Psy. 453. **Theories of Personality.** 5 credits. Prerequisite, Psy. 452 or consent of department chairman.
- Psy. 455. **Case Studies in Psychology.** 2 credits. If in Teacher Education student major or minor in Psychology with 10 hours completed. If in Arts and Science, student major in Psychology or minor in education with 10 hours completed.
- Psy. 456. **Personnel Psychology.** 3 credits.
- Psy. 457. **Psychology of Exceptional Children.** 3 credits. Prerequisite, Ed. 343 or permission.
- Psy. 458. **Clerkship in Psychology.** 2 credits. Prerequisite, major in psychology plus 25 hours of psychology.
- Psy. 460. **Counseling Parents of Exceptional Children.** 3 credits. Prerequisite, Spec. Ed. 343 and Psy. 457, or permission.
- Psy. 461. **History and Systems of Psychology.** 5 credits. Prerequisites, Psy. 450 or 451 or 452.
- Psy. 463. **Special Diagnostic Techniques.** 3 credits. Prerequisite, Psy. 205 or by permission of the Psychology department.
- Psy. 467. **Maladjusted Children.** 3 credits. Prerequisite, Psy. 475 and Psy. 205 or permission.
- Psy. 469. **Advanced Psychological and Educational Statistics.** 4 credits. Prerequisite, Psy. 362.
- Psy. 471. **Vocational Development Theory.** 3 credits. Prerequisite, Ed. 358 and recommended prerequisite, Psy. 444.
- Psy. 473. **Experimental Psychology of Thinking.** 4 credits. Prerequisite, Psy. 362.
- Psy. 475. **Instrumentation of Psychological Research.** 2 credits. Prerequisite, one course in experimental psychology.
- Psy. 476. **Comparative Psychology.** 4 credits. Prerequisites, Psy. 201 and Zool. 152, or permission.
- Psy. 477. **Neurological Basis of Behavior.** 4 credits. Prerequisite, Psy. 378 or consent of department chairman.
- Psy. 478. **Experimental Physiological Psychology.** 4 credits. Prerequisites, Psy. 378, Psy. 477, and Zool. 372, or permission.
- Psy. 487. **Group Processes and Leadership.** 3 credits.
- Psy. 488. **Group Dynamics and the Individual.** 3 credits. Prerequisite, Psy. 487.
- Psy. 496. **Individual Study.** 2-6 credits. G. P.A. of 3.0 or above in Psy. and overall; approval of instructor and department chairman.
- Psy. 499. **Seminar in Psychology.** 1-6 credits.
- Psy. 552. **Human Development, Advanced.** 3 credits. Prerequisite, Psy. 309 or consent of department chairman.
- Psy. 559. **Practicum in School Psychology.** 1-15 credits. Prerequisite, permission.
- Psy. 560. **Theories of Counseling.** 4 credits. Prerequisite, Psy. 453.
- Psy. 561. **Group Counseling.** 3 credits.
- Psy. 562. **Theories of Learning.** 5 credits. Prerequisite, Psy. 452 or permission.
- Psy. 563. **Theories of Perception.** 4 credits. Prerequisites, Psy. 450 or permission.
- Psy. 564. **Individual Testing: Child.** 5 credits. Prerequisites, Psy. 205 and Psy. 362, 444.
- Psy. 565. **Individual Testing: Adolescent and Adult.** 5 credits. Prerequisites, Psy. 205, 362 and 444.

- Psy. 566. **Personality Assessment.** 5 credits. Prerequisites, Psy. 364, 444, 453, 565.
- Psy. 567. **Theories of Motivation.** 4 credits. Prerequisites, Psy. 451 or 452.
- Psy. 568, 569. **Experimental Design.** 3 credits each quarter. Prerequisite, Psy. 469.
- Psy. 571. **Family Counseling.** 3 credits. Prerequisites, Ed. 478 and approval.
- Psy. 583.1, 583.2, 583.3. **Supervised Field Experience in School Psychology.** 1 credit each quarter. Prerequisite, graduate in School Psychology.
- Psy. 584.1, 584.2, 584.3. **Supervised Field Experience in Counseling.** 1 credit each quarter. Prerequisite, all course work from M. Ed. or all but Ed./Psy. 600 and at least ½ time employment as counselor.
- Psy. 590.1, 590.2, 590.3. **Current Issues in Psychology.** 3 credits each quarter.
- Psy. 596. **Individual Study.** 1-6 credits.
- Psy. 598.1, 598.2, 598.3. **Seminar in Counseling and School Psychology.** 1 credit each quarter. Prerequisite, permission.
- Psy. 599.1, 599.2, 599.3. **Seminar in Psychology.** 1 credit each.
- Psy. 600. **Thesis.** 6 credits.

## Recreation

- Rec. 321. **Methods and Materials in Recreation.** 5 credits. Prerequisite, Rec. 207.
- Rec. 335. **Playground Leadership.** 3 credits.
- Rec. 442. **Field Work in Recreation.** 1-5 credits.
- Rec. 449. **School Camping.** 3 credits. Prerequisite, Rec. 249.
- Rec. 450. **Outdoor Recreation.** 2 credits.
- Rec. 460. **The School Recreation Program.** 2 credits.
- Rec. 470. **Modern Trends in Recreation.** 3 credits.
- Rec. 480. **Administration of Recreation.** 5 credits. Prerequisite, Rec. 321.
- Rec. 489. **School Camping for the Classroom Teacher.** 2 credits.
- Rec. 499. **Seminar in Recreation.** 2 credits.
- Rec. 571. **Modern Trends in Outdoor Education.** 3 credits.
- Rec. 596. **Individual Study.** 1-6 credits.

## Russian

- Russian 331. **19th Century Russian Literature I.** 4 credits. Prerequisite, Russian 253 or equivalent.
- Russian 332. **19th Century Russian Literature II.** 4 credits. Prerequisite, Russian 331 or equivalent.

- Russian 333. **20th Century Russian Literature I: Pre-Soviet Period.** 4 credits. Prerequisite, Russian 332 or equivalent.
- Russian 334. **20th Century Russian Literature II: Soviet Period.** 4 credits. Prerequisite, Russian 333 or equivalent.
- Russian 361, 362, 363. **Intermediate Conversation and Composition.** 2 credits each quarter. Courses must be taken in sequence. Prerequisite for Russian 361, Russian 263 or equivalent. May be taken concurrently with Russian 331, 332, 333 respectively.
- Russian 455. **Russian Poetry of the 19th and 20th Centuries.** 3 credits. Prerequisite, 8 hours of 300 level Russian literature or equivalent.

## Safety Education

- Safety Ed. 437. **General Safety Education.** 3 credits.
- Safety Ed. 455. **Driver and Traffic Safety Education.** 3 credits.
- Safety Ed. 456. **Driver and Safety Education.** 3 credits. Prerequisite, Safety Ed. 455 and experience.

## Science Education

- Sci. Ed. 322. **Science Education in the Elementary School.** 3 credits
- Sci. Ed. 324. **Science Education in the Secondary Schools.** 3 credits.
- Sci. Ed. 424. **Methods and Materials in Teaching Biology.** 4 credits. Prerequisite, 30 credits in biology and Sci. Ed. 324 or permission.
- Sci. Ed. 440. **Workshop.** 1-6 credits.
- Sci. Ed. 440C.O.E. **Workshop. Conservation and Outdoor Education.** 2½ credits each course.
- Sci. Ed. 442, 443. **Laboratory Experience in Teaching Science.** 2 credits each course. Prerequisite, 15 credits in the science involved and permission.
- Sci. Ed. 496, 497. **Individual Study.** 2-4 credits each course.

## Sociology

- Soc. 346. **Crime and Delinquency in the United States.** 5 credits.
- Soc. 348. **Marriage and Families.** 5 credits.
- Soc. 350. **Social Theory I.** 4 credits.
- Soc. 355. **Culture and Personality.** 3 credits.
- Soc. 360. **The Community.** 3 credits.
- Soc. 367. **Sociology of Religion.** 3 credits.

- Soc. 370. **Social Change.** 5 credits.  
 Soc. 380. **Demography of Ecology.** 5 credits.  
 Soc. 400. **Social Institutions.** 5 credits.  
 Soc. 415. **Urban Sociology.** 4 credits.  
 Soc. 445. **Social Stratification.** 3 credits.  
 Soc. 448. **Political Sociology.** 4 credits.  
 Soc. 450. **Social Theory II.** 4 credits. Prerequisite, Soc. 350.  
 Soc. 455. **Collective Behavior.** 5 credits.  
 Soc. 465. **Methods of Social Research.** 3 credits.  
 Soc. 470. **Contemporary Social Thought.** 4 credits. Prerequisite, Soc. 450 or permission.  
 Soc. 475. **Communication and Human Relations.** 3 credits.  
 Soc. 481. **Philosophy of the Social Sciences.** 4 credits.  
 Soc. 495. **Research Seminar in Sociology.** 2 credits.  
 Soc. 496. **Individual Study.** 2-3 credits. Prerequisite, ten hours or more in sociology.

## Social Science

- Soc. Sci. 420. **Methods and Materials in the Social Sciences—Elementary.** 3 credits.  
 Hist. 421. **Methods and Materials in History—Secondary.** 2 credits.  
 Soc. Sci. 440. **Workshop.** 1-6 credits.  
 Soc. Sci. 521. **Social Science Methods and Materials.** 2 credits. Prerequisite, B.A. degree with graduate guided electives in the social sciences and permission.

## Spanish

- Span. 351, 352, 353. **Survey of Spanish Literature.** 3 credits each quarter. Prerequisite, Span. 253.  
 Span. 361, 362, 363. **Intermediate Conversation and Composition.** 2 credits each quarter. Prerequisite, Span. 263.  
 Span. 426. **Medieval Spanish Literature.** 4 credits. Prerequisite, Span. 351 or equivalent.  
 Span. 427. **Spanish Renaissance Literature.** 4 credits. Prerequisite, Span. 351 or equivalent.  
 Span. 430. **Spanish Romanticism.** 3 credits. Prerequisite, Spanish 353 or equivalent.  
 Span. 435. **Realism and Naturalism.** 5 credits. Prerequisite, Spanish 353 or equivalent.  
 Span. 441. **Spanish Grammar for Teachers.** 3 credits. Prerequisite, 2 years of college Spanish or equivalent.  
 Span. 448. **Cervantes.** 3 credits. Prerequisite, Span. 352 or permission.  
 Span. 450. **The Drama of the Golden Age.** 3 credits. Prerequisite, Span. 352 or permission.

- Span. 451, 452, 453. **Survey of Spanish-American Literature.** 3 credits each quarter. Prerequisite, Spanish 353 or permission.  
 Span. 455. **The Generation of 1898.** 3 credits. Prerequisite, Spanish 353 or permission.  
 Span. 461, 462, 463. **Advanced Conversation and Composition.** 2 credits each quarter. Prerequisite, Span. 363.  
 Span. 496, 497, 498. **Individual Study.** 2 credits each quarter. Prerequisite, Span. 351, 352, 353 or equivalent.

## Special Education

- Spec. Ed. 307. **Introduction to Special Education.** 2 credits.  
 Spec. Ed. 343. **Educating Exceptional Children.** 3 credits. Prerequisite, Psy. 309, or permission.  
 Spec. Ed. 413. **Psychology and Education of the Mentally Retarded.** 4 credits. Prerequisite, Psy. 309, Spec. Ed. 343.  
 Spec. Ed. 414. **Curriculum and Problems of Instruction for the Mentally Handicapped.** 4 credits.  
 Spec. Ed. 415. **Introduction to Causes of Behavior Problems.** 4 credits. Prerequisite, Spec. Ed. 343.  
 Spec. Ed. 416. **Education of Disturbed and Conduct-Problem Children.** 4 credits. Prerequisite, Spec. Ed. 415.  
 Spec. Ed. 418. **Problems of Teaching Trainable Mentally Retarded Children.** 4 credits. Prerequisite, Spec. Ed. 343 or by permission of instructor.  
 Spec. Ed. 421. **Principles of Remedial Education.** 4 credits.  
 Spec. Ed. 422. **Diagnostic Techniques in Remedial Education.** 4 credits. Prerequisite, Spec. Ed. 421, Ed. 322, and Ed. 323.  
 Spec. Ed. 425. **Educating the Slow Learner.** 3 credits. Prerequisite, Ed. 442, teaching experience or permission.  
 Spec. Ed. 429. **Remedial Arithmetic.** 2 credits. Prerequisite, Ed. 314.  
 Spec. Ed. 433. **The Disadvantaged Child.** 4 credits.  
 Spec. Ed. 437. **The Gifted Child and Society.** 4 credits.  
 Spec. Ed. 438. **Remedial Reading.** 3 credits. Prerequisites, Ed. 314 and Ed. 322 or teaching experience.  
 Spec. Ed. 440.0 to 440.9. **Workshop.** 1 to 6 credits.  
 Spec. Ed. 443. **Student Teaching in a Remedial Class.** 5 credits. Prerequisite, Ed. 442, and X-ray examination of chest showing freedom from tuberculosis.



- Spec. Ed. 446. **Directed Observation.** 3 credits. Prerequisite, teaching experience or junior standing.
- Spec. Ed. 448.0, 448.1, 448.2, 448.3, 448.4, 448.5, 448.6. **Practicum.** 3-9 credits. Prerequisite, permission of the Department.
- Spec. Ed. 457. **Psychology of Exceptional Children.** 3 credits. Prerequisite, Spec. Ed. 343 or permission.
- Spec. Ed. 460. **Counseling Parents of Exceptional Children.** 3 credits. Prerequisite, Spec. Ed. 343, Spec. Ed. 457, or permission.
- Spec. Ed. 463. **Special Diagnostic Techniques.** 3 credits. Prerequisite, Psy. 205 or by permission of the Education Department.
- Spec. Ed. 467. **Maladjusted Children.** 3 credits. Prerequisite, Psy. 205 or Spec. Ed. 457 or permission.
- Spec. Ed. 490. **Seminar in Special Education Problems.** 4 credits. Prerequisite, Spec. Ed. 448.
- Spec. Ed. 496, 497. **Individual Study.** 2 credits each.
- Spec. Ed. 499. **Seminar in Special Education.** 4 credits.
- Spec. Ed. 585. **Administration and Supervision of Special Education Programs.** 4 credits. Prerequisite, Ed. 585 or Ed. 587.
- Spec. Ed. 596. **Individual Study.** 1-6 credits.

## Speech and Drama

### General

- Sp. 420. **Teaching Speech in the Elementary School.** 3 credits.
- Sp. 428. **Teaching Speech in the Secondary School.** 3 credits.
- Sp. 440. **Workshop.** 1-6 credits.
- Sp. 443. **Advanced Oral Interpretation.** 3 credits. Prerequisite, Sp. 243.
- Sp. 445. **Psychology of Speech.** 3 credits.
- Sp. 446. **Oral Interpretation of Children's Literature.** 4 credits.
- Sp. 478. **Speech Correction and Classroom Teaching.** 3 credits.
- Sp. 496. **Individual Study.** 2 credits.
- Sp. 507. **Introduction to Graduate Study.** 3 credits.
- Sp. 596. **Individual Study.** 2-4 credits.
- Sp. 600. **Thesis.** 3 or 6 credits.

### Radio and Television

- R-TV. 310, 311, 312. **Practical Radio.** 1 credit each course.
- R-TV. 314. **Radio and Television Announcing.** 3 credits. Prerequisite, R-TV. 215, Speech 282 or consent of instructor.
- R-TV. 315. **Advanced Radio and Television**

- Production.** 3 credits. Prerequisite, R-TV. 215.
- R-TV. 409, 410, 411. **Radio and Television Project.** 1 credit for each quarter.
- R-TV. 420, 421, 422. **Practical Television.** 2 credits each quarter.
- R-TV. 440. **Workshop.** 1-6 credits.
- R-TV. 450. **Radio and Television in Today's World.** 3 credits.

## Rhetoric and Public Address

- Sp. 340. **Classical Rhetoric.** 4 credits.
- Sp. 341. **Medieval and Renaissance Rhetoric.** 4 credits.
- Sp. 342. **Modern Rhetoric.** 4 credits.
- Sp. 345. **Advanced Public Speaking.** 3 credits. Prerequisite, Sp. 201.
- Sp. 350. **Persuasion.** 3 credits. By permission.
- Sp. 441. **Speech Criticism.** 4 credits.

## Speech Pathology and Audiology

- Sp. 364. **Stuttering Theory and Therapy.** 4 credits. Prerequisites, Sp. 277, 282, and 290.
- Sp. 365. **Audiology.** 5 credits. Prerequisites, Sp. 277 and 290.
- Sp. 376. **Articulation.** 4 credits. Prerequisites, Sp. 277, 282, 290.
- Sp. 381. **The Cleft Palate.** 2 credits.
- Sp. 388, 389, 390. **Clinical Practicum.** 2 credits each quarter. Prerequisites, Sp. 277, 282, and one of the following: Sp. 363, 365, and permission.
- Sp. 445. **Psychology of Speech.** 4 credits.
- Sp. 455. **Rehabilitation of the Hard of Hearing.** 4 credits.
- Sp. 460. **Childhood Language Disorders.** 4 credits.
- Sp. 465. **Hearing and Communication.** 4 credits.
- Sp. 467. **Audiometry.** 4 credits. Prerequisite, Sp. 365.
- Sp. 470. **Voice Disorders.** 4 credits. Prerequisite, permission.
- Sp. 480. **Therapy for Aphasia.** 3 credits. Prerequisite, Sp. 379.
- Sp. 491. **Diagnostic Methods.** 4 credits. Prerequisite, Sp. 277, Sp. 378, and six credits in clinical practice, plus recommended prerequisites, Ed. 362 and Psy. 449.
- Sp. 499. **Advanced Anatomy and Neurology of Speech.** 4 credits. Prerequisite, permission.
- Sp. 555. **Psycholinguistics.** 4 credits.
- Sp. 563. **Seminar in Stuttering.** 4 credits.
- Sp. 567.1. **Seminar in Audiometry.** 4 credits.
- Sp. 567.2. **Seminar in Audiology.** 4 credits.

## Theatre and Drama

- Sp. 362. Practice in Creative Dramatics. 3 credits. Prerequisite, Sp. 272.
- Sp. 363.1, 363.2, 363.3. History of Theatre. 3 credits each course.
- Sp. 369. Advanced Acting. 3 credits. Prerequisite, Sp. 269 and/or permission.
- Sp. 371. Greek and Roman Drama. 3 credits.
- Sp. 373. American Drama. 3 credits.
- Sp. 375. Continental European Drama. 3 credits.
- Sp. 429. Advanced Directing. 3 credits. Prerequisite, Sp. 266.
- Sp. 470. Recent Plays. 3 credits.
- Sp. 473. Children's Theatre. 3 credits.
- Sp. 474. Modern British Drama. 3 credits.
- Sp. 475. Continental European Drama. 3 credits.
- Sp. 479. Restoration and Eighteenth Century Drama. 3 credits.

## Technology and Industrial Education \*

- T. I.E. 356. Sheet Metal. 3 credits.
- T. I.E. 357. Welding and Forging. 4 credits.
- T. I.E. 365. Engineering Drawing II. 4 credits. Prerequisite, T.-I.E. 165.
- T. I.E. 371. Shop and Tool Maintenance. 2 credits.
- T. I.E. 374. Basic Electronics. 4 credits. Prerequisite, T.-I.E. 269 or Physics 162.
- T. I.E. 375. Industrial Design. 3 credits.
- T. I.E. 380. History and Philosophy of Industrial Education. 3 credits.
- T. I.E. 430. Principles of Industrial Education. 4 credits.
- T. I.E. 433. Industrial Education Laboratory Planning. 2 credits.
- T. I.E. 440. Workshop. 1 to 6 credits.
- T. I.E. 448. Finishing. 2 credits.
- T. I.E. 450. Advanced Furniture Construction. 5 credits. Prerequisite, T.-I.E. 250.
- T. I.E. 455. General Metals II. 5 credits. Prerequisite, T.-I.E. 255.
- T. I.E. 465. Descriptive Geometry. 3 credits. Prerequisite, T.-I.E. 165 and Math. 163.
- T. I.E. 466. Architectural Drawing. 4 credits. Prerequisite, T.-I.E. 165.
- T. I.E. 474. Intermediate Electronics. 4 credits. Prerequisite, T.-I.E. 364.
- T. I.E. 496, 497, 498. Individual Study. 2 credits each. Prerequisite, approval of the instructor and chairman of the department.

\*See also Crafts.

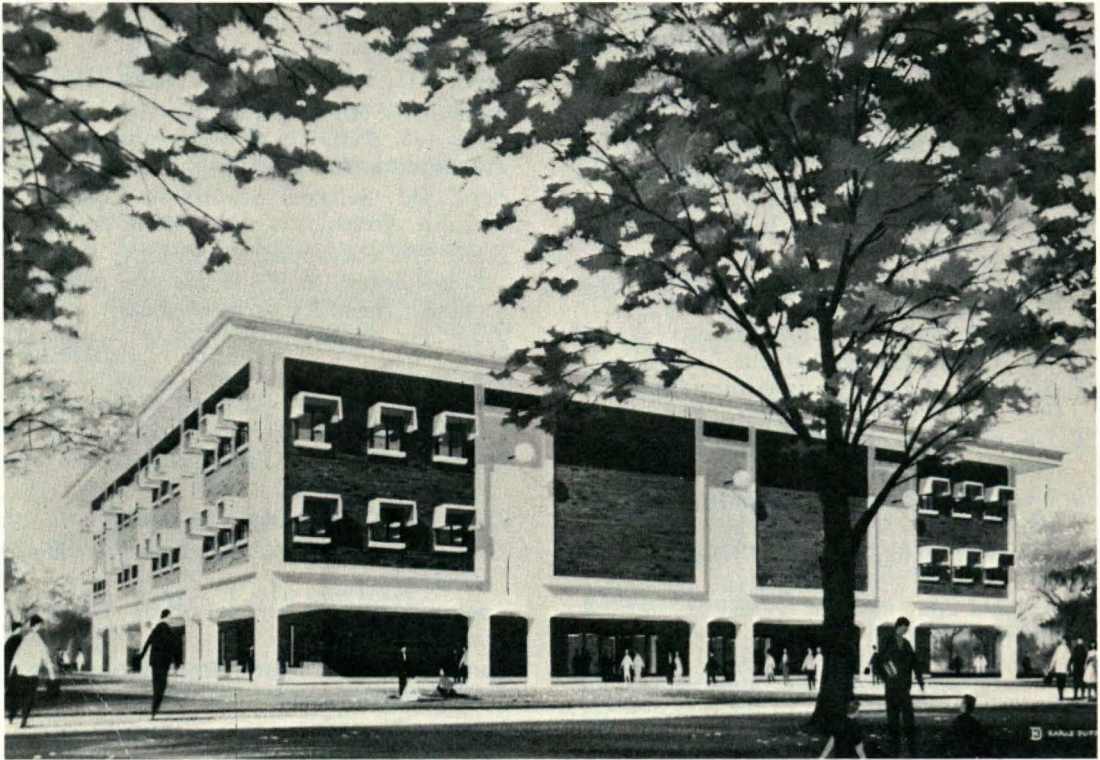
- T. I.E. 550. Advanced Studies in Woodworking. 2 to 5 credits. Prerequisite, T-IE 450.
- T. I.E. 555. Advanced Studies in Metalwork. 2 to 5 credits. Prerequisite, T.-I.E. 357, 455.
- T. I.E. 599. Seminar in Industrial Education. 3 credits.

## Zoology

- Zool. 345. Ornithology. 5 credits. Prerequisite, ten hours of biological science.
- Zool. 348. General Vertebrate Embryology. 5 credits. Prerequisite, Zool. 152.
- Zool. 351, 352. Comparative Anatomy of Chordates. 4 credits each course. Prerequisite, Zool. 152.
- Zool. 361. Advanced Invertebrate Zoology. 5 credits. Prerequisite, Zool. 152.
- Zool. 362. General Entomology. 3 credits. Prerequisite, Zool. 152 or permission.
- Zool. 372. General Physiology. 5 credits. Prerequisites, Zool. 152 and Chemistry 360.
- Zool. 380. Parasitology. 5 credits. Prerequisite, Zool. 152.
- Zool. 381. Protozoology. 4 credits. Prerequisite, Zool. 152.
- Zool. 435. Mammalogy. 5 credits. Prerequisite, Zool. 152.
- Zool. 436. Herpetology. 4 credits. Prerequisite, one year of zoology.
- Zool. 437. Ichthyology. 4 credits. Prerequisite, one year of zoology.
- Zool. 445. Avifauna of Washington. 4 credits. Prerequisite, Zool. 345.
- Zool. 451. Selected Studies in Zoology. 3 credits. Prerequisite, 10 hours of zoology.
- Zool. 470. Advanced Physiology. 5 credits. Prerequisites, Zool. 372 and one quarter of organic chemistry or biochemistry.
- Zool. 471. Histology. 4 credits. Prerequisite, Zool. 152.
- Zool. 472. Natural History of the Vertebrates. 5 credits.
- Zool. 473. Animal Ecology. 4 credits. Prerequisite, Zool. 152 or Bot. 161.
- Zool. 474. Zoogeography. 4 credits.
- Zool. 475. Ethology. 4 credits. Prerequisite, Zool. 372.
- Zool. 496, 497. Individual Study. 2-4 credits each course.
- Zool. 548. Experimental Embryology. 5 credits. Prerequisite, Zool. 348 and Chem. 360 or 362.
- Zool. 600. Thesis. 6 credits.



*Black Hall and Grupe Conference Center*



*New Science Building*

CENTRAL WASHINGTON STATE COLLEGE

Ellensburg

APPLICATION FOR ADMISSION

to
Master's Degree Program

Name ..... Date .....

Maiden Name or Religious Name .....

Permanent Address .....
Street or Box Number City State Zip Code

Date and Place of Birth ..... Telephone No. ....

Colleges or Universities Attended Dates Degrees
.....
.....
.....

Undergraduate Preparation: Major ..... Minor(s) .....

Professional Experience:

Place Dates Position Name of Supervisor
.....
.....
.....
.....

Degree Program to be attempted (M.A., M.Ed., M.S.): .....

Field of Specialization .....

PLEASE COMPLETE THE FOLLOWING:

Date .....

Name .....
Last First Middle Maiden

Address .....
Street or Box Number City State Zip Code

Degree now held ..... Date Granted .....

Name of institution granting degree .....

Have you previously attended C.W.S.C. .... When .....

When do you plan to attend C.W.S.C. .... Quarter ....., 19....

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