

Home Economics  
University of Minnesota Bulletin  
1986-88



# Home Economics

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# Introduction

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## Location

McNeal Hall, which houses the main administrative offices of the College of Home Economics, is located at 1985 Buford Avenue, St. Paul, MN 55108 (612/624-1717).

## Publications

**Bulletins**—This biennial bulletin, the basic source of information about the College of Home Economics, should be kept handy for repeated reference.

The annual *General Information Bulletin* provides a brief overview of the Twin Cities campus and basic costs and regulations. Separate bulletins for the College of Education, College of Agriculture, Graduate School, Summer Session, and other University units are available at the Williamson Hall Information Center, Minneapolis, or in 130 Coffey Hall, St. Paul.

**Class Schedule**—This quarterly publication lists University day school courses complete with hours, rooms, instructors, and prerequisites. It also features details on registration steps, holds, tuition and fees, health service and hospitalization charges, transcripts, final exams, grade definitions, and graduation. In addition, separate preliminary schedules allow long-term planning.

## Policies

**Bulletin Use**—The contents of this bulletin and other University bulletins, publications, or announcements are subject to change without notice. University offices can provide current information about possible changes.

**Equal Opportunity**—The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age, or veteran status. In adhering to this policy, the University abides by the requirements of Title IX of the Education Amendments of 1972; by Sections 503 and 504 of the Rehabilitation act of 1973; by Executive Order 11246, as amended; 38 U.S.C. 2012; by the Vietnam Era Veterans Readjustment Assistance Act of 1972, as amended; and by other applicable statutes and regulations relating to equality of opportunity.

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Inquiries regarding compliance may be addressed to Patricia A. Mullen, Director, Office of Equal Opportunity and Affirmative Action, 419 Morrill Hall, University of Minnesota, 100 Church Street S.E., Minneapolis, MN 55455 (612/624-9547); to the Director of the Office of Civil Rights, Department of Education, Washington, DC 20202; or to the Director of the Office of Federal Contract Compliance Programs, Department of Labor, Washington, DC 20210.

## Postal Statement

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### The Campus and Community

On the Twin Cities campus, College of Home Economics students enjoy the vast academic and cultural opportunities of a world-renowned university as well as those of a major metropolitan area.

**Two Campuses in One**—The Twin Cities campus, the largest and oldest in the University system, is technically two separate campuses linked by an intercampus bus system. The Minneapolis campus is just east of the Hubert H. Humphrey Metrodome; the St. Paul campus is just west of the State Fairgrounds.

The Mississippi River divides the Minneapolis campus into two banks connected by the double-decker Washington Avenue Bridge. Coffman Union and Northrop Auditorium are on either end of the traditional tree-studded mall of the East Bank; across the river, the newer West Bank is home to the main University library and other sleek brick buildings. Just a few miles away is the St. Paul campus, whose quieter location, grassy open spaces, floral gardens, and beautifully wooded areas evoke a small college atmosphere.

**Home Economics**—The College of Home Economics is based in McNeal Hall on the St. Paul campus. Students take most of their professional courses in St. Paul, with free intercampus bus service providing easy access to Minneapolis classes. Those who wish to live on campus may select either St. Paul or Minneapolis as their first preference for a dorm.

Recent expansion and modernization have made the college one of the finest home economics teaching and research facilities in the nation. The Goldstein Gallery provides space for undergraduate, graduate, faculty, and community exhibitions.

About 100 faculty members teach, conduct research, and engage in community outreach—including continuing education—in the area of their special expertise. Undergraduate student enrollment in a typical fall quarter is about 1,400. (Total Twin Cities campus day school en-

rollment is generally around 44,000, including 33,000 undergraduates.)

**A Wealth of Resources**—The Twin Cities campus teems with special programs and facilities—several comprehensive libraries and 40 subject-oriented branches; a Phi Beta Kappa chapter; honors programs; counseling and placement offices; women's and minority centers; health, employment, and legal services; an international travel agency; and much more, all at students' fingertips.

The University's large diverse faculty includes some of the most prominent scholars and teachers in the world—leaders in their professional fields as well as in their classrooms. In addition, countless lecture series bring to campus such luminaries as Norman Borlaug, Jimmy Carter, Geraldine Ferraro, Nikki Giovanni, Coretta Scott King, Lane Kirkland, Jeane Kirkpatrick, Ralph Nader, Jehan Sadat, Alice Walker, and George Will.

**Urban Diversity**—The St. Anthony Park neighborhood alongside the St. Paul campus, and the Dinkytown, Stadium Village, Seven Corners, and Cedar-Riverside areas near the Minneapolis campus, all feature shops and restaurants tailored to students' interests and budgets. Also nearby are newly renovated festival markets like Bandana Square, St. Anthony Main, and Riverplace.

Minneapolis (the largest city in Minnesota) and St. Paul (the state capital) are both flourishing centers of commerce and industry, where grandiose historic buildings complement bold new skyscrapers. Focal points of a unique, progressive metropolitan area of 2 million people, the two downtowns offer myriad opportunities for sightseeing, entertainment, research, volunteer or part-time work, internships, and eventual careers.

**Arts and Entertainment**—The Twin Cities are renowned for innovative and varied cultural attractions, such as the Guthrie Theater, Ordway Music Theater, Orchestra Hall, Science Museum and Om-

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nitheater, Garrison Keillor's *Prairie Home Companion*, and Dudley Riggs' *Brave New Workshop*.

Northrop Auditorium, the campus centerpiece, hosts performances by popular musical and dance artists and outstanding University bands and ensembles. Students can see or star in plays at the Rarig Center, the summertime Showboat, and the Punchinello Players' North Hall Theatre. Or they can savor the University Art Museum or the Minneapolis Institute of Arts, the Minnesota or Como Park zoo, the Renaissance Festival or Valleyfair, the Aquatennial or Winter Carnival.

**Recreation**—Students can balance their academic work with a wide variety of recreational endeavors. The campus features lots of space for everything from frisbee tossing to just plain relaxing. Outdoor enthusiasts can also explore the 150 nearby parks and 200 lakes, ideal for picnicking, hiking, biking, swimming, canoeing, sailing, fishing, roller or ice skating, cross-country or downhill skiing, or simply sitting and staring. The gentle warmth of spring, sunny greenery of summer, and bright crisp colors of autumn do give way to at least three months of winter snow, but even then, daytime temperatures generally average a quite bearable and invigorating 10 to 30 degrees above.

**Sports**—The Rec Sports program, one of the largest of its kind on any campus in the country, offers curling, cycling, racquetball, crew, ballroom dance, juggling, and 100 other teams, clubs, and fitness activities. Big-league sports fans can view Golden Gophers or Vikings football and Twins baseball at the Dome, North Stars hockey and Strikers soccer at the Met Sports Center, and professional horse racing at Canterbury Downs. Numerous women's and men's intercollegiate athletic events also take place right on campus.

# General Information



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## General Information

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The College of Home Economics, through its teaching, research, and outreach activities, is concerned with the functioning of individuals within family and other living units, with policies and programs related to elements of the near environment (design, food and nutrition, textiles and clothing, housing, and human relationships) and with ways people interact with, influence, and are influenced by these elements.

The college offers courses of study for undergraduate, graduate, and nondegree students. Its teaching programs draw upon the broad resources of the University and the metropolitan and statewide communities. The instructional programs reflect the college's commitment to experiential learning and a problem-solving orientation. They are designed to prepare students as skilled and knowledgeable professionals as well as to contribute to their personal growth and ability to participate as responsible members of society.

Research efforts in the college seek to identify and illuminate better ways to address the diverse, interconnected problems and opportunities confronting individuals and family groups. Faculty members work closely with others who have common interests but perhaps differing orientations, both within the college and throughout the University.

Through extension, continuing education, and research efforts resulting from its relationships with the Minnesota Extension Service and the Agricultural Experiment Station, the college serves statewide, national, and international audiences.

Although home economics from its earliest beginnings has recognized the importance of strengthening the family and maintaining a positive home environment, today its contacts reach out more than ever into industry and business, government agencies, and other units of society where the quality of food, nutrition, housing, clothing, design and human relationships are addressed.

The College of Home Economics is based on the Twin Cities campus/St. Paul.

McNeal Hall provides outstanding facilities for the college's teaching and research programs. The Division of Home Economics Education is housed in the new Vocational and Technical Education Building nearby. Research laboratories and offices for faculty in the areas of food science and nutrition are located in the Food Science and Nutrition Building, while work in quantity foods takes place in a section of the Dining Center. The School of Social Work, which became part of the college recently, has offices in Ford Hall on the Minneapolis campus. All locations provide access and facilities for the handicapped.

## Administrative Structure and Programs

The College of Home Economics is organized into five major units—the Department of Design, Housing, and Apparel; Department of Family Social Science; Department of Food Science and Nutrition; Division of Home Economics Education; and School of Social Work. These units provide the courses and the faculty for the college's academic and professional programs. Also an integral part of the college are the Center for Youth Development and Research and the developing Center for Home Economics.

Close ties are maintained with the College of Education through which the Division of Home Economics Education is administered. Undergraduate students planning to major in home economics education begin their studies in the College of Home Economics before applying to the College of Education. They are jointly registered in the two colleges during their junior and senior years.

Based on the premise that home economics is essentially problem-oriented and involves various areas of expertise, the curricula have been organized into programs that are administered by committees composed primarily of faculty members from one or more departments in the college. Programs focus on a major interest area but maintain an interdisci-

plinary approach, drawing from such disciplines as communications, the natural sciences, the social sciences, and the humanities. They are unified by their common focus on human needs and on improving the quality of life for all people. The range of programs offered is designed to serve students interested in highly specialized areas as well as those seeking a general background in home economics. Undergraduate programs are currently offered in the following areas:

Applied Design and Visual Communication  
 Consumer Food Science  
 Costume Design  
 Food Science and Technology  
 Home Economics  
 Home Economics Education  
 Housing  
 Human Relationships: Family, Youth, and Social Services  
 Interior Design  
 International Social Development (collateral area of emphasis)  
 Nutrition and Dietetics  
 Retail Merchandising  
 Technical Communication  
 Textiles and Clothing  
 Youth Studies (collateral area of emphasis)

The collateral area of emphasis, part of the majority of programs offered by the college, makes each student's curriculum unique. It is a sequence of courses designed to act as a supporting field for the major, enhance career opportunities, capitalize on special interests or talents, and help prepare students to respond to newly emerging societal needs with expertise. Some students have used the collateral to prepare for admission to professional schools (law, dentistry, medicine) or to meet specific requirements for admission to graduate programs.

The newest program, Technical Communication, is funded through the College of Agriculture but also available as a major to students in the College of Home Economics.

A sequence of courses in youth studies

and another in international development supplement the degree programs in this college as well as other colleges within the University. Additional information on these and other collateral areas such as journalism, commercial art, business, pre-kindergarten teacher licensure, work with aging, or in home economics extension is available in the college office, 32 McNeal Hall.

Audiotapes describing the college's programs as well as accounts of recent graduates in their new careers are available in the Career Resource Room, 36 McNeal Hall.

## Degrees Offered

**Baccalaureate Degrees**—The major programs in home economics all lead to the bachelor of science degree.

**Postbaccalaureate Degrees**—Professional non-research-oriented degree programs are open to persons who have completed baccalaureate programs in home economics and are interested in building additional professional competence and skills. Of special interest may be the master of education degree, offered by the College of Education and emphasizing home economics education, and the master of agriculture degree, offered by the College of Agriculture and emphasizing a variety of home economics related areas. See the *College of Education Bulletin* or the *College of Agriculture Bulletin* for details.

**Graduate Degrees**—Through the Graduate School, the master of arts, master of science, and doctor of philosophy degrees are offered in design, housing, and apparel; family social science; food science; nutrition; and social work. For information about these programs, see the *Graduate School Bulletin*.

## Admission

Your application to an undergraduate program in the College of Home Economics should be sent to the Admissions Of-



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240 Williamson Hall, 231 Pillsbury Drive S.E., University of Minnesota, Minneapolis, MN 55455. A \$20 nonrefundable application fee, payable to the University of Minnesota, must accompany your application. You may enroll in any quarter or summer term to begin your college work, although you must apply for a specific quarter or term.

Applications must be received by July 15 for fall quarter admission, November 15 for winter quarter admission, February 15 for spring quarter admission, or May 15 for summer admission. Earlier application is advisable so that you can be informed of the special orientation-registration programs available for new students. You are encouraged to attend these programs.

The faculty and staff of the College of Home Economics encourage applications from persons belonging to minority and other groups that have been underrepresented in the college. The college is committed to providing equal opportunity to all who seek access to its programs, facilities, and services; establishing fair educational standards and applying them equitably in making decisions about admission and academic standing; and helping to compensate for inequities in society.

**Freshman Admission**—If you graduated in the upper 50 percent of your high school class and completed 12 units in grades 10 through 12, you may be admitted. The high school courses must include three units in English and one unit each in elementary algebra (accepted if taken in grade 9), plane geometry, and higher algebra. Nine of these units should be in English, social studies and history, mathematics, natural science, and foreign languages. ACT or PSAT scores are also required; they are used as an aid for advising purposes rather than for making admission decisions.

**Admission with Advanced Standing**—To transfer to the University of Minnesota after completing course work at another college institution, you must apply for ad-

mission with advanced standing. Your previous college record—courses taken, credits earned, grade point average—is considered in making the admission decision. Advanced standing applicants must meet the same high school mathematics requirements as freshman applicants. Send the Office of Admissions a copy of your high school transcript so that completion of the mathematics units can be readily verified. Your course work will be evaluated in light of the requirements for the specific undergraduate program you intend to enter.

If you are planning to start your college career elsewhere with the intention of later transferring to the College of Home Economics, program descriptions and curricular requirements presented in the second section of this bulletin should help you select appropriate courses so that the maximum number of credits are accepted when you transfer. For information about transfer of course work, consult your college counselor or write to the Student Services Unit, College of Home Economics, 32 McNeal Hall, University of Minnesota, 1985 Buford Avenue, St. Paul, MN 55108. You may also arrange to meet with an adviser assigned to the program area you plan to enter.

**Change of College Within the University**—To enter the College of Home Economics after being admitted to another unit within the University, apply for change of college through the Office of Admissions and Records on the campus at which you are currently enrolled. You should apply as far in advance of the quarter you wish to transfer as possible. If you have not completed an algebra course at the University, you should have a copy of your high school transcript sent to the Admissions Office, 240 Williamson Hall, to verify that you have fulfilled the admission requirement in mathematics.

You can make a registration appointment with an adviser from the central advising staff by calling the College of Home Economics (612/624-1717).

**Readmission to the College**—If you were previously enrolled in the College of Home Economics and wish to be readmitted, visit the college office, 32 McNeal Hall. Your request will be reviewed by the assistant dean for student affairs.

Students who are readmitted to the college after an absence of more than two years are advised to complete the curricular requirements in effect at the time they reenter. However, those who had completed more than 130 credits at the time they last attended the college may elect to follow either current requirements or those in effect when they were last enrolled.

**Adult Special Admission**—If you wish to register for particular courses to meet special needs rather than to pursue a degree, you may be admitted as an adult special student. Apply through the Admissions Office, 240 Williamson Hall.

If you decide at a later date to seek a baccalaureate degree in home economics, you must file a special application for a change of status with the Office of Admissions and Records. To be admitted as a degree-seeking student, you will be expected to meet College of Home Economics admission requirements.

If you are planning to enter the Graduate School, you should be aware that there is a limit on the number and type of adult special credits that may be transferred to a graduate program. Contact the Graduate School for information.

**Admission to Graduate School**—Refer to the *Graduate School Bulletin*, or call the Graduate School (612/625-3014).

**Admission to Summer Session**—Refer to the *Summer Session Bulletin*, or call the Summer Session office (612/624-3555).

**Senior Citizen Admission**—If you are a Minnesota resident age 62 or older, you may be admitted to University of Minnesota classes when space is available after all tuition-paying students have been accommodated, provided you have completed specified prerequisites. If you take courses on an audit (no credit) basis, there

is no charge unless materials or other special fees are involved. If you take courses for credit, a fee of \$6 per credit as well as any special fees are charged. Eligible persons should contact the Admissions Office, 240 Williamson Hall.

## Expenses

Current information on tuition, fees, and other expenses is published in the quarterly *Class Schedule* and the annual *General Information Bulletin*, available from the Office of Admissions and Records, 130 Coffey Hall, University of Minnesota, 1420 Eckles Avenue, St. Paul, MN 55108.

## Financial Aid

For information about financial assistance, contact the Office of Student Financial Aid, 210 Fraser Hall, University of Minnesota, 106 Pleasant St. S.E., Minneapolis, MN 55455 (612/624-1665).

When applying for financial aid, state that you are a student in the College of Home Economics. Several scholarships administered through the Office of Student Financial Aid are available only to students in this college. Recipients of these scholarships are selected according to academic aptitude, vocational promise, personal attributes, leadership, and, in most but not all cases, financial need.

## Registration

Your first obligation as a student is proper registration. Upon registering and paying fees, you are considered to have completed a contract with the University whereby the individual colleges offering the courses agree to make certain instruction and other facilities available to you and you agree to follow established regulations and procedures. Errors in registration, late registration, failure to observe procedures, or excessive changes in registration not only cause an imposition on others, but are costly and time-consuming.

Quarterly class offerings are listed in the *Class Schedule*, which is published

## General Information

just before the registration period each quarter. Check the *Class Schedule* for prerequisites, limitations on enrollment, special registration procedures, and meeting places and times for courses.

Registration periods begin in late August for fall quarter, mid-November for winter quarter, and mid-February for spring quarter. Continuing students register for summer and fall terms in May.

**Obtaining Registration Materials**—If you are enrolling in the College of Home Economics for the first time (as a freshman, new advanced standing, or transfer within the University student), you will receive a letter informing you of a date and place for your first program planning and registration meeting. An adviser will be assigned to help you plan your schedule of courses.

As a continuing student, you will receive registration instructions at your current mailing address prior to the first day of registration for the upcoming term. Registration materials may be picked up in the college office, 32 McNeal Hall.

Much of the inconvenience associated with registration can be avoided by carefully following instructions in the quarterly *Class Schedule*.

**Working with your Adviser**—Your faculty adviser approves your course selections, follows your academic progress, and offers assistance with other aspects of your college career. You will work with a central adviser in 32 McNeal Hall until you have satisfactorily met admission requirements, completed about 45 credits, and selected a major. Then you will be assigned to an adviser in your major. Transfer and advanced standing students work with a central adviser during initial registration or until all transfer credits have been evaluated and admission requirements met. Pre-home economics education students remain with a central adviser until joint registration with the College of Education has been approved. They are then assigned to an adviser in their program area.

You are expected to take the initiative in keeping your adviser informed of your academic progress. Before meeting to have your registration approved, you should develop a tentative program for the quarter. Use the curriculum requirements and course descriptions in this bulletin and the *Class Schedule* as a guide.

**Program Clearance Sheet**—When you enroll in the college for the first time as a regular student, a program clearance sheet itemizing all requirements for your major program will be placed in your academic file. Each quarter, as grades are reported, you and your adviser will update the clearance sheet by including course work completed.

If you completed any college work before enrollment, it will be evaluated and entered on the program clearance sheet with an indication of how it was accepted for transfer to your major. If you change majors, a new clearance sheet must be substituted for the initial one.

When you apply for your degree, the clearance sheet must be attached to a current copy of your transcript and submitted to the college office, 32 McNeal Hall, for final approval. (See item on Graduation in this bulletin.)

**Repeating a Course**—You must repeat any required course in which you received a W or an N grade. You may repeat any course in which you received a D grade. When you repeat a course, the grade from the second attempt is entered on the transcript; the higher grade is used when computing the grade point average. W, D, and N grades from the first attempt remain on the transcript.

**Extra Credit Registration**—There may be times when you would like to work independently and complete extra work in order to receive additional credits in a course. Extra credit registration is designed to provide the opportunity to earn from 1 to 3 additional credits through more intensive study of a topic in a regular course or an extension of study in a closely related topic. Extra credit may be

earned by completing additional work concurrently with the regular work for a course or after you have taken the course. This special registration requires approval of the instructor. The usual regulations concerning fees, grades, and cancellations apply.

To register for extra credit, pick up a registration override form at the college office, 32 McNeal Hall, or from the department office. Have the form signed by the instructor and submit it with your other registration materials. Registration for extra credit should be designated by an X after the course number (e.g., Dsgn 1523X) and accompanied by a special course call number provided by the department.

**Independent Study Registration**—To encourage self-directed learning, certain courses in the college may be taken through independent study by following the syllabus of a course without attending classes. Independent study courses are considered part of your credit load and carry the usual fees. You are expected to take the final examination, if one is required, at the regular time (or at a time set by the instructor), and to meet deadlines for any other required work. This special registration requires approval of the department and the instructor. The usual regulations concerning grades, incompletes, and cancellations apply.

To register for independent study, pick up a registration override form at the college office, 32 McNeal Hall, or in the department office, and have it approved by the department offering the course. In most cases you will also have to confer directly with the instructor for permission to register for independent study. The override form must be submitted with your other registration materials. Independent study registration should be designated by a Y after the course number (e.g., FScN 3600Y) and accompanied by a special course call number provided by the department.

**Cancelling and Adding Courses**—When you register for a course, you enter

into an agreement that you will complete the work for which you are enrolled. Any change in registration must be officially recorded. The steps for either canceling or adding a course are listed below.

1. Obtain a course request form from the college office, 32 McNeal Hall, or from the Records Office, 130 Coffey Hall.

2. Obtain any necessary signatures (see below).

3. Submit the form to 130 Coffey Hall.

During the first week of a quarter, you may add a course with the approval of your adviser; if the course has been listed as closed, you will also need the instructor's approval. After the first week of the quarter, you need the approval of both your adviser and the instructor to add a course, and after the eighth week, the college office as well.

Cancellations after a quarter has begun are discouraged. They are often costly in terms of time and money, and perhaps more important, often deny other students places in classes.

During the first two weeks of a quarter, you may cancel a course without grade (W) with your adviser's approval. (The course does not appear on your transcript if it is cancelled in the first two weeks.) After the second week of the quarter, you need the approval of both your adviser and the instructor to cancel a course. If you cancel a course after the sixth week, you will also need the approval of the college office. If you are doing failing work at the time, you may receive a grade of N instead of a W. You must submit documentation of unusual circumstances in order to cancel during the last two weeks of the quarter.

**Cancelling Out of College**—If you decide, before the quarter begins, not to attend, cancel before the first day of classes to receive a full refund. If you stop attending class and do not plan to continue, cancel immediately. Cancellations are effective the day you officially cancel, not on the day you stopped attending classes. Tuition refunds are prorated according to the amount of time you attended class.

## General Information

### Credit

**Credit Load**—The average course load is 14 to 16 credits per quarter. If you are employed or have other outside commitments, you may need to take a lighter load. You must carry a minimum of 12 credits per quarter to be classified as a full-time student. To take more than 18 credits a quarter you must have a C (2.00) average. To carry more than 21 credits you must have a B (3.00) average in the work of the previous quarter and must obtain permission from the Student Scholastic Standing Committee.

**Credit from Extension Classes**—Generally, undergraduate degree courses offered through Continuing Education and Extension (CEE) are accepted for full credit and grade value by the College of Home Economics. To register for courses through CEE, obtain a registration form from 101 Westbrook Hall (612/625-3333). You must officially transfer credits and grades earned for CEE courses in order for them to appear on your transcript. Make your request for such transfer through the Records Office, 130 Coffey Hall, in writing or in person.

**Credit by Special Examination**—If you believe your knowledge of a subject is equal to that required to complete a particular course, you may, on an individual basis, request a special examination for either proficiency or credit. Check with the college office, 32 McNeal Hall.

The University grants both credit and advanced placement based on scores earned in the English and humanities tests of the College Level Examination Program (CLEP). Apply to take the CLEP tests at 101 Eddy Hall, Minneapolis. The college faculty accepts scores above the 75th percentile in the CLEP English examination in lieu of the Rhet 1101 requirement for the undergraduate programs. Scores in the CLEP humanities examination above the 75th percentile earn credits that may be applied toward the liberal education distribution requirements for category D, Literature, Humanities, and Fine Arts.

**Credit through Cooperative Education**—Cooperative education integrates practical work experience with academic study. You can earn 2 to 15 credits, depending on your program area, through a preplanned work experience related to your professional program. For further information, contact the Career Services Center, 37 McNeal Hall (612/624-2742).

**Residence Credit Requirement for a Baccalaureate Degree**—You may earn a bachelor of science degree in the College of Home Economics by completing all degree requirements in a selected program, including a minimum of 45 credits while registered in this college.

**Credit for a Second Major or Minor**—To qualify for a second major in the College of Home Economics or a major or minor in another college of the University, inquire at the college office, 32 McNeal Hall (612/624-9764).

### Grading

**A-N and S-N Systems**—The University uses two grading systems: the traditional letter grade (A-N) system and the satisfactory-no credit (S-N) system. When you register you must choose the grading system under which you want your class performance to be evaluated. The grading system must be declared at the time of registration and may not be changed after the first week of the quarter without the approval of your adviser and instructor. After the sixth week you must also have the approval of the college office.

Under the A-N system, students may satisfactorily complete a course by earning grades of A, B, C, or D. Students whose work is below the D level receive an N (no credit). For computation of the grade point average (GPA), each credit of A is equivalent to four grade points; B, three grade points; C, two grade points; and D, one grade point. The GPA is computed by dividing the total number of grade points earned by the total number of A, B, C, and D credits earned.

The S-N system is designed to allow students to explore a greater variety of course work while freed largely from the pressure of grades. Under this grading system instructors determine their own criteria for satisfactory work in a course. The S is not tied to any letter grade equivalent in the A-N system. Under the S-N system S stands for "satisfactory" and N for "no credit." S and N grades do not carry grade points and therefore are not included when computing the grade point average; credits of S are, however, counted toward the total credits required for graduation. The following restrictions apply to the use of the S-N system:

1. Courses that are listed in your curriculum by department designator and number (e.g., Rhet 1101) must be taken under the A-N grading system. Courses that are used to fulfill a credit requirement for your curriculum (e.g., minimum of 9 credits in the following) may be taken S-N. However, all professional courses in the major (category E) must be taken A-N unless otherwise indicated.

2. Baccalaureate candidates from the college may present a maximum of 25 percent of the residence credits offered for their degrees in courses in which they received grades of S.

3. The S-N system is available to students of the college irrespective of their academic standing.

4. Students may take only one course per quarter on the S-N grading system until they have completed 36 credits. This restriction does not include courses offered on the S-N system only.

5. A course for which a student has previously registered on the A-N system may not be taken at a later date on the S-N system.

Your adviser or the college office will offer assistance if you have questions about the use of the S-N system.

The quarterly *Class Schedule* contains complete definitions of grades and the supplementary symbols W (withdrawal), I (incomplete), X (sequence course), V (visitor or auditor), and T (transfer credits).

**Academic Records and Grade Reports**—Your official grade record is kept by the Records Office. It indicates the outcome of every registration and shows all passing grades, N grades, incompletes, and withdrawals.

Fall and winter quarter grade reports are distributed at the beginning of the next quarter in the college office, 32 McNeal Hall, upon presentation of your student identification card. An official transcript, which includes your spring quarter grades, is mailed to you each summer from the Records Office.

If you have any questions about grading symbols and transcripts, contact the Office of Admissions and Records, 130 Coffey Hall.

**Access to Student Educational Records**—In accordance with regents' policy on access to student records, information about a student generally may not be released to a third party without the student's permission. The policy also permits students to review their educational records and to challenge the contents of those records.

Some student information—name, address, telephone number, dates of enrollment and enrollment termination, college and class, major, adviser, academic awards and honors received, and degrees earned—is considered public or directory information. To prevent release of such information outside the University while in attendance at the University, students must notify the records office on their campus.

Students are notified annually of their right to review their educational records. The regents' policy, including a directory of student records, is available for review at the Information Booth in Williamson Hall, Minneapolis, and at records offices on other campuses of the University. Questions may be directed to the Office of Registration, Student Records, and Scheduling, 150 Williamson Hall (612/625-5333).

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## General Information

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### Honors Program

The Honors Program was approved by the college faculty in March 1984. It is designed for highly motivated students whose academic potential has already been demonstrated and who wish to participate in stimulating learning experiences utilizing the faculty and research facilities of the college.

To be eligible, you must have (1) declared a major in the College of Home Economics, (2) completed at least 90 credits, (3) completed a minimum of 12 credits at the University of Minnesota with a GPA of 3.50 or above, and (4) have at least four quarters remaining before graduation.

Eligible students are encouraged to apply. Application forms are available in 32 McNeal Hall.

### Dean's List

The Dean's List is posted quarterly on the bulletin board in the lobby of McNeal Hall. To be named to the Dean's List you must earn 12 credits of A; any additional credits that quarter must be A or S.

### Satisfactory Progress

You are expected to complete a minimum of 50 percent of the courses you attempt each quarter and a minimum of 75 percent you attempt each year with grades of A, B, C, D, or S. These percentages apply to credits for which you were registered after the tenth day of class each quarter. An overall grade point average of 2.00 (C) is also required. Some undergraduate programs require specific grade point averages in courses for the major.

Students who do not achieve and maintain these standards are considered by the Student Scholastic Standing Committee and may be advised to reevaluate their academic goals. The accumulation of substandard grades or an excessive number of withdrawals diminishes the student's likelihood of graduation or of transferring to another institution.

The Student Scholastic Standing Committee evaluates each individual case on

the basis of all evidence presented and recommends continuance or suspension. You may appeal the recommendation through the Student-Faculty Complaints Committee if you think that additional information may modify the decision.

Students are encouraged to seek help from advisers, instructors, and the University Counseling Services (190 Coffey Hall), which maintains a Reading and Study Skills Center and also provides personal and career counseling. If you feel you are having difficulties, check with your instructor, adviser, or a staff member in University Counseling Services immediately rather than waiting until you receive a low grade.

### Student Scholastic Conduct

The College of Home Economics is proud of its long-standing tradition of mutual trust and respect among its students, faculty, and administration, who have worked together to achieve a climate of learning characterized by honesty.

The college defines scholastic misconduct to include cheating on assignments; acquiring or using test materials without faculty permission; plagiarizing (representing as a student's own work any part of what was done by another person); submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials or otherwise interfering with another student's work; falsifying a record; or any other act that violates the academic rights of another student or involves misrepresentation of a student's own work. The policy for dealing with apparent scholastic misconduct and the reporting, hearing, and appealing procedures are outlined in a college brochure, "Policy and Procedures Concerning Scholastic Misconduct," distributed annually to all students and available in the college office, 32 McNeal Hall.

## Petitions and Appeals

**Petitioning**—If you need to request permission to depart from usual procedures and regulations, you must complete a petition form available at the college office, 32 McNeal Hall, or at the Admissions Office, 130 Coffey Hall. Consult your adviser about writing the petition and for approval. Present your petition to the college office before the fifth week of the quarter for a decision by the Student Scholastic Standing Committee. You may pick up your copy of the decision in the college office after the sixth week of the quarter.

**Student Scholastic Standing Committee**—The college's Student Scholastic Standing Committee is composed of seven faculty members and two students. The committee interprets and enforces faculty policy concerning academic regulations and requirements. It makes final decisions in evaluating transfer credits in light of the aims of the college and the requirements of the various curricula. The committee is also authorized to consider alternative ways of meeting those requirements when permission to depart from normal procedures is requested.

**College of Home Economics Appeals Committees**—When you have problems or questions, your adviser, the program chairpersons, the department heads, members of the Home Economics Student Board, or personnel of the college office are good sources of information and support.

Should you encounter a situation in which you question some aspect of the college program, you may wish to carry your concern to your adviser, department head, the College of Home Economics Academic Freedom and Responsibilities Appeals Committee, or the College of Home Economics Student-Faculty Complaints Committee. The committees, composed of faculty and student members, are organized to resolve problems that cannot be handled through usual channels. The college office can provide information about appeals procedures.

## Graduation

**Requirements**—To be recommended for graduation as a candidate for the bachelor of science degree, you must:

1. Complete the prescribed curriculum, including required and elective courses and total credits required, as specified in your degree application.
2. Earn a minimum cumulative grade point average of 2.00 and the specific minimum GPA in certain courses as spelled out in the program requirements, with at least 45 credits in the college.
3. Meet the general University requirements for graduation as indicated in the *General Information Bulletin*.

**Application**—Graduation application deadlines are established by the Records Office and are published as part of registration information materials distributed to students.

In the first quarter of your senior year, request your updated clearance sheet from your adviser. Submit it with a current transcript to the college office for approval; you can pick it up one week later. (See deadlines listed below.) Your approved clearance sheet must accompany your degree application.

<i>Term you plan to graduate</i>	<i>Clearance Sheet to 32 McNeal</i>	<i>Degree Application to 130 Coffey</i>
	On or Before	On or Before
SSI or SII	April 1	April 15
Fall	April 1	April 15
Winter	October 1	October 15
Spring	December 1	January 15

The degree application initiates the preparation of the senior balance sheet listing the total number of credits accumulated, the required courses that remain to be completed, and any deficiencies that must be removed before the degree can be granted.

**Program Update**—If, after filing for your degree, you find that minor changes occur because you are not able to register for courses listed on your clearance sheet, you must submit a program update form.



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## General Information

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Your adviser must approve of any changes and mail the program update form to the Records Office, 130 Coffey Hall.

**Commencement**—The college holds its commencement exercises during the last week of classes in the fall (for fall and winter graduates) and in spring quarter (for spring and summer graduates). The college office informs graduating seniors of important facts concerning the graduation ceremony for a given quarter. If your graduation date changes from that indicated on your degree application, it is your responsibility to inform the college office and the Records Office of this change.

**Honors**—To be eligible to graduate "with distinction" from the College of Home Economics, you must rank in the top 10 percent of your class scholastically. To be eligible to graduate "with high distinction," you must rank in the top 3 percent of your class. The Records Office identifies graduating seniors who qualify for these honors based on the cumulative grade point average for courses completed at the University of Minnesota.

### Student Personnel Services

**College Information Desk**—The receptionist at the college information desk in the college office, 32 McNeal Hall, will assist you in securing information about the programs and activities of the College of Home Economics. College bulletins and brochures describing the various curricula are available. You will be referred to appropriate staff members for answers to specific questions.

**Student Mailboxes**—When you initially register, the college office will assign you a mailbox located in the main lobby of McNeal Hall. New mailbox numbers are issued at the beginning of each academic year.

The mailboxes are not used for U.S. mail but serve to bring you important communications from your adviser, instructors, the Career Services Center, the college office, student organizations, and

other students. You are expected to check your mailbox frequently.

**Student Services Office**—The Student Services office has one major concern: to provide needed services for the students in the College of Home Economics. The office processes admission applications of high school students, new advanced standing students, and students who transfer from other colleges within the University. The Student Services office maintains files on all students, acts as the agent for the Student Scholastic Standing Committee, maintains contact with prospective students, and coordinates undergraduate advising, student governance, and career development activities.

**Career Services Center**—To help students secure employment during their academic career or following graduation, the Career Services Center, 37 McNeal Hall, announces openings for full-time and part-time jobs, assists in arranging interviews with employer representatives, offers seminars and workshops on career preparation skills, and maintains a Career Resource Room, 36 McNeal Hall. Staff members are available to discuss and offer assistance with career choices and employment opportunities. During the year the center sponsors programs dealing with various career planning topics. For questions concerning career and job opportunities, call 612/624-2742.

A part of the Career Services Center is the Cooperative Education Program, which encourages students to participate in a preplanned work experience related to their professional studies. This program coordinates student work experience activities. Individuals who would like to participate in a co-op program should contact the program office, 37 McNeal Hall (624-2742).

Additional placement services are available to students in home economics education through the Education Student Affairs Office of the College of Education, 1425 University Avenue S.E., Minneapolis, MN 55414.

### Student Organizations

**Home Economics Student Board**—The major objectives of the Home Economics Student Board are to initiate, promote, and coordinate activities of home economics student organizations and to serve as a liaison between students and faculty in order to achieve the goals of the college. Board members facilitate communication between the student body, faculty, and administration through their representation on college committees and through the publication of the quarterly student newsletter.

The Home Economics Student Board consists of five elected officers plus representatives from the following groups: the five curricular areas in the college, the freshman class, new advanced standing students, the three home economics organizations (Omicron Nu, Phi Upsilon Omicron, and the Home Economics Association), the St. Paul Board of Colleges, and the Student Center Board. All students in the college are eligible to file for a position as an officer or as a representative of one of the curricular areas: design/housing and apparel, food science and nutrition, human relationships, home economics education, and home economics. Elections are held during spring quarter. You can keep informed about the board's activities and its current membership by checking notices on the student bulletin board in McNeal Hall or by inquiring at the college office, 32 McNeal Hall. Meetings are open to all students in the college. Student members of college committees automatically become non-voting members of the Home Economics Student Board.

**Other Home Economics Student Organizations**—Many of the undergraduate programs sponsor student clubs. Honor societies and professional organizations periodically hold elections to invite selected students to membership. Membership and participation in student organizations can add a valuable dimension to your academic program and contribute a great deal to your professional development.

Check with the chairperson of your program and with your adviser about these organizations.

If you want to become involved in college organizations, consult the assistant dean for student affairs, 32 McNeal Hall.

**Freshman Board**—This group gives you an opportunity to learn about the University—its organization and administration, its governance and procedures, and student roles in decision making. Freshman students may apply for membership during the orientation-registration program in August or during Welcome Week in September. Freshmen are invited to become members each fall. For further information, inquire at the Student Affairs office, 190 Coffey Hall.

**St. Paul Campus Board of Colleges**—The St. Paul Campus Board of Colleges directs and coordinates student activities and encourages student leadership throughout the St. Paul campus. Its membership is drawn from all major areas of the colleges of Agriculture, Forestry, Home Economics, Veterinary Medicine, and Biological Sciences.

The board cooperates with the Twin Cities Student Assembly (TCSA) and the Senate Committee on Student Affairs. It brings questions from the student body to the administration of its member colleges and discusses and reaches decisions on matters of general interest. As a student in the College of Home Economics, you may file for election to the board. Inquire at the Student Affairs office, 190 Coffey Hall, for more information.

**Student Center Board of Governors**—The St. Paul Student Center sponsors a wealth of social, cultural, and recreational activities and contributes in many ways to the educational objectives of the campus. You are encouraged to participate in these varied activities. Students representing the academic units on the St. Paul campus are elected to the Board of Governors, which formulates policy for the operation of the Minnesota Unions and establishes its budget. For information about the Stu-

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## General Information

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dent Center, its operation, and opportunities to serve on its various planning and programming committees, inquire at the information desk, room 42 of the Student Center.

**Student Representation on College and University Committees**—All College of Home Economics committees and most all-University committees have student representatives and welcome student interest in their activities. Watch for announcements about filing for positions in the *Minnesota Daily* and on bulletin boards around the campuses.

# Programs



# Programs

## Liberal Education Distribution Requirements

Programs in the College of Home Economics are designed to meet distribution requirements that contribute to the liberal education of all students, whatever their major or professional goals. In the broadest sense, a liberal education frees us from the limitations that ignorance places on our powers of judgment and choice. More specifically, a liberal education asks of us that we seek control over the general intellectual instruments for acquiring and communicating knowledge, primarily through the command of language and numbers; understanding of the ways in which natural science has contributed to our knowledge of ourselves and our environment; behavioral, historical, and philosophic perspective on the nature of our own lives and the world in which we live; and appreciation of the creative insights into life and nature provided by literature and the arts.

For *electives* in any of four liberal education categories, refer to the following list of suggested courses. (Note: Courses listed have few or no prerequisites. Some programs require more than the minimum number of credits designated for certain categories below because they serve as preparation for major requirements.) When a course is listed in your chosen program—described later in this section—by department and course number, you must complete that specific course.

### A. Communication, Language, Symbolic Systems (18 credits minimum)

#### 1. English and Foreign Language Communication Skills

Rhet 1101, 1104, 1147, 1151, 1220, 1222, 1226, 1251, 1500, 1506, 3101, 3254, 3257, 3266, 3562, 5551, 5561

Spch 1101, 1102, 3605

Foreign Languages—all beginning courses

#### 2. Linguistics, Logic, Philosophic Studies

Ling 1001, 3001

Phil 1001

#### 3. Mathematics, Computer Science, and Statistics

CSci—all courses

Math—all courses

Stat—all courses

### B. Physical and Biological Sciences (9 credits minimum)

#### 1. The Physical Universe

Ast 1011, 1015

BioC 1301-1302, 1303

Chem 1001-1002, 1003, 1004-1005, 1006

GC 1111, 1112, 1161, 1163, 1171

Geo 1001, 1002, 1005, 1111

Phys 1001, 1005, 1041-1042, 1061, 1065

#### 2. The Biological Universe

Biol—all courses

Bot 1009, 1012

FSaN 1012, 1020, 3600

GC 1131, 1132, 1137

GCB 3002, 3008, 3022

MicB 3103

Phsl 1002, 3051

### C. The Individual and Society (9 credits minimum)

#### 1. Analysis of Human Behavior and Institutions

Afro 1015, 1025, 3061, 3072, 5001, 5101

AgEc 1020, 1030, 5580

AmIn 3026, 3131, 5411

AmSt—all courses

Anth 1101, 1102, 3131, 5102, 5141

Chic 1105, 1106, 1107, 3210, 3441, 3615, 3617

CPsy 1301, 3303, 3304, 3311, 3331, 3332

Econ 1001, 1002

FSoS 1001, 1002, 1025, 5001, 5200, 5202, 5210, 5255

Geog 1301, 1973, 5101, 5102

Hsg 5801, 5865, 5866

Pol—all courses

Psy—all courses

Soc—all courses

SW 1001, 3004, 3005, 3984, 5349

TexC 3661, 5622, 5661, 5662, 5668

#### 2. Historical and Philosophic Studies

Afro 1441, 3011

AmIn 3026, 3036, 3111, 3112, 3211

AmSt 3111, 3112, 3113

Hist—all courses

Phil 1002, 1003

### D. Literature, Humanities, and Fine Arts (9 credits minimum)

#### 1. Literature and the Humanities

AmIn 3116

AmSt 5101

Chic 3507, 3508, 3511

Clas 1042, 3073, 3082

Engl—all literature courses

Hum—all courses 1001 through 1101, 3301

Rhet 1301, 1302, 1303, 1376, 1401, 1424, 1425, 1442, 3370, 3374, 3380, 3381

Foreign Languages—all literature courses

#### 2. The Arts (non-studio courses)

Afro 1301, 3055, 3101, 3102, 3105, 3108, 3301, 3601

AmIn 3221, 3242, 5251

Arch 1001, 1021, 1022

ArtH—all courses

ArtS 1401

Chic 3213

Dsgn 1501, 3517, 5507, 5509, 5512, 5514, 5515, 5518

Mus 1001, 1021, 1804, 3021, 5027, 5028, 5029, 5804  
 TexC 3663  
 Th 1101, 1102

Because of numerous changes that occur in course numbers, titles, content, and credits, an accurate list of courses that fulfill each of the above categories is difficult to maintain. For an updated list of suggested courses and for approval of courses not on this list, consult your adviser or contact the college office, 32 McNeal Hall (612/624-1717).

## Applied Design and Visual Communication

This program is appropriate for the student who welcomes the challenge and responsibility involved in planning an interdisciplinary course of study in applied design in consultation with an adviser. The program incorporates a broad base of design course work, an area of specialization, and supporting work in collateral areas of study. Students complete studio work in applied design and visual communication. Coordinated field assignments give the student the opportunity to acquire practical work experience in graphic, fiber structure, surface fabric, and exhibition and display design.

Graduates may choose to pursue further study or may begin directly in an entry-level position in the field. Graduates may find successful careers in arts administration, design education, design retailing, fiber-fabric design, graphic design, and other work in two- and three-dimensional design. For those planning graduate study, this program provides a good foundation in applied design, color and design, visual communication, decorative arts, history of design, and museology.

Students must achieve a minimum grade of C in design courses listed under E and must complete all required 1000-level courses (including liberal education requirements) before taking 3000-level courses.

### A. Communication, Language, Symbolic Systems

Rhet 1101—Writing to Inform and Persuade (4)

Rhet 1104—Library Research Method (1)  
 Rhet 1151—Writing in Your Major (4)  
 Rhet 1222—Public Speaking (4)  
 Rhet 3562—Writing in Your Profession (4)  
 Minimum of 1 additional credit selected from approved courses (may be taken S-N)

### B. Physical and Biological Sciences

Minimum of 9 credits selected from approved courses from at least two disciplines (must be taken A-N)

### C. The Individual and Society

Psy 1001—General Psychology (5)  
 Minimum of 4 additional credits from a second discipline (may be taken S-N)

### D. Literature, Humanities, and Fine Arts

Arth 1002—Introduction to History of Art (4) or equivalent course  
 Minimum of 5 additional credits selected from approved courses (may be taken S-N)

### E. Professional Courses in the Major

1. *Basic design requirements—prerequisite to selection of 28 additional credits*

Dsgn 1501—Introduction to Design (3)  
 Dsgn 1521—Design Process: Color (4)  
 Dsgn 1523—Design Process: Visual Presentation (4)  
 Dsgn 1525—Design Process: Two-Dimensional Design I (4)  
 Dsgn 1531—Surface Fabric Design I (4)  
 Dsgn 3521—Design Process: Color II (4)  
 Dsgn 3523—Design Process: Visual Presentation II (4)  
 Dsgn 3525—Design Process: Two-Dimensional Design II (4)  
 Dsgn 3527—Design Process: Three-Dimensional Design (4)  
 Rhet 3101—Functional Photography (4) or equivalent course  
 Minimum of 8 credits in computer courses (see adviser)  
 Minimum of 4 credits in business and marketing  
 12 credits selected from the following design history courses:  
 Dsgn 3517—History of Costume: Primitive Through 18th Century (3)  
 Dsgn 5507—History of Decorative Arts I: Textiles (4)  
 Dsgn 5509—History of Decorative Arts II: Metals, Ceramics, Glass (4)  
 Dsgn 5512—History of European Furniture and Interiors (4)  
 Dsgn 5514—History of American Furniture and Interiors (4)  
 Dsgn 5515—20th Century Furniture and Interiors (4)  
 Dsgn 5518—History of Costume: 19th and 20th Centuries (4)  
*and/or* courses taught in Department of Art History (see adviser for list)  
*and/or* courses taught in School of Architecture (see adviser for list)

## Programs

2. *Minimum of 28 additional credits selected from department courses or related areas below (see adviser for other related areas):*

- Dsgn 3531—Surface Fabric Design II (4)
- Dsgn 3535—Design Process: Materials (4)
- Dsgn 3571—Professional Issues in Applied Design (1)
- Dsgn 3584—Field Experience in Design (4-8)
- Dsgn 5527—Three-Dimensional Design II (4)
- Dsgn 5531—Surface Fabric Design III (4)
- Dsgn 5585—Problems in Design (3-4 [12 max])
- Dsgn 5588—Problems in Design: Textiles (3-4 [12 max])
- TexC 1601—Laboratory in Basic Apparel Principles (2)
- TexC 1602—Fitting the Human Subject (2)
- TexC 3661—Cultural Perspectives on Dress (3)
- TexC 3662—Aesthetics of Clothing (3)

Offered through Extension only:

- Dsgn 1526—Presentation to Clients (3)
- Dsgn 1533—Metalsmithing: Introduction to Techniques (4)
- Dsgn 3203—Commercial Drawing II (4)
- Dsgn 3242—Commercial Illustration II (4)
- Dsgn 3253—Graphic Design III (4)
- Dsgn 3280—Design Portfolio (4)
- Dsgn 3532—Fiber Structure: Weaving (4)
- Dsgn 3533—Metalsmithing: Fabrication (4)
- Dsgn 3536—Metalsmithing: Enameling (4)
- Dsgn 3537—Fiber Structure: Design I (4)
- Dsgn 5532—Fiber Structure: Weaving II (4)
- Dsgn 5533—Metalsmithing: Combined Techniques (4)
- Dsgn 5537—Fiber Design: Quilting (4)
- TexC 5623—Dyeing Medium and Color (3)

### F. Collateral Area

Minimum of 18 credits from an area selected with approval of your adviser (must be taken A-N); two-thirds of credits must be 3000-level or above. Suggested areas include:

- Architecture
- Art Education
- Art History
- Business
- Education
- Family Social Science
- Industrial Education
- Journalism and Mass Communication (includes commercial art)
- Sociology
- Studio Art
- Theatre Arts

### G. Free Electives

Electives to make a total of 185 credits required for graduation

Other supporting areas may be developed in addition to Collateral Area.

For courses outside the department relevant to special interest areas, see adviser.

## Consumer Food Science

This program is designed to prepare students for employment in the areas of pro-

motion, product development, marketing, and consumption of food. Upon completing the program you should have a sound knowledge of basic scientific principles of food science, consumer aspects of food product development, testing, marketing, advertising, and communication. Required course work includes studies in marketing, agricultural and applied economics, and statistics. In addition, you will select a concentration in one of five collateral areas of emphasis—economics and business administration, sociopsychology, communication, food product development, or nutrition. Through choice of the collateral area, you can help prepare for a particular job emphasis after earning the bachelor's degree, or for graduate study in a specific area such as business administration, agricultural and applied economics, or food science.

Listed below are the requirements for the major in consumer food science. Work closely with your adviser to select appropriate courses in biochemistry and chemistry if you are considering a food and product development or a nutrition collateral area or graduate work in food science.

### A. Communication, Language, Symbolic Systems

- Rhet 1101—Writing to Inform and Persuade (4) or equivalent course
- Rhet 1104—Library Research Method (1)
- Rhet 1151—Writing in Your Major (4)
- Rhet 1222—Public Speaking (4)
- Rhet 3562—Writing in Your Profession (4)
- Math 1142—Short Calculus (5)

### B. Physical and Biological Sciences

- Biol 1009—General Biology (5)
- Biol 5001—Biochemistry (4)
- Chem 1004-1005—General Principles of Chemistry (10)
- Chem 3301-3302—Elementary Organic Chemistry I, II (8)
- Chem 3305-3306—Elementary Organic Chemistry Laboratory I, II (4)

### C. The Individual and Society

- AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)
- or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)
- Psy 1001—General Psychology (5)
- Soc 1001—Introduction to Sociology (4)

## D. Literature, Humanities, and Fine Arts

Minimum of 9 credits selected from approved courses

## E. Professional Courses in the Major

- FScN 1102—Technology of Food Processing (4)
- FScN 3110—Food Chemistry (4)
- FScN 3112—Food Chemistry Laboratory (2)
- FScN 3123—Microbiology of Foods (5)
- FScN 3272—Introduction to Food Decision Making (2)
- FScN 3403—Experimental Foods (4)
- FScN 3472—Principles of Food Purchasing (4)
- FScN 3600—Principles of Nutrition (4)
- FScN 3622—Life Cycle and Community Nutrition (4)  
or FScN 5622—Macro-Nutrient Metabolism (4)
- FScN 5100—General Seminar (1)
- FScN 5360—Sensory Evaluation of Food Quality (4)
- FScN 5403—Experimental Study of Foods (5)
- FScN 5412—Physicochemistry of Foods (3)
- FScN 5413—Structural-Functional Relations in Food Systems (3)
- AgEc 3101—Microeconomic Theory (4)
- AgEc 3102—Macroeconomic Theory (4)
- Mktg 3000—Principles of Marketing (4)
- Stat 5021—Statistical Analysis I (5)

## F. Collateral Area

In addition to the above requirements, you must select one of the following fields as an area of emphasis. A minimum of 20 credits must be completed in a collateral area. Courses are usually selected from those listed below, but others may be selected in consultation with your adviser. More than one collateral area may be selected.

### ECONOMICS AND BUSINESS ADMINISTRATION

- Acct 1024—Principles of Financial Accounting I (3)
- Acct 1025—Principles of Financial Accounting II (3)
- Acct 3001—Managerial Accounting (4)
- AgEc 1250—Principles of Accounting (5)
- AgEc 5560—Economics of Consumer Policies (4)
- AgEc 5580—Economic Organization of the Household (4)

- BGS 3001—Managerial Economics (4)
- BFin 3000—Finance Fundamentals (4)
- FScN 5390—Introduction to Food Law (4)
- FScN 5474—Food Consumption Economics (4)
- Mgmt 3001—Fundamentals of Management (4)
- Mktg 3010—Buyer Behavior, Marketing Analysis (4)
- Mktg 3020—Marketing Operations Management (4)
- Mktg 3050—Marketing Communications (4)
- Psy 5751—Psychology of Advertising (4) or Jour 5251—Psychology of Advertising (4)
- DSci 3055—Introduction to Management Sciences (4)
- Soc 5201—Introduction to Social Psychology (4)
- Soc 5411—Formal Organizations (4)
- Stat 5022—Statistical Analysis II (5)

### SOCIOPSYCHOLOGY

- Mktg 3010—Buyer Behavior, Marketing Analysis (4)
- Psy 3031—Sensation and Perception (4)
- Psy 3201—Introduction to Social Psychology (4)
- Psy 3401—Social Organization (4)
- Soc 5201—Introduction to Social Psychology (4)
- Soc 5355—Opinion and Communication: Social Factors (4)
- Soc 5401—Social Organizations (4)

- Soc 5411—Formal Organizations (4)

### COMMUNICATION

- FScN 3400—Food Communication Techniques (3)
- Jour 3155—Publications Editing (4)
- Jour 3173—Magazine Writing (4)
- Jour 3241—Advertising Copywriting (4)
- Jour 3301—Photojournalism (4)
- Jour 3321—Basic Media Graphics (4)
- Jour 5143—Interpretation of Science and Technology (4)
- Jour 5261—Advertising: Media Analysis (4)
- Jour 5263—Advertising Campaign Planning and Media Strategy (4)
- Jour 5302—Advanced Photographic Communication (4)
- Psy 5751—Psychology of Advertising (4)
- Rhet 3254—Advanced Public Speaking (4)
- Rhet 3572—Grammatical Editing for Technical Writers (2)
- Rhet 5565—Writing for Publication (4)
- Soc 5201—Introduction to Social Psychology (4)
- Soc 5355—Opinion and Communication: Social Factors (4)

### FOOD AND PRODUCT DEVELOPMENT

- BioC 5025—Laboratory in Biochemistry (2)
- FScN 5000—Professional Experience Program (4 cr max)
- FScN 5111—Independent Study in Food Science and Nutrition (1-5)
- FScN 5120—Food Microbiology (5)
- FScN 5122—Control of Microorganisms in Food Processing (2)
- FScN 5135—Food Engineering Unit Operations (5)
- FScN 5136—Unit Operations Laboratory (2)
- FScN 5310—Advanced Food Chemistry (3)
- FScN 5312—Chemical and Instrumental Analysis of Foods (5)
- FScN 5404—Current Issues in Food and Nutrition (2-4)
- FScN 5406—Current Literature in Foods (2-4)
- FScN 5512—Meat Technology (5)
- FScN 5530—Industrial Processing of Fruits and Vegetables (4)
- FScN 5540—Fats and Oils Chemistry and Technology (4)
- FScN 5555—Freezing and Dehydration of Foods (5)
- FScN 5562—Flavor Technology (3)
- FScN 5643—Seminar: World Food Supply Problems (4)
- TexC 5625—Color Metrology (3)

### NUTRITION

- Phsl 1002—Human Physiology (4)  
or Phsl 3051—Human Physiology (5)
- BioC 5025—Laboratory in Biochemistry (2)
- FScN 5622—Macro-Nutrient Metabolism (5)
- FScN 5623—Vitamin and Mineral Biochemistry (4)

In addition to the three required courses above, select courses from nutrition, public health, biochemistry, and medicine in consultation with your adviser

## G. Free Electives

Electives to make a total of 185 credits required for graduation



# Programs

## Costume Design

This program is designed to help students develop professional competence in the areas of creative fashion, apparel, and accessory design. Emphasis is placed on the development of creative thinking as well as a high degree of technical skill. The program relates principles of total design to industrial production of apparel.

Courses in this major include studies in basic and advanced design and construction methods for pattern, fabric, color, texture, costumes, and accessories; textiles, historic costumes, and apparel production from a historical, cross-cultural, and sub-cultural approach; and art, economics, and humanities as a foundation for understanding people, their lifestyles, and their needs.

### A. Communication, Language, Symbolic Systems

Rhet 1101—Writing to Inform and Persuade (4)  
Rhet 1104—Library Research Method (1)  
Rhet 1151—Writing in Your Major (4)  
Rhet 1222—Public Speaking (4)  
Rhet 3562—Writing in Your Profession (4)  
Foreign language or upper division course in composition or journalism (3 credits minimum)

### B. Physical and Biological Sciences

Chem 1003—Physical World, Chemistry (5) or Chem 1004, 1005—General Principles of Chemistry (10)  
One course from a discipline other than chemistry to be selected from approved courses

### C. The Individual and Society

AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)  
or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)  
Psy 1001—General Psychology (5)

### D. Literature, Humanities, and Fine Arts

Minimum of 9 credits selected from approved courses; may not include art history

### E. Professional Courses in the Major

ArtH 1002—Introduction to the History of Art (4)  
Dsgn 1521—Design Process: Color (4)  
Dsgn 1523—Design Process: Visual Presentation (4)  
Dsgn 1525—Design Process: Two-Dimensional Design I (4)  
Dsgn 1531—Surface Fabric Design (4)  
or Dsgn 3537—Fiber Structure Design I (4)  
Dsgn 1541—Costume Design I (3)  
Dsgn 1543—Fashion Illustration (4)  
Dsgn 1544—Costume Design: Special Techniques (4)

Dsgn 3517—History of Costume: Primitive Through 18th Century (3)

Dsgn 3527—Design Process: Three-Dimensional Design (4)

Dsgn 3541—Costume Design II (4)

Dsgn 3583—Field Experience in Costume Design (4) (S-N)

Dsgn 5518—History of Costume: 19th and 20th Centuries (4)

Dsgn 5541—Costume Design III (3)

Dsgn 5544—Costume Design Problems (4)

Dsgn 5589—Problems in Design: Costume (3-4 [12 max])

TexC 1602—Fitting the Human Subject (2)

TexC 1603—Advanced Principles of Apparel Production (2)

TexC 3604—Flat Pattern Design (3)

TexC 3605—Draping Design and Construction (3)

TexC 3621—Textiles (5)

### F. Collateral Area

A minimum of 18 credits from one area selected with approval of your adviser. The following areas and courses are suggested:

#### DESIGN

Dsgn 1533—Metalsmithing: Introduction to Techniques (4)

Dsgn 3531—Surface Fabric Design II (4)

Dsgn 3532—Fiber Structure: Weaving (4)

Dsgn 3533—Metalsmithing: Fabrication (4)

Dsgn 3536—Metalsmithing: Enameling (4)

Dsgn 5531—Surface Fabric Design III (4)

Dsgn 5533—Metalsmithing: Combined Techniques (4)

#### TEXTILES AND CLOTHING

TexC 1641—Introduction to Merchandising (3)

TexC 1643—Apparel Industries (4)

TexC 3601—Tailoring (4)

TexC 3603—Ready-to-Wear Analysis (3)

TexC 3662—Aesthetics of Clothing (3)

TexC 3664—Fashion Trend Analysis (4)

TexC 5600—Advanced Apparel Design and Construction Problems (2-4)

TexC 5661—Clothing and Human Behavior (4)

TexC 5662—Clothing Consumption Problems (3)

#### DECORATIVE ARTS

Dsgn 5507—History of Decorative Arts I: Textiles (4)

Dsgn 5509—History of Decorative Arts II: Metals, Ceramics, Wood, and Glass (4)

ArtH 3008—History of Ancient Art (4)

Additional elective credits

#### THEATRE

Th 1101—Introduction to Theatre (4)

Th 1504—Elements of Technical Theatre (4)

Th 3513—Technical Theatre Production I (4)

Th 5171-5172-5173—History of Theatre (4-12)

Th 5510—Drawing and Rendering for Theatre Designers (2)

Th 5512—Advanced Problems in Costuming (4)

Th 5520—Costuming Crafts and Techniques (4)

#### JOURNALISM AND MASS COMMUNICATION

Jour 1001—Introduction to Mass Communication (2)

Jour 1002—Visual Communication (2)

Jour 3201—Principles of Advertising (4)

Jour 5251—Psychology of Advertising (4)  
Additional elective credits

## ART STUDIO

ArtS 1101—Drawing I (4)  
ArtS 1701—Photo Medium (4)  
ArtS 3710—Photography (12 max)  
ArtS 5710—Photography (16 max)

## OTHER

Independent work in cultural and subcultural studies in design, clothing, and language, historical and modern, chosen in consultation with your adviser  
Business courses, industrial design courses, or study outside United States

## G. Free Electives

Electives to make a total of 185 credits needed for graduation

## Food Science and Technology

Food science and technology applies modern science and engineering to the manufacture and distribution of food. An understanding of the basic principles and techniques of many disciplines, including chemistry, physics, economics, engineering, microbiology, nutrition, management, public health, and agricultural production, are applied to food processing and preservation as well as to marketing situations. Food scientists and technologists are concerned with the theoretical and practical aspects of the food industry that involve the food chain from production of raw materials to the ultimate utilization of products by consumers. This flexible program permits you to tailor your studies to fit personal career goals. In it you learn to recognize and analyze problems of the food industry and to arrive at solutions through the application of principles of the biological and physical sciences, engineering, and business. You develop competence in a professional discipline related to the food industry through supplementary studies in an area of emphasis in business administration, chemistry, engineering, microbiology, or public health. Food scientists and technologists should be prepared to meet the challenges of work with cereals, dairy products, fruits and vegetables, meat and poultry products, or fabricated foods of the future.

Many graduates of the program seek employment after earning the bachelor of science degree, while others continue on to graduate study. Among the job areas available are production management, product and process research and development, public health and regulatory agency service, teaching, merchandising, advertising, technical service and sales, quality control supervision, and international nutrition and food agency work.

## A. Communication, Language, Symbolic Systems

Rhet 1101—Writing to Inform and Persuade (4) or equivalent  
Rhet 1104—Library Research Method (1)  
Rhet 1151—Writing in Your Major (4)  
Rhet 1222—Public Speaking (4)  
Rhet 3562—Writing in Your Profession (4)  
Math 1142—Short Calculus (5)  
Statistics course (4)

## B. Physical and Biological Sciences

Chem 1004-1005—General Principles of Chemistry (10)  
Chem 3301-3302—Elementary Organic Chemistry I, II (8)  
Chem 3305-3306—Elementary Organic Chemistry Laboratory I, II (4)  
Biol 1009—General Biology (5)  
Biol 5001—Biochemistry (4)  
BioC 5025—Biochemistry Laboratory (2)  
Phys 1041-42—Introductory Physics (8)  
Phys 1045-46—Introductory Physics Laboratory (2)  
MicB 3103—General Microbiology (5)

## C. The Individual and Society

AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)  
or Econ 1001-1002—Principles of Macroeconomics, Microeconomics (8)  
Minimum of 14 credits selected from approved courses

## D. Literature, Humanities, and Fine Arts

Minimum of 9 credits selected from approved courses

## E. Professional Courses in the Major

FScN 1102—Technology of Food Processing (4)  
FScN 3110—Food Chemistry (4)  
FScN 3112—Food Chemistry Laboratory (2)  
FScN 3600—Principles of Nutrition (4)  
FScN 5100—General Seminar (1)  
FScN 5120—Food Microbiology (5)  
FScN 5122—Control of Microorganisms in Food Processing (2)  
FScN 5123—Microbiology of Food Fermentations (2)  
FScN 5135—Food Engineering Unit Operations (5)  
FScN 5136—Unit Operations Laboratory (2)  
FScN 5312—Chemical and Instrumental Analysis of Foods (5)

## Programs

In addition to the above required courses, a minimum of 20 credits must be chosen from the following courses (a minimum of 8 of the credits must be chosen from FScN 5512, 5522, 5523, 5530, 5540, 5555):

- FScN 1500—Meat Science (4)
- FScN 5000—Professional Experience Program (4)
- FScN 5111—Independent Study in Food Science and Nutrition (1-5)
- FScN 5310—Advanced Food Chemistry (3)
- FScN 5320—Food Biotechnology (3)
- FScN 5350—Application of Experimental Design in the Food Industry (4)
- FScN 5360—Sensory Evaluation of Food Quality (4)
- FScN 5380—Food Packaging (3)
- FScN 5390—Introduction to Food Law (4)
- FScN 5412—Physicochemistry of Foods (3)
- FScN 5413—Structural-Functional Relations in Food Systems (3)
- FScN 5512—Meat Technology (5)
- FScN 5522—Technology of Fluid and Concentrated Milk Products (4)
- FScN 5523—Technology of Fermented Dairy Products (4)
- FScN 5524—Sensory Evaluation of Dairy Products (1)
- FScN 5530—Industrial Processing of Fruits and Vegetables (4)
- FScN 5540—Fats and Oils Chemistry and Technology (4)
- FScN 5555—Freezing and Dehydration of Foods (5)
- FScN 5562—Flavor Technology (3)

### F. Areas of Emphasis

In addition to the course requirements specified above, you must complete one of the following areas of emphasis as well as sufficient electives to meet the 186-credit requirement for graduation. The area of emphasis is designed to support and complement your major field. Courses used to complete the area of emphasis cannot be used to meet other major course requirements. It is assumed that a well-conceived area of emphasis will include some 3000- and 5000-level courses.

#### CEREALS

This area of emphasis is designed for the student interested in cereals, including the handling, storage, and marketing of grains as well as the utilization of cereal-based products in food systems. At least 20 credits should be selected from the following courses. Courses must include:

- FScN 5413—Structural Functional Relations in Food Systems (3)
- AgEc 3420—Grain Marketing Economics (3)

Other courses may include:

- Agro 1100—Morphology and Identification of Crops and Weeds (4)
- Agro 1110—Seed Analysis and Grain Handling (3)
- AgEc 1400—Agricultural Markets and Prices (4)
- Biol 3012—Plant Biology (5)
- Bot 3109—Plant Anatomy (5)
- Ent 1005—Economic Entomology (4)
- Ent 3175—Introductory Entomology (5)
- Ent 5252—Stored Product Pest Management (4)
- FScN 3403—Experimental Foods (4)
- GCB 3022—Genetics (4)

- GCB 5606—Biological Electron Microscopy (3)
- PIPa 3001—Introductory Plant Pathology: Lecture, Laboratory, and Introduction to Diagnosis (6)
- PIPa 5106 or 5107—Mycology: Ascomycetes—Fungi Imperfecti (4)
- PIPh 3131—Survey of Plant Physiology (4)

#### CHEMISTRY

This area of emphasis is designed for the student seeking a fundamental approach to the chemistry of foods and food processes. FScN 5310 is required of all students selecting this area of emphasis. At least 20 credits of chemistry must be selected, which may include FScN 5310 if not counted in group E. Other credits may include:

- Chem 1006—Solution Chemistry (4)
- Chem 3100-3101—Quantitative Analysis and Laboratory (5)
- Chem 5520-5521—Elementary Physical Chemistry (6)
- BioC 5002—Biochemistry Topics (3)

#### DAIRY TECHNOLOGY

This area of emphasis is designed for the student primarily interested in the technology and processing of dairy products. At least 20 credits must be selected to represent dairy processing, dairy marketing and economics, and other related areas. Courses must include:

- FScN 5522—Technology of Fluid and Concentrated Milk Products (4)
- FScN 5523—Technology of Fermented Dairy Products (4)
- AgEc 3430—Dairy Marketing Economics (3)

Other courses may include:

- AnSc 1520—Milk Production (3)
- AgEc 1400—Agricultural Markets and Prices (4)
- FScN 5524—Sensory Evaluation of Dairy Products (1)
- FScN 5360—Sensory Evaluation of Food Quality (4)

#### ENGINEERING TECHNOLOGY

This area of emphasis is designed for the student interested primarily in the engineering technology aspects of food process development and production. At least 25 credits in a cohesive program are to be selected in consultation with your adviser.

Students interested in a four-year food engineering degree should consult the description of the agricultural engineering program in the *Institute of Technology Bulletin*.

#### FLAVOR

This area of emphasis is designed for the student interested in a career in flavor manufacture, analysis or sensory evaluation. At least 20 credits must be selected from flavor-related courses. Courses must include:

- FScN 5360—Sensory Evaluation of Food Quality (4)
- FScN 5562—Flavor Technology (3)

Other courses may include:

- Chem 3303—Elementary Organic Chemistry III (4)
- Chem 5301—Spectral Methods for Organic Qualitative Analysis (4)

- Chem 5344—Heterocyclic Compounds (3)  
 Chem 5365—Organic Qualitative Analysis (4)  
 FScN 5111—Independent Study in Food Science and Nutrition (Special Problems in Flavor Chemistry) (2)  
 FScN 5524—Sensory Evaluation of Dairy Products (1)  
 FScN 5462—Advanced Topics in Sensory Evaluation of Food (2-4)  
 BioC 5002—Biochemistry Topics (3)

## INDUSTRIAL ENGINEERING

This area of emphasis is designed for the student with competence and interest in the industrial engineering aspects of the food industry. The requirements include the following:

- ME 3900—Introduction to Engineering Statistics (4)  
 or Stat 3091—Introduction: Probability, Statistics (4)

At least 20 credits from the industrial engineering courses described in the *Institute of Technology Bulletin*

## MANAGEMENT

This area of emphasis is designed for the student interested in the problems of the business and economic phases of food industries. At least 30 credits must be selected from course offerings in the Department of Agricultural and Applied Economics, Department of Economics, Department of Rhetoric, and School of Management.

- BioC 1301-1302-1303 (10) may be substituted for Chem 3301-3302-3305-3306 (12) and Biol 5001-BioC 5025 (6) in category B if desired.

## MEAT SCIENCE AND TECHNOLOGY

This area of emphasis is designed for the student primarily interested in the technology of meat products. At least 20 credits must be selected to represent meat science, technology, marketing, and economics.

Courses must include:

- FScN 1500—Meat Science (4)  
 FScN 5512—Meat Technology (5)  
 AgEc 3440—Livestock Marketing Economics (3)

Other courses may include:

- AgEc 1400—Agricultural Markets and Prices (4)  
 AgEc 5480—Futures, Markets and Prices (4)  
 AnSc 1120—Livestock and Meat Evaluation (4)  
 AnSc 3143—Meat: Judging and Grading (2)  
 LACS 5651—Veterinary Community Medicine (3)

## MICROBIOLOGY

This area of emphasis is designed for the student interested in courses related to the microbiological aspects of the food processing industry. About 20 credits of microbiology-oriented courses in biochemistry, microbiology, plant pathology, public health, and related departments must be selected. These usually include: MicB 5321—Physiology of Bacteria (3)

## NUTRITION

This area of emphasis is designed for the student interested in courses related to the nutritional aspects of the food processing industry. At least 20 credits of nutrition-oriented courses must be completed in food science and nutrition, biochemistry, animal science, and related departments, and must include:

- Phsl 1002—Human Physiology (4)  
 or Phsl 3051—Human Physiology (5)

## PUBLIC HEALTH

This area of emphasis is designed to provide the necessary background for the variety of activities performed by the sanitarian in either government or industrial work related to the regulatory and quality control of raw materials and finished products in the food field. At least 20 credits are to be selected from course offerings of the School of Public Health. See the *School of Public Health Bulletin* for course listings.

## OTHER AREAS

The courses presented for the above areas of emphasis may not satisfy the needs of every student. With the aid of your adviser, you may set up a course of study designed to meet specific requirements in another area of emphasis or in a combination of suggested areas. Examples include advertising, journalism, sales, mechanical engineering, statistics, and experimental design. Some 3000- and 5000-level courses must be included. The area must total at least 20 credits, have a logical focus, and serve to support and strengthen the Food Science and Technology major.

## G. Free Electives

Electives to make a total of 186 credits required for graduation

# Home Economics

This interdepartmental and interdisciplinary program is designed to provide much flexibility. You can develop an in-depth study in a particular area—within or outside home economics—appropriate to your personal and professional goals. The program includes a broad base of courses that meets the all-University distribution requirements as well as home economics courses in food and nutrition, textiles and clothing, design, housing and household equipment, home management, and family relationships. The remainder of the credits are taken in the collateral area (supporting area of study) and electives.

You may work with your adviser to develop an individualized collateral area, or you may follow one of several defined areas that have been developed with the aid of practicing professionals in the field. Defined collateral areas that are available include the following:

- Aging
- Business
- Consumer Affairs
- Extension Service
- Journalism and/or Communications
- Household Equipment and Energy
- International Development

## Programs

### Pre-Kindergarten Teacher Licensure Youth Studies

#### A. Communication, Language, Symbolic Systems

Rhet 1101—Writing to Inform and Persuade (4)  
Rhet 1104—Library Research Method (1)  
Rhet 1151—Writing in Your Major (4)  
Rhet 1222—Public Speaking (4)  
Rhet 3562—Writing in Your Profession (4)  
Math 1111—College Algebra and Analytic Geometry (5)

#### B. Physical and Biological Sciences

Biol 1009—General Biology (5) or GC 1132—Biological Science, Human Body (5)  
FScN 1020—Introductory Microbiology (4) or MicB 3103—General Microbiology (5)  
Chem 1003—Physical World, Chemistry (5) and Phys 1001—The Physical World (4)  
or Chem 1004-1005—General Principles of Chemistry (10)

#### C. The Individual and Society

AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)  
or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)  
Psy 1001—General Psychology (5)  
Soc 1001—Introduction to Sociology (4)  
Anth 1102—Introduction to Social and Cultural Anthropology (5)  
CPsy 1301—Introduction to Child Psychology (4)

#### D. Literature, Humanities, and Fine Arts

Minimum of 9 credits selected from approved courses in such areas as humanities, literature, theatre, design, art, or music (may be taken S-N)

#### E. Professional Courses in the Major (must be taken A-N)

FScN 3600—Principles of Nutrition (4)  
*Minimum of 8 additional FScN credits selected from:*  
FScN 1102—Technology of Food Processing (4)  
FScN 1212—Scientific Principles of Food Preparation (5)  
FScN 1215—Home Preservation of Foods (2)  
FScN 1500—Meat Science (4)  
FScN 3272—Introduction to Food Decision Making (2)  
FScN 3400—Food Demonstration Techniques (3)  
FScN 3472—Principles of Food Purchasing (4)  
FScN 3622—Life Cycle and Community Nutrition (4)

Dsgn 1501—Introduction to Design (3)  
HE 3191—Proseminar: Home Economics (2)  
Hsg 1801—Household Equipment (4)  
Hsg 1851—Consumer Aspects of Housing (4)  
FSoS 3260—Family Resource Management (3)  
FSoS 5218—Family Financial Management (3)  
FSoS 5200—Family Relationships (5)  
HE 5003—Field Experience (5) or equivalent course  
TexC 3621—Textiles (5)  
One 5000-level course in home economics (3-5)

#### F. Collateral Area (must be taken A-N)

Minimum of 18 credits selected in consultation with your adviser on the basis of your professional goals and interests; at least one-half the credits must be in upper division courses.

The type of employment students seek often depends on their collateral and its depth. Graduate surveys indicate that students are employed in the following positions related to their collaterals:

**AGING**—Activity directors in nursing homes, supervisors of congregate dining programs and in programs concerned with home and health care of the elderly.

**BUSINESS**—Computer analysts, sales representatives, marketing specialists, home economists and other supervisory and managerial positions in business, government, or hospital settings.

**CONSUMER AFFAIRS**—Positions in consumer response, in both businesses and government agencies.

**EXTENSION SERVICE**—Home economics county agents, 4-H agents, adult educators, Peace Corps workers, and other related positions.

**HOME ECONOMICS JOURNALISM OR COMMUNICATIONS**—Editors of magazines or newspapers, in radio and TV broadcasting; advertising or public relations workers.

**HOUSEHOLD EQUIPMENT AND ENERGY**—Home economists, consumer representatives, and sales representatives for utility companies and other energy-related businesses.

**INTERNATIONAL**—Positions in the Peace Corps, mission programs such as "Food for the Hungry," teaching or extension service in the international setting.

**PRE-KINDERGARTEN TEACHER LICENSURE**—Supervisors in private and industry-owned day care centers.

**YOUTH STUDIES**—Youth directors for religious organizations, 4-H, or public agencies.

**INDIVIDUALIZED**—Positions related to specific professional goals such as working with special population groups (i.e., American Indians, Chicanos, the handicapped), entrepreneurs.

Listings of suggested courses for collaterals are available from advisers.

#### G. Free Electives

Electives to make a total of 185 credits required for graduation; at least one-third should be in upper division courses (may be taken S-N)

## Home Economics Education

The curricula in home economics education, offered jointly by the College of Home Economics and the College of Education, are designed for those who wish to become educators in school or community settings. Satisfactory completion of curricular options 1 and/or 2 qualifies students for teaching home economics in federally

aided schools. Satisfactory completion of the Education in Community and Work Settings option qualifies students for educational roles in a wide range of non-secondary school settings that do not require standard or vocational secondary teacher licensure.

During the first two years, you register in the College of Home Economics. Early in the quarter in which you will complete 90 credits of specified courses, and after completion of HEEd 1500 and/or HEEd 1510, you apply for joint admission to the College of Education. To be eligible for admission to the College of Education, you must have earned a grade point average of 2.00 (C) overall and 2.50 (C+) in your major courses. The application form and information about admission procedures should be obtained at the Office of Admissions and Records, 130 Coffey Hall. For admission to clinical practicum or internship experiences, you must have earned a grade point average of 2.00 overall and 2.50 in all major and HEEd courses.

The three curricular options, designed to include appropriate courses to satisfy the liberal education distribution requirements as detailed in the *College of Education Bulletin*, are Consumer and Family Education; Service Occupations Education (with child development and care, foodservice, or textiles and clothing clusters) and an optional program for teacher coordination licensure; and Education in Community and Work Settings. Also offered are family life educator endorsement and vocational adult parent educator licensure.

Alternate courses may be substituted for specified courses with department approval. Advisers can provide information about electives.

## A. Communication, Language, Symbolic Systems

- Rhet 1101—Writing to Inform and Persuade (4)
- Rhet 1104—Library Research Method (1)
- Rhet 1151—Writing in Your Major (4)
- Rhet 1222—Public Speaking (4)
- Rhet 3562—Writing in Your Profession (4)
- 2 elective credits from courses in category A

## B. Physical and Biological Sciences

- Chem 1001-1002—Chemical Principles and Covalent Systems (10)
- or Chem 1004-1005—General Principles of Chemistry (10)
- GC 1132—Biological Science, Human Body (5)
- FScN 1020—Introductory Microbiology (4)

## C. The Individual and Society

- AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)
- or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)
- Psy 1001—General Psychology (5)
- Soc 1001—Introduction to Sociology (4)

## D. Literature, Humanities, and Fine Arts

- Dsgn 1501—Introduction to Design (3)
- 9 elective credits from courses in category D in such areas as humanities, literature, theatre, design, art, or music

## E. Professional Courses in the Major—Complete options 1 and/or 2 for licensure:

### 1. Consumer and Family Education Option

- AgEc 5580—Economic Organization of the Household (3)
- or FSoS 3500—Consumer and the Market System (3)
- or FSoS 5220—Family Economics (3)
- or GC 1534—Practical Law (5)
- CPsy 1301—Introduction to Child Psychology (4)
- CPsy 3303—Adolescent Psychology (4)
- Minimum of 2 credits in CPsy 3330—Directed Experiences (1-4)
- FScN 1212—Scientific Principles of Food Preparation (5)
- FScN 3472—Principles of Food Purchasing (4)
- FScN 3600—Principles of Nutrition (4)
- Hsg 1801—Household Equipment (4)
- Hsg 1851—Consumer Aspects of Housing (4)
- TexC 1602—Fitting the Human Subject (2)
- TexC 1603—Advanced Principles of Apparel Production (2)
- TexC 3621—Textiles (5)
- FSoS 3260—Family Resource Management (3)
- FSoS 5200—Family Relationships (5)

One elective from the following:

- Anth 3222—Peoples and Cultures of Middle America (4)
- FSoS 5202—Introduction to Social Psychology With Applications to the Family (5)
- FSoS 5210—Family in World Perspective (5)
- Soc 5505—Family Development (5)

One elective from the following:

- TexC 3603—Ready-to-Wear Analysis (3)
- TexC 5622—Issues and Trends in Textile Consumer Protection (3)
- TexC 5661—Clothing and Human Behavior (4)
- TexC 5662—Clothing Consumption Problems (3)

Professional Education Courses (required):

- HEEd 3331—Children and Parenting: Curriculum Methods and Materials (2)
- HEEd 5407—Family Life Education (1-4)

## Programs

### 2. Service Occupations Education Option

To qualify for licensure as a teacher in service occupations education programs in Minnesota, you must select one or more subject matter clusters: foodservice, child development and care, or textiles and clothing services. In addition to the subject matter preparation, licensure requirements include a specified number of hours of occupational experience in the cluster area.

- CPsy 1301—Introduction to Child Psychology (4)
- CPsy 3303—Adolescent Psychology (4)
- Hsg 1801—Household Equipment (4)
- FSoS 3260—Family Resource Management (3)
- FSoS 5200—Family Relationships (5)
- FScN 1212—Scientific Principles of Food Preparation (5)
- FScN 3600—Principles of Nutrition (4)
- TexC 1602—Fitting the Human Subject (2)
- TexC 1603—Advanced Principles of Apparel Production (2)
- TexC 3621—Textiles (5)
- 3 credits in HEEd 5102—Service Occupations Work Experience (3-6)
- HEEd 5100—Service Occupations Education (3)

*Cluster Requirements*—select one cluster (see adviser for approved courses):

- Foodservice (minimum of 19 credits)
- Child Development and Care (minimum of 20 credits)
- Textiles and Clothing (minimum of 15 credits)

*Optional Program for Teacher Coordinator Licensure*  
Home economics teachers who wish to prepare themselves for positions as coordinators of service occupations programs in secondary schools may do so by completing the following courses:

- HEEd 5106—Coordination Techniques for Service Occupations (3)
- HEEd 5104—Curricula, Materials, and Methods for Service Occupations (3)

### F. Education Courses and Other Requirements

- HEEd 1500—Introduction to Home Economics Teaching (2)
- HEEd 1510—Knowledge and Values in Teaching (4)
- HEEd 3520—Home Economics Curriculum and Instruction: Cognitive Learning (5)
- HEEd 3530—Home Economics Curriculum and Instruction: Affective Learning (4)
- HEEd 3620—Curriculum Management (3)
- HEEd 3601—Clinical Experience (9)
- HEEd 3611—Fieldwork (3)
- EPsy 3131—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (5)
- SeEd 3150—Introduction to Secondary Teaching (5)
- SeEd 3155—Psychological Foundations of Secondary Education (5)
- SPFE 3090—The School and Society (3)
- VoEd 5300—Philosophy and Practice of Vocational Education (3)
- VoEd 5800—Working with Special Needs Students (3) or, with permission of adviser PsyS 3106—Exceptional Students in Regular Classes (2)
- Physical Education—3 credits

### G. Free Electives

Electives to make a total of 186 required for graduation

*3. Education in Community and Work Settings Option*  
Common requirements described at the beginning of the Home Economics Education section do not apply to this curriculum, except in categories A and C. All other courses must be selected from a list of approved courses available from pre-Home Economics Education and Home Economics Education advisers, except for 6 free elective credits.

#### A. Communications, Language, and Symbolic Systems (minimum of 18 credits)

See category A in Home Economics Education above.

#### B. Physical and Biological Sciences (minimum of 12 credits)

See adviser for suggested courses

#### C. The Individual and Society (minimum of 17 credits)

See category C in Home Economics Education above.

#### D. Literature, Humanities, and Fine Arts (minimum of 12 credits)

See adviser for suggested courses.

#### E. Professional Courses in the Major

- CPsy 1301—Introduction to Child Psychology (4)
- FSoS 3260—Family Resource Management (3)
- FSoS 5200—Family Relationships (5)

*One of the following:*

- FScN 1012—Nutrition: Concepts and Issues (3)
- Hsg 1851—Consumer Aspects of Housing (4)
- TexC 5661—Clothing and Human Behavior (4)

*Area of Emphasis (minimum of 34 credits):*

Choose one of five emphasis areas: family and parent education, nutrition education, cooperative extension, international education, and financial education. Courses may be selected from, but not limited to, one or more of the following subject matter areas: nutrition, human development, parenting, family life, consumer economics, food management, housing, apparel, design, textiles. See adviser for approved courses in each emphasis area.

#### F. Professional Education Courses

- Home Economics Education (minimum of 35 credits)*
- HEEd 1500—Introduction to Home Economics Education (2)
- HEEd 1510—Knowledge and Values in Teaching (4)
- HEEd 3520—Home Economics Curriculum and Instruction: Cognitive Learning (5)
- HEEd 3530—Home Economics Curriculum and Instruction: Affective Learning (4)
- HEEd 3620—Curriculum Management (3)
- Home Economics Education Practicum (9) (see adviser for suggestions)
- 8 elective credits in Home Economics Education *Learning, Instructional, and Educational Theory (minimum of 6 credits)*
- See adviser for suggestions.

*Educational Audience, Setting, and Role (minimum of 15 credits)*

See adviser for suggestions.

**G. Electives** (21 credits) 15 credits must be chosen from categories A-F and additional credits to make total of 186 required for graduation.

*Family Life Educator Endorsement*

Applicants for this option must hold a bachelor's degree and a valid license as a classroom teacher at the grade level where assignments may be made. With careful planning, students may also complete course work for initial licensure concurrently with this endorsement option. Eligible individuals who complete this option will be approved by the Minnesota Board of Teaching for endorsement as a Family Life Educator. Students complete 27 credits in the areas shown below, selected in consultation with an adviser:

Family Structure and Function—minimum of 3 credits from FSoS 5202, 5210; Soc 3501, 5505, 5506, 5511

Parent Education—minimum of 3 credits from FSoS 5025, CPsy 5339; HEEd 3331, 5405

Human Sexuality—minimum of 3 credits from FSoS 5001, 5002; Soc 3503, 5524

Child Development—maximum of 6 credits from CPsy 1301, 3331 or 5331, 5333

Family Relationships—minimum of 3 credits—FSoS 5200 suggested

HEEd 5407—Family Life Education (1-4)

*Vocational Adult Parent Educator Licensure*

Applicants must be in a degree program or hold a completed degree in vocational home economics education, general home economics, early childhood education, family life education, child development, or other education field. Vocational licensure may also be undertaken concurrently with undergraduate, M.Ed., graduate, or adult special status. For detailed information, contact the Division of Home Economics Education, University of Minnesota, 325 Vocational and Technical Building, St. Paul, MN 55108. General requirements are:

Family Life Core—15-27 credits, depending on the bachelor's degree field, with at least 3 credits in each of the following five areas: family structure and function, parent education, family relationships, child development, methods and materials of family life education

Adult Education Methods—3 credits

Philosophy of Vocational Education—3 credits

State requirements for training in human relations

HEEd 3910—Educational Methods for Home Economists and Related Professionals (3) (required of non-education majors)

Master of education (M.Ed) programs in home economics education are offered for licensed home economics teachers and for nonlicensed professional workers in home economics education. See the *College of Education Bulletin* for details.

**Housing**

This program is designed to develop problem-solving skills to use in helping people with their housing needs. Basic courses in design and family social science emphasize human needs and behavior, designed environments, family relationships, and housing development, alternatives, management, and rehabilitation. A multidisciplinary core of courses offered in departments across the University offers knowledge of planning, financing, political processes, implications of public policy, economic resources, urbanization, and cultural background. After acquiring a firm theoretical base, you will select an area of concentration, based on your career interests, in aging, community development, design, energy, management/marketing, or social service. One of the strengths of the housing program is an internship, a one-quarter practical work experience away from the classroom.

Graduates of this program may work in a wide variety of housing positions reflecting their area of concentration and internship experience. Employers may include government agencies (housing authority, city planning department, advocacy office, heritage preservation commission), neighborhood organizations, financial institutions, private or public housing and property management agencies, and construction or development firms. Another option is to pursue graduate studies to prepare for careers in college teaching and/or research in a special area of competence.

A grade of at least C is required in all professional courses in the major (category E).

**A. Communication, Language, Symbolic Systems** (must be taken A-N)

Rhet 1101—Writing to Inform and Persuade (4)

Rhet 1104—Library Research Method (1)

Rhet 1151—Writing in Your Major (4)

Rhet 1222—Public Speaking (4)

Rhet 3562—Writing in Your Profession (4)

Minimum of 1 additional credit selected from approved courses

**B. Physical and Biological Sciences** (must be taken A-N)



## Programs

Minimum of 9 credits selected from approved courses from at least two disciplines, to include:

Phys 1001—The Physical World (4)

### C. The Individual and Society (must be taken A-N)

AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)

or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)

Psy 1001—General Psychology (5)

Soc 1001—Introduction to Sociology (4)

### D. Literature, Humanities, and Fine Arts

Minimum of 9 credits selected from approved courses from at least two disciplines, to include:

Dsgn 1501—Introduction to Design (3)

Arch 1021 (4) recommended

### E. Professional Courses in the Major

Hsg 1851—Consumer Aspects of Housing (4) (required for all majors except those selecting design option)

or Dsgn 1552—Introduction to Interior Design (4) (required for all majors selecting design option)

Hsg 3863—Environment: Housing and Community (4)

Hsg 3870—Professional Seminar in Housing (1)

Hsg 5861—Housing Management (5)

Hsg 5867—Housing Alternatives for the Family (4)

Hsg 5868—Housing Problems of the Family (5)

FSoS 3260—Family Resource Management (3)

or FSoS 3500—Consumer and the Market System (3)

FSoS 5200—Family Relationships (5)

Dsgn 1550—Drafting: Basic Drafting Techniques (4)

ForP 3310—Wood Frame Building Systems and Materials (4)

*One of the following courses:*

Econ 3701—Money and Banking (4)

BFin 3000—Finance Fundamentals (4)

BFin 3500—Real Estate Investment Analysis (4)

Econ 3101 (AgEc 3101)—Microeconomic Theory (4)

AgEc 3640—Public Finance: Concepts and Practices (4)

Econ 3801—Elements of Public Finance (4)

*One of the following courses:*

FSoS 5202—Introduction to Social Psychology with Application to the Family (5)

FSoS 5218—Family Financial Management (3)

FSoS 5220—Family Economics (3)

FSoS 5260—Dynamics of Family Decision Making (3)

or Hsg 5801 (FSoS 5301)—The Family and Energy Issues (3)

*Two of the following courses:*

Econ 5623—Housing Markets and Public Policy: United States (4)

FSoS 5255—Approaches to Family Policy (4-5)

PA 5505—Housing Policy (4)

*One of the following courses:*

Soc 1651—Rural Sociology (4)

Geog 5391—Rural Geography (4)

Soc 5651—Rural Social Institutions (4)

Soc 5661—Rural Community Analysis (4)

*One of the following courses:*

Geog 5372—Metropolitan Analysis I (4)

Arch 5137—Planning: Urban Function and Structure (4)

Soc 3601—Urban Community (4)

*One of the following courses:*

EPsy 5260—Introductory Statistical Methods (4)

Stat 1051—Introduction to Ideas of Statistics (4)

Stat 5021—Statistical Analysis I (5)

Soc 3801-3802-3803—Sociological Methods I, II, III (15)

Psy 3801—Introduction to Measurement and Statistical Methods (4)

*One of the following courses:*

MIS 3300—Introduction to Computers and Management Information Systems (4)

other computer courses (see adviser)

demonstrated computer proficiency (see adviser)

*Area of Concentration*

Minimum of 30 credits in one of the following areas (see adviser for suggested list of courses):

Aging

Community Development

Design

Energy

Housing Management/Marketing

Social Service

### F. Internship

Hsg 3580—Internship in Housing (15 max)

### G. Free Electives

Electives to make a total of 185 credits required for graduation

## Human Relationships: Family, Youth, and Social Services

This program provides the education for richer and more aware relationships. Its multidisciplinary course work and internship experience lay the groundwork for work in such human service occupations as marriage and family counseling, case management, advocacy, social work, and youth work. Students will have the opportunity to acquire skills involved in functional management, interpersonal relationships, and community social policies and services. The program incorporates a basic core in the study of human relationships, after which students select an area of concentration in family relationships, youth studies, or social services. Through a college-supervised fieldwork experience, students will work with a community-based professional on projects

# Human Relationships: Family, Youth, and Social Services

related to family relationships, youth, or social welfare services.

Graduates may engage in counseling and educational services to individuals, couples, parents, families, or youth organizations, or may choose to pursue graduate work in an academic or professional school.

## A. Communication, Language, Symbolic Systems

Rhet 1101—Writing to Inform and Persuade (4)  
Rhet 1104—Library Research Method (1)  
Rhet 1151—Writing in Your Major (4)  
Rhet 1222—Public Speaking (4)  
Rhet 3562—Writing in Your Profession (4)  
Math 1111—College Algebra and Analytic Geometry (5)

## B. Physical and Biological Sciences

Minimum of 9 credits to be selected from approved courses; must include one course in a biological science and one in a physical science

## C. The Individual and Society

AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)  
or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)  
Anth 1102—Introduction to Social and Cultural Anthropology (5)  
FSoS 1001—Dynamics of Family Relationships (3)  
or FSoS 1002—Dynamics of a Couple Relationship (3)  
or FSoS 1025—Parenthood (4)  
Pol 1001—American Government and Politics (5)  
Psy 1001—General Psychology (5)  
Soc 1001—Introduction to Sociology (4)

## D. Literature, Humanities, and Fine Arts

Minimum of 9 credits selected from approved courses

## E. Professional Courses in the Major (must be taken A-N unless offered S-N only)

FSoS 3260—Family Resource Management (3)  
FSoS 5001—Human Sexual Behavior (4)  
FSoS 5200—Family Relationships (5)  
CPsy 1301—Introductory Child Psychology (4)  
or CPsy 3303—Adolescent Psychology (4)  
or CPsy 5301—Advanced Child Development (4)  
SW 1001—Introduction to Social Welfare and Community Services (5)  
SW 3005—Social Work: The Art of Helping People (4)  
or FSoS 3001—Communication Skills and Interviewing Techniques: An Introduction (3)  
SW 3101—Current Social Policy Problems and Social Welfare (4)  
or FSoS 5255—Approaches to Family Policy (4-5)  
Three courses in American studies, history, classics, philosophy, women's studies, humanities, Afro-American studies,\* American Indian studies,\* Chicano studies,\* East Asian studies, Middle Eastern studies, South Asian studies, or Scandinavian studies (\*also

meets ethnic studies requirement for social services option)

4 or 5 credits in statistics from:

EPsy 5260—Introductory Statistical Methods (4)  
Psy 3801—Introduction to Measurement and Statistical Methods (4)  
Soc 3801, 3802—Sociological Methods I and II (10)  
(both courses must be taken to meet requirement)  
Stat 1051—Introduction to Ideas of Statistics (4)  
Stat 3091—Introduction to Probability and Statistics (4)

3-5 credits in methodology courses in measurement and research design from:

FSoS 5205—Introduction to Family Research Methods (3)  
EPsy 5221—Basic Principles of Measurement (3)  
EPsy 5240—Principles and Methods of Evaluation (3)  
Soc 3803—Sociological Methods III (5)  
Soc 5821—Evaluation Research (4)  
Psy 1004-1005—Introductory Laboratory Psychology (8)  
Hist 3955—Introduction to Writing History (4)  
Phil 3105—Introduction to the Theory of Knowledge (5)  
Phil 3631—Logic of Scientific Reasoning (5)

One of the following areas of concentration:

## FAMILY RELATIONSHIPS

FSoS 5202—Introduction to Social Psychology with Application to the Family (5)  
or Soc 5201—Introduction to Social Psychology (4)  
or Psy 5201—Social Psychology (4)  
FSoS 5210—Family in World Perspective (5)  
FSoS 5220—Family Economics (3)  
or FSoS 5218—Family Financial Management (4)  
or FSoS 5260—Dynamics of Family Decision Making (3)  
FSoS 5249—Fieldwork: Directed Community Work Experience (5-15)

## YOUTH STUDIES

YoSt 3100—Introduction to Youthwork (3)  
YoSt 5201-2-3—Practicum (4 cr per qtr)  
YoSt 5330—Child and Adolescent Psychology for Practitioners (4) or CPsy 3303—Adolescent Psychology (4)

Minimum of 16 credits from:

YoSt 5132—Experiential Learning (4)  
YoSt 5133—Youth and Health (4)  
YoSt 5231—Work with Youth: Individual (4)  
YoSt 5233—Work with Youth: Groups (4)  
YoSt 5331—Youth Agencies, Organizations, and Youth Service Systems (4)  
YoSt 5332—Understanding and Working with Special Youth Populations (4)  
Soc 5952—Youth in Modern Society (4)

Other YoSt courses, such as 5129 and 5130, or courses from other departments may be included with consent of adviser.

## SOCIAL SERVICES

SW 3984—Community Organization/Development/Practice (4)  
SW 5349—Social Welfare in America (4)  
Fieldwork recommended

## Programs

Minimum of one course from each of the following areas:

*Aging* (4 cr)

SW 5024—Multidisciplinary Perspectives on Aging (4)

Soc 5957—Sociology of Aging (4)

*Ethnic Studies* (4 cr)

CPsy 3332—Cross-Cultural Child Development (4)  
or alternatives in Afro-American, American Indian, and Chicano studies (see Professional Courses in the Major)

*Communication* (3-4 cr)

GC 3605—Interviewing (4)

GC 3622—Individual Helping Skills (4)

SW 5414—Fundamentals of Social Group Work (4)

CSPP 5110—Counseling Procedures (3)

*Advanced Courses in Social Services* (3-4 cr)

SW 5021—Human Sexuality for the Health and Helping Professions I (4)

SW 5022—Human Sexuality for the Health and Helping Professions II (4)

SW 5023—Human Sexuality for the Health and Helping Professions III (4)

SW 5010—Special Topics (3-4)

SW 5102—The Changing Roles of Men and Women (4)

SW 5228—Social Work Practice in Rural Areas (4)

### F. Electives

Electives to make a total of 185 credits required for graduation (may be taken S-N)

## Interior Design

This program is designed to help the student develop competence in identifying, researching, and creatively solving problems of the immediate physical environment by acquiring (1) an understanding of the relationship between the individual and the environment, (2) a sense of the designer's responsibility to society, (3) a foundation in basic design, (4) an understanding of historical styles and contemporary trends, (5) technical knowledge and communication skills, and (6) an awareness of business and professional ethics. A firm base of professional course work and flexibility in the choice of supporting areas of study are offered.

Upon graduation, students may work in residential or contract design. Potential employers include interior design firms, architectural firms, showrooms, retail stores, or community agencies.

Students beginning the curriculum are considered pre-interior design majors. A limited number of students who have met

the specified requirements are admitted to the interior design program. Contact the program chairperson for further information.

A minimum GPA of 2.50 is required with a minimum grade of a C in all interior design studio courses. The program is accredited by the Foundation for Interior Design Education and Research.

### A. Communication, Language, Symbolic Systems

Rhet 1101—Writing to Inform and Persuade (4)

Rhet 1104—Library Research Method (1)

Rhet 1151—Writing in Your Major (4)

Rhet 1222—Public Speaking (4)

Rhet 3562—Writing in Your Profession (4)

One computer course (3) (see adviser)

### B. Physical and Biological Sciences

Phys 1001—The Physical World (4)

Chem 1003—Physical World, Chemistry (5)

or equivalent course in chemistry that is a prerequisite to work required in textiles

### C. The Individual and Society

AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)

or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)

Psy 1001—General Psychology (5)

European history course (3-4)

### D. Literature, Humanities, and Fine Arts

ArtH 1002—Introduction to History of Art (4) or equivalent

Arch 1021—History of Environmental Development: Architecture (4)

or Arch 1022—History of Environmental Development: Architecture, Landscape Architecture (4)

Minimum of one additional course selected from approved courses other than art or architectural history (may be taken S-N)

### E. Professional Requirements in the Major

Dsgn 1550—Drafting—Basic Drafting Techniques (4) or demonstrated proficiency

Dsgn 1501—Introduction to Design (3)

Dsgn 1521—Design Process: Color (4)

Dsgn 1523—Design Process: Visual Presentation (4)

Dsgn 1552—Introduction to Interior Design (4)

Dsgn 1554—Interior Design I: Spatial Design Experiences (3)

Dsgn 1555—Interior Design I: Interior Design Problems (3)

Dsgn 3527—Design Process: Three-Dimensional Design (4)

Dsgn 3548—Lighting Design for Environmental Spaces (3)

Dsgn 3550—Interior Design Presentation (3)

Dsgn 3553—Interior Design II (4)

Dsgn 3557—Interior Design Resources and Materials (3)

Dsgn 3558—Commercial Interior Design: Theory and Practice (3)

Dsgn 5507—History of Decorative Arts: Textiles (4)  
or Dsgn 5509—History of Decorative Arts: Metal, Ceramics, Wood, Glass (4)

Dsgn 5512—History of European Furniture and Interiors (4)

Dsgn 5514—History of American Furniture and Interiors (4)

Dsgn 5515—20th-Century Interiors and Furnishings (4)

Dsgn 5552—Interior Design III: Residential Design (4)

Dsgn 5554—Interior Design IV: Contract Design (4)

Dsgn 5575—Interior Design Research (3)

Hsg 1801—Household Equipment (4)

ForP 3310—Wood Frame Building Systems and Materials (4)

TexC 3621—Textiles (5)

TexC 3622—Textiles for Interiors (3)

*One of the following (see adviser):*

1. Dsgn 3581—Field Experiences (3) or Hsg 5868—Housing Problems of the Family (5)

Additional credits in interior design, general design, or related courses to total 15; suggested are Dsgn 5553—Interior Design Collaborative (6), Hsg 5867—Housing Alternatives for the Family (4), FSos 5240—The Family as an Ecosystem (3), and Hsg 5801—Family and Energy Issues (3).

2. Dsgn 3576—Internship in Interior Design (15)

3. Dsgn 5555—Honors Thesis Project in Interior Design (15)

*Two courses from:*

Acct 1024—Principles of Financial Accounting (3)  
or AgEc 1250—Principles of Accounting (5)

Mktg 3000—Principles of Marketing (4)

Mgmt 3001—Fundamentals of Management (4)

#### F. Collateral Area

Minimum of 15 credits of related courses selected with approval of your adviser (may be taken S-N)

#### G. Free Electives

Electives to make a total of 185 credits needed for graduation (may be taken S-N)

## International Social Development Collateral

The International Social Development Collateral is an interdisciplinary sequence of courses and experiences for students, both U. S. and international, interested in the less developed areas of the world. Designed to augment B.S. and M.S. degree programs in any college of the University, it is primarily aimed at those in the College of Agriculture and the College of Home Economics. Its purpose is to

integrate aspects of agriculture and aspects of home economics for more effective work and research in rural economic development. Focus is on issues of household and food production, distribution, and consumption, with particular concern for women, children, and families in the context of the social and economic institutions affecting them.

Students plan their participation with the coordinator of the collateral and their major advisers. The collateral includes specified required courses and electives. Field placements may be an option. For more information, contact Miriam Seltzer, Coordinator of International Activities, 37C McNeal Hall (612/624-7735).

#### Required Courses

AgEc 5580—Economic Organization of the Household (cr ar)

FScN 5643/AgEc 5790—World Food Supply Problems (4)

HEEd/AgEd 5023—Extension Methods for Developing Countries (3)

HE 5600 or SocW 5010—International Development Seminar: Agriculture, Home Economics, Women, and Youth (3)

SocW 3984—Community Development (4)

SocW 5228—Rural Issues in Social Work Practice (3)

#### Electives

At least two courses in the broad subject matter areas of social work, family, food and nutrition, health; agriculture production and marketing; home/farm management; and in the process skills of program development, planning and administration, non-formal education methods, and communication techniques.

## Nutrition and Dietetics

This program is intended for those interested in the field of nutrition and its various applications in dietetics, public health, and nutrition science. The options offered in dietetics and community nutrition meet the requirements of the American Dietetic Association for membership and for internship. Students completing either option and a 6- to 12-month hospital or public health internship may seek employment in hospitals or community agencies.

The nutrition science option is planned for those interested in graduate study in this area. Students in this option should

# Programs

maintain a minimum grade point average of 2.80. Employment possibilities for persons holding graduate degrees in nutrition science include teaching or research in colleges, universities, or industry.

You must complete the organic chemistry sequence by the end of your sophomore year in order to have the prerequisites to enter courses normally scheduled in the junior year, or you may be delayed in completing the program. Transfer students who have completed organic chemistry or biochemistry courses that are not as extensive as those listed below are required to take additional courses in both fields.

The American Dietetic Association has accredited a coordinated undergraduate program in dietetics at the University. With the cooperation of Twin Cities area hospitals, this program enables qualified students to integrate an internship experience with the final two years of undergraduate study. Upon completing the program, students are assured membership in the American Dietetic Association. Enrollment is limited and interested students should apply to the program director early in their sophomore year.

## A. Communication, Language, Symbolic Systems

- Rhet 1101—Writing to Inform and Persuade (4) or equivalent course
- Rhet 1104—Library Research Method (1)
- Rhet 1151—Writing in Your Major (4)
- Rhet 1222—Public Speaking (4)
- Rhet 3562—Writing in Your Profession (4)
- Math 1111—College Algebra and Analytic Geometry (5)

## B. Physical and Biological Sciences

- Anat 3001—Elementary Anatomy (5)
- Biol 1009—General Biology (5)
- Biol 5001—Biochemistry (4)
- BioC 5025—Laboratory in Biochemistry (2)
- Chem 1004-1005—General Principles of Chemistry (10)
- Chem 3301-3302—Elementary Organic Chemistry I, II (8)
- Chem 3305-3306—Elementary Organic Chemistry Laboratory I, II (4)
- MicB 3103—General Microbiology (5) or Biol 5013—Microbiology (5)
- Phsl 3051—Human Physiology (5) or Phsl 1002—Human Physiology (4)

## C. The Individual and Society

- AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)  
or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)
- Psy 1001—General Psychology (5)
- Soc 1001—Introduction to Sociology (4)

## D. Literature, Humanities, and Fine Arts

Minimum of 9 credits selected from approved courses

## E. Professional Courses in the Major

- FScN 3110—Food Chemistry (4)
  - FScN 3112—Food Chemistry Laboratory (2)
  - FScN 3272—Introduction to Food Decision Making (2)
  - FScN 3403—Experimental Foods (4)
  - FScN 3472—Principles of Food Purchasing (4)
  - FScN 3600—Principles of Nutrition (4)
  - FScN 3622—Life Cycle and Community Nutrition (4)
  - FScN 3730—Quantity Food Production Management (5)
  - FScN 5100—General Seminar (1)
  - FScN 5622—Macro-Nutrient Metabolism (4)
  - FScN 5623—Vitamin and Mineral Biochemistry (4)
  - FScN 5665, 5675—Applied Clinical Nutrition and Laboratory I (2, 1)
  - FScN 5666, 5676—Applied Clinical Nutrition and Laboratory II (2, 1)
  - FScN 5667—Applied Clinical Nutrition III (2)
  - FScN 5750—Principles of Foodservice Management (4)
  - LaMP 5177—Pathology for Allied Health Students General and System Pathology (4)
  - Mgmt 3001—Fundamentals of Management (4)  
4 or 5 additional credits in sociology or anthropology
- 3 credits in psychology of learning from:*
- HSU 5011—Instructional Skills for Health Professionals: The Teaching-Learning Process (3)
  - EPsy 5114—Psychology of Student Learning (3)
  - EPsy 5115—Adult Learning and Educational Practice (4)
- 3 to 5 credits in statistics or computer usage from the following or in consultation with adviser:*
- EPsy 5260—Introductory Statistical Methods (4)
  - PubH 5404—Introduction to Biostatistics and Statistical Decision (4)
  - Soc 3801—Sociological Methods I: Descriptive Statistics (5)
  - Stat 1051—Introduction to Ideas of Statistics (4)
  - Stat 3081—Experimental Techniques and Statistical Inference (5)
  - Stat 5021—Statistical Analysis I (5)

## F. Areas of Emphasis

In addition to the course requirements specified above, you must complete one of the five following areas.

### CLINICAL DIETETICS AND GENERAL DIETETICS

The requirements for these options are met by the general program listed in categories A through E above and meet American Dietetic Association requirements for these specializations.

**COMMUNITY NUTRITION**

To meet the American Dietetic Association community specialization, add 6 credits of approved course work after consultation with your adviser.

**COORDINATED UNDERGRADUATE PROGRAM IN DIETETICS**

The basic curriculum is similar to that specified in categories A through E above. However, it also includes field experience courses in which didactic and clinical phases of instruction are coordinated. A detailed plan of the coordinated program may be obtained from the Department of Food Science and Nutrition.

**NUTRITION SCIENCE**

If you want a nutrition science emphasis or are considering graduate study, you may, with the approval of your adviser, substitute up to 28 credits from the courses listed below for an equivalent number of credits from the major requirements. Courses cannot be substituted for FScN 5622 or 5623. This option is intended primarily to provide preparation for graduate studies and does not meet the American Dietetic Association requirements for internship.

- BioC 5744—Analytical Biochemistry (4)
- BioC 5751—General Biochemistry (4)
- BioC 5752—General Biochemistry (4)
- Chem 1006—Principles of Solution Chemistry (4)
- Chem 3100—Quantitative Analysis Lecture (3)
- Chem 3303—Elementary Organic Chemistry III (4)
- Chem 5520—Elementary Physical Chemistry (3)
- Chem 5521—Elementary Physical Chemistry (3)
- Math 1142—Short Calculus (5) or Math 1201—Pre-Calculus (5)
- Math 1211—Calculus I (5)
- Math 1221—Calculus II (5)
- 10-15 credits of college physics

**G. Free Electives**

Electives to make a total of 185 credits required for graduation

**Retail Merchandising**

The core of this program consists of retailing, business, and textiles and clothing courses offering product knowledge and a merchandising focus. Students may select one of two areas of emphasis: apparel or home furnishings.

Employment opportunities exist for graduates in many retail operations such as department, mass merchandising, or specialty stores where they may work in buying or sales management. General merchandising positions as manufacturer's representatives are another option.

A minimum grade point average of 2.50 overall is required in courses used to

fulfill major requirements and supporting business requirements (categories E and F below).

**A. Communication, Language, Symbolic Systems**

- Rhet 1101—Writing to Inform and Persuade (4)
- Rhet 1104—Library Research Method (1)
- Rhet 1151—Writing in Your Major (4)
- Rhet 1222—Public Speaking (4)
- Rhet 3562—Writing in Your Profession (4)
- Math 1131—Finite Mathematics (5)

**B. Physical and Biological Sciences**

- Chem 1001-1002—Chemical Principles and Covalent Systems (10)
  - or Chem 1003—Physical World, Chemistry (5)
  - or Chem 1004-1005—General Principles of Chemistry (10)

One additional course from a discipline other than chemistry selected from approved courses to total 9 credits

**C. The Individual and Society**

- AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)
  - or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)
- Psy 1001—General Psychology (5)
- Soc 1001—Introduction to Sociology (4)

**D. Literature, Humanities, and Fine Arts**

- ArtH 1002—Introduction to the History of Art (4) or equivalent course
- Minimum of 5 additional credits selected from approved courses

**E. Professional Courses in the Major**

- Dsgn 1501—Introduction to Design (3)
- TexC 1641—Introduction to Retail Merchandising (3)
- TexC 1642—Seminar: Orientation to Retail Merchandising (1)
- TexC 1643—Apparel Industries (4)
- TexC 3621—Textiles (5)
- TexC 3643—Retail Merchandising (5)
- TexC 3644—Retail Experience Seminar I (2)
- TexC 3645—Retail Experience Seminar II (2)
- TexC 3646—Retail Supervision (3)
- TexC 3647—Retail Occupational Search (1)
- TexC 3664—Fashion Trend Analysis (4)

One of the following options:

**Apparel Option**

- TexC 3603—Ready-to-Wear Analysis (3)
- TexC 3622—Textiles for Interiors (3)
  - or TexC 3623—Performance Evaluation of Textiles (3)
  - or TexC 5622—Issues and Trends in Textile Consumer Protection (3)
- TexC 3662—Aesthetics of Clothing (3)
- TexC 5661—Clothing and Human Behavior (4) or TexC 5662—Clothing Consumption Problems (3)
- 9 additional TexC or selected Dsgn credits (to be taken A-N)

# Programs

## *Home Furnishings Option*

- Dsgn 1521—Design Process: Color (3)
- Dsgn 1552—Introduction to Interior Design (4)  
or Hsg 1851—Consumer Aspects of Housing (4)
- Dsgn 3557—Interior Design Resources and Materials (3)
- Dsgn 5507—History of Decorative Arts: Textiles (4)  
or Dsgn 5509—History of Decorative Arts: Metal, Ceramics, Wood, and Glass (4)
- Dsgn 5512—History of European Furniture and Interiors (4)
- Dsgn 5514—History of American Furniture and Interiors (4)
- TexC 3622—Textiles for Interiors (3)

## **F. Supporting Business Requirements**

- Acct 1024—Principles of Financial Accounting I (3) or AgEc 1250—Principles of Accounting (5)
- DSci 1050—Elementary Managerial Statistics (4) or Stat 1051—Introduction to Ideas of Statistics (4)
- Mgmt 3001—Fundamentals of Management (4)
- Mgmt 3002—Psychology of Management (4)
- Mktg 3000—Principles of Marketing (4)
- Mktg 3010—Buyer Behavior and Marketing Analysis (4)
- Mktg 3065—Retail Management (4)
- MIS 3300—Introduction to Computers and Management Information Systems (4)
- 12 additional credits (to be taken A-N)

## **G. Free Electives**

Electives to make a total of 185 credits required for graduation

*Note:* 4-8 credits in TexC 5003 and 2-4 credits in TexC 5004 may be used as TexC elective credits for category E (apparel option); or a maximum of 8 of these credits may be used as electives for category F.

## **Technical Communication**

Technical communicators apply modern techniques to the dissemination of technical knowledge in industry, business, education, and government. Technical communicators write for diverse audiences that include scientists, managers, and consumers of products and services provided by technology. To accomplish their objectives, technical communicators must first be generalists, well acquainted with the basic principles of science, engineering, the social sciences, and management practices. In addition, they must be familiar with and able to apply the basic principles of writing and editing, graphics, communication research and theory, and oral communication. The interdisciplinary technical communication curriculum is designed to provide the necessary

fundamental theory for application in these areas within a program flexible enough to allow you to plan a course of study appropriate to your career goals.

As a graduate of the program, you may be employed in government, educational, and other organizations in such fields as home economics, agriculture, communication, computer science, electronics, research and development, and transportation. You may pursue a career as a writer-editor, an extension specialist, or a training or communication specialist.

If you plan to pursue a graduate communication program, you should consult with your adviser about selection of appropriate course work early in your program.

Students majoring in the undergraduate program in technical communication must complete the requirements listed below. Course substitutions in categories A, B, C, and D may be made only with the approval of the college office, and in categories E and F only with the approval of the Department of Rhetoric, 202 Haecker Hall, (612/624-3445).

## *Major*

### **A. Communication, Language, Symbolic Systems—27 credits minimum**

- Math 1111—College Algebra and Analytical Geometry (5)
- Rhet 1101—Writing to Inform and Persuade (4)
- Rhet 1104—Library Research Method (1)
- Rhet 1151—Writing in Your Major (4)
- Rhet 1222—Public Speaking (4)
- Rhet 1500—Introduction to Word Processing (2) S/N
- Rhet 3562—Writing in Your Profession (4)

#### *One course from:*

- AgEt 3030—Introduction to Problem Solving with Computers (4)
- CSci 3101—Introduction to FORTRAN Programming (4)
- CSci 3102—Introduction to Pascal Programming (4)
- CSci 3104—Introduction to Programming and Problem Solving (4)
- MIS 3300—Introduction to Computers and Management Information Systems (4)

### **B. Physical and Biological Sciences—18 credits minimum from:**

- BioC 1301—Elementary Biochemistry I (5)
- BioC 1302, 1303—Elementary Biochemistry II and Laboratory (3, 2)
- Biol 1009—General Biology (5)
- Biol 1103—General Botany (5)

Biol 1106—General Zoology (5)  
 Bot 1009—Minnesota Plant Life (4)  
 Bot 1012—Plants Useful to Man (4)  
 Chem 1004—General Principles of Chemistry (5)  
 Chem 1005—General Principles of Chemistry (5)  
 EBB 3004—Fundamentals of Ecology (4)  
 GCB 3022—Genetics (4)  
 Geo 1001—Physical Geology (5)  
 Geo 1002—Historical Geology (4)  
 Geo 1111—Introductory Physical Geology (5)  
 MicB 3103—General Microbiology (5)  
 Phsl 1002—Human Physiology (4)  
 Phys 1001, 1005—The Physical World and Laboratory (4, 1)  
 Phys 1041, 1045—Introductory Physics and Laboratory (4, 1)  
 Phys 1042, 1046—Introductory Physics and Laboratory (4, 1)

### C. The Individual and Society—14 credits minimum

See All-College Requirements, category C, in preceding section.

### D. Literature, Humanities, and Fine Arts—16 credits minimum

See All-College Requirements, category D in preceding section.

### E. Professional Courses in the Major—70 credits minimum

*Required for all students*—6 credits minimum

Rhet 3582—Senior Seminar (2)

Rhet 5180—Internship in Technical Communication (4-6)

Students majoring in technical communication must complete a total of 70 credits in category E with a minimum number in each competency area listed below. Note that the minimums do not add up to 70 credits, since you are expected to surpass the minimums in areas of particular interest. Required courses in certain competency areas are identified. Courses identified as recommended may be taken with the approval of your adviser. Courses not listed may be taken only with the approval of the director of the Technical Communication Program or, in his or her absence, the head of the Department of Rhetoric.

### WRITING AND EDITING—14 credits minimum

#### *Recommended*

Comp 1027—Intermediate Expository Writing (4)

Rhet 3130—Publicity (4)

Rhet 3159—Publications Editing (4)

Rhet 3572—Grammatical Editing for Technical Writers (2)

Rhet 5561—Advanced Editing Seminar: Electronic Publishing (2)

Rhet 5565—Writing for Publication (4)

Rhet 5571—Writing for Special Purposes (2)

Rhet 5581—Document Design (4)

GC 1425—Business Correspondence (4)

### ORAL COMMUNICATION—8 credits minimum

#### *Required*

Rhet 5257—Scientific and Technical Presentations (4)

Rhet 5258—Interviewing: Dynamics of Face-to-Face Communication (4)

#### *Recommended*

Rhet 3254—Advanced Public Speaking (4)

Rhet 3266—Communication, Discussion in Small Group Decision Making (4)

Rhet 3270—Speech: Special Problems (1-5)

Spch 3201—Introduction to Broadcasting Production (4)

Spch 3203—Radio Production (4)

Spch 5411—Small Group Communication (4)

Spch 5431—The Process of Persuasion (4)

### VISUAL COMMUNICATION—7 credits minimum

#### *Required*

Ind 1600—Drafting (3)

#### *Recommended*

Dsgn 1521—Color and Design (4)

Dsgn 1523—Visual Presentation I (4)

Dsgn 1525—Two-Dimensional Design I (4)

GC 1536—Introduction to Commercial Art (3)

Ind 1602—Drawing and Design (3)

Ind 1620—Graphic Communication I (3)

Ind 1622—Graphic Communication II (3)

Ind 3120—Graphic Communication: Intermediate (Applied Photography) (3-9)

Ind 3131—Graphic Communication: Advanced (3)

Rhet 3101—Functional Photography (4)

In addition to these recommended courses, there are many University courses in art, cinematography, television production, and photography that would satisfy this requirement. If you have a special interest in any of these areas, consult with your adviser.

### COMMUNICATION SYSTEMS—7 credits minimum

#### *Recommended*

Rhet 5150—Direction of Training in Business and Service Organizations (4)

Rhet 5165—Studies in Organizational Communication, Conflict, and Change (4)

Rhet 5170—Managerial Communications (4)

Rhet 5400—Dissemination and Utilization of Information (4)

Rhet 5531—Technical Writing Course Development (2)

Rhet 5600—Transfer of Technology (4)

Spch 3111—Leadership Communication (3)

Spch 5412—Group and Organizational Communication (4)

Spch 5414—Authority and Power in Task-Oriented Communication (4)

### COMMUNICATION THEORY AND RESEARCH—7 credits minimum

#### *Required*

Rhet 1220—Principles of Human Communication (4)

Rhet 3700—Rhetorical Theory (4)

#### *Recommended*

Clas 3045—Basic Program in Technical Terminology and Word Study (2)



## Programs

- Engl 3851—The English Language (4)  
Engl 5815—History of English Language (4)  
Engl 5831—American English (4)  
Engl 5851—Structure of Modern English (4)  
Ling 3001—Introduction to Linguistics (5)  
Ling 3601—Introduction to Historical Linguistics (4)  
Rhet 5500—Research in Communication Strategies (4)  
Rhet 5541—Readings in Scientific and Technical Prose (2)  
Spch 5403—Theory Construction and Analysis in Communication (4)  
Spch 5421—Quantitative Research in Communication (4)  
Spch 5611—Classical Rhetoric (4)  
Stat 5021—Statistical Analysis I (5)  
Stat 5022—Statistical Analysis II (5)

### PHILOSOPHY AND HISTORY OF SCIENCE AND TECHNOLOGY—7 credits minimum

#### Recommended

- HMed 3002—Medicine and Disease in History: 17-19th Centuries (4)  
HMed 3003—Medicine and Disease in History: Modern (4)  
HSci 1712—Technology and Western Civilization: Medieval (4)  
HSci 1713—Technology and Western Civilization: Modern (4)  
HSci 1811—Introduction to History of Science: Ancient Science (4)  
HSci 1812—Introduction to History of Science: Medieval Science (4)  
HSci 1813—Introduction to History of Science: Modern Science (4)  
Phil 5601—Philosophy of Science (4)  
Phil 5615—Minds, Bodies, and Machines (4)

#### F. Technical Electives—20 credits minimum

Through the selection of your technical electives, you are expected to develop enough competency in a science, social science, or engineering discipline to acquire an understanding of the goals and methods of science and technology. You may also use this portion of the program to prepare for employment in some specific area such as computers or foods. Technical electives will be chosen with the aid of your adviser and can be interdisciplinary as well as intradisciplinary. You may choose from such areas as agriculture, computer science, forestry, the health sciences, home economics, and the natural and physical sciences. At least 8 credits must be at the 3000 level or higher.

**G. Electives** to complete the 190 credits required for graduation with the bachelor of science degree

#### Minor

The technical communication minor is intended to augment your major by increasing your capability to communicate in your chosen field. It requires 30-32 credits in addition to the basic communication re-

quirements of the College of Home Economics (Rhetoric 1101, 1104, 1151, 1222, and 3562). Contact a faculty adviser in the Department of Rhetoric for assistance in planning a minor in technical communication. The following courses are required.

- Rhet 1220—Principles of Human Communication (4)  
Rhet 3572—Grammatical Editing for Technical Writers (2)  
Rhet 5257—Scientific and Technical Presentations (4)  
Rhet 5258—Interviewing: Dynamics of Face-to-Face Communication (4)  
Rhet 5571—Writing for Special Purposes (2) (Students must register for two quarters and complete 4 credits.)

#### Two courses from:

- Rhet 1147—Efficient Reading (4)  
Rhet 1376—The Use of Scientific and Technical Film (4)  
Rhet 3254—Advanced Public Speaking (4)  
Rhet 3266—Communication, Discussion in Small Group Decision Making (4)  
Rhet 5170—Managerial Communications (4)  
Rhet 5561—Advanced Editing Seminar: Electronic Publishing (2)  
Rhet 5565—Writing for Publication (4)  
Rhet 5581—Document Design (4)

#### One course from:

- Rhet 1301—Humanities: Modern Thought and the Enlightenment (4)  
Rhet 1302—Humanities: Modern Thought and the Industrial Revolution (4)  
Rhet 1303—Humanities: Modern Thought and the Impact of Evolution (4)  
Rhet 5541—Readings in Scientific and Technical Prose (2)

## Textiles and Clothing

This program relates clothing and other textile products in the near environment to the physical, psychological, and social needs of individual consumers and families. Its two basic emphases are: (1) materials and physical behavioral aspects of textile products, especially clothing, and (2) the relationship between clothing and human behavior. Analysis of the textile and clothing needs of people and design of solutions to problems involving those needs help students gain the personal insights and expertise in textiles and clothing necessary for effecting environmental change.

By selecting course work in appropriate supporting areas, majors may prepare

for professional work in educational services programs (government agency, business/industry, mass media, community/extension); product analysis or market research (business/industry, government agency); or promotional and training programs (business/industry). This program may also serve as preparation for graduate study in textiles and clothing or other advanced professional programs.

Within the program you may emphasize either textiles or clothing by selecting electives in the desired area. You complete work in a supporting area that is related to your professional interests. Courses in the supporting area may be chosen from other departments within the college as well as other units within the University, such as anthropology, business, chemistry, design, economics, education, family social science, journalism, sociology, physics, and psychology.

A GPA of 2.50 in courses in textiles and clothing is required for graduation. A higher overall GPA is required for admission to graduate study.

#### A. Communication, Language, Symbolic Systems

Rhet 1101—Writing to Inform and Persuade (4)  
 Rhet 1104—Library Research Method (1)  
 Rhet 1151—Writing in Your Major (4)  
 Rhet 1222—Public Speaking (4)  
 Rhet 3562—Writing in Your Profession (4)  
 Math 1131—Finite Mathematics (5) or Math 1111—College Algebra and Analytical Geometry (5)

#### B. Physical and Biological Sciences

Biol 1009—General Biology (5) or GCB 3002—Human Genetics and Social Affairs (3 or 4)  
 Chem 1001-1002—Chemical Principles and Covalent Systems (10)  
 or Chem 1004-1005—General Principles of Chemistry (10)

#### C. The Individual and Society

AgEc 1020-1030—Principles of Macroeconomics, Microeconomics (9)  
 or Econ 1001, 1002—Principles of Macroeconomics, Microeconomics (8)  
 Psy 1001—General Psychology (5)  
 Soc 1001—Introduction to Sociology (4)

#### D. Literature, Humanities, and Fine Arts

Dsgn 1501—Introduction to Design (3)  
 Minimum of 6 additional credits selected from approved courses

#### E. Professional Courses in the Major

TexC 1602—Fitting the Human Subject (2)  
 TexC 1603—Advanced Principles of Apparel Production (2)  
 TexC 1643—Apparel Industries (4)  
 TexC 1680—Opportunities in Textiles and Clothing (1)  
 TexC 3621—Textiles (5)  
 TexC 3622—Textiles for Interiors (3)  
 TexC 3661—Cultural Perspectives on Dress (3)  
 TexC 3662—Aesthetics of Clothing (3)  
 TexC 3664—Fashion Trend Analysis (4)  
 TexC 5621—Macro-Micro Property Relationships (5)  
 TexC 5622—Issues and Trends in Textile Consumer Protection (3)  
 TexC 5661—Clothing and Human Behavior (4)  
 TexC 5662—Clothing Consumption Problems (3)

14 to 19 additional credits in TexC courses, with a maximum of 6 credits in any one course. Up to 6 credits in TexC 3003, 5003, 5004 may be used to partially satisfy this requirement. Additional credits in these courses (in excess of 6) may be applied to partially satisfy supporting area or free elective requirements or both.

#### F. Supporting Area

You must complete a minimum of 35 credits (A-N only) in a supporting area. The following areas of emphasis are recommended. Courses must be selected with approval of adviser. Lists of recommended courses for each of the supporting areas are available in the Design, Housing, and Apparel department office, 240 McNeal Hall.

##### APPAREL TECHNOLOGY

For those interested in careers related to production of apparel. Graduates might work as consultants in the home sewing industry, as pattern makers in industry, or in related positions in theatres or museums.

##### COMMUNICATIONS

For those interested in careers related to publicity, promotion of new products, and public relations in businesses and industries dealing with textile and apparel products.

##### CONSUMER EMPHASIS

For those interested in serving as a liaison between the textile and clothing consumer and business, industry, and government. Graduates might work as education/information specialists, textile and clothing consultants, or consumer affairs representatives. Recommended courses focus on social, economic, and political organizations and their influences, people and their relationships with each other, and selected skills in researching and presenting information to diverse groups.

##### MARKETING AND MANAGEMENT

For those interested in careers in marketing and management in the textiles and apparel industries. Recommended courses are primarily in departments in the School of Management.

##### TEXTILE ANALYSIS

For those interested in applying basic skills in logic, scientific reasoning, computation, and statistical method to analyze situations, problems, or products

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## Programs

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involving textiles and clothing and to arrive at useful conclusions. Graduates might work in business, industry, or public service.

### *PREPARATION FOR GRADUATE STUDY*

For those planning to pursue graduate study. You may concentrate on completing courses in a social science or physical science area that will serve as prerequisites for graduate-level courses in the area that relates to textiles and clothing.

### **G. Free Electives**

Electives to total 185 credits required for graduation

## **Youth Studies Collateral**

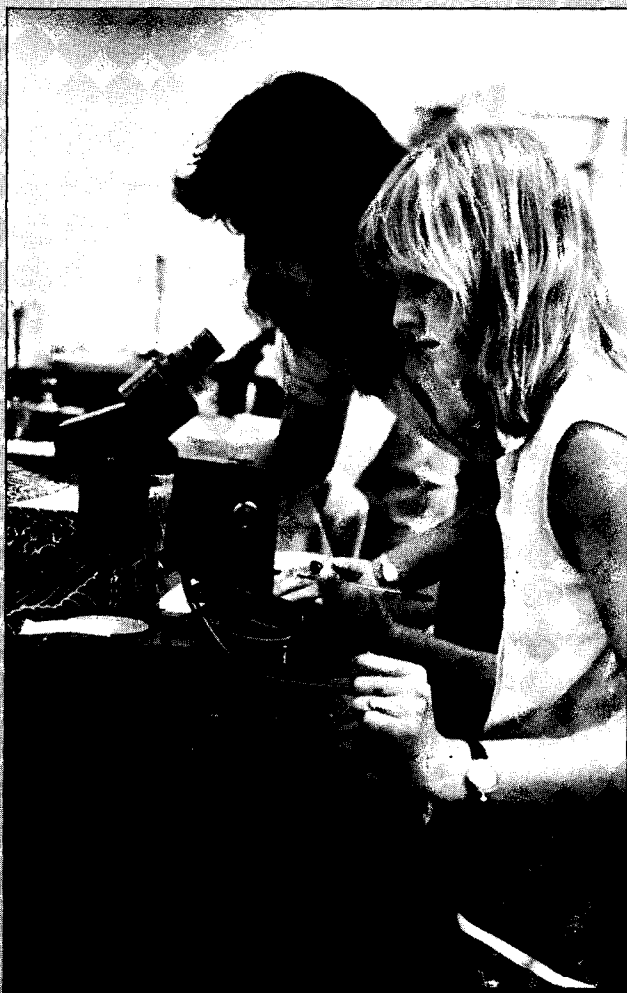
The School of Social Work offers a 24-credit collateral area of emphasis in youth studies for selected upper division and graduate students registered in any college of the University. The purpose of the collateral is to help students acquire the basic understanding, skills, attitudes, and insights into themselves necessary for study about or continuing work with youth. The Youth Studies Collateral includes:

1. A designated course for each of three quarters: CPsy 3303 or 5303—Adolescent Psychology; Soc 5952—Youth in Modern Society; CSPP 5110—Communications Procedures; or other courses, depending on student needs.
2. Eight to ten hours per week of direct work with youth throughout the three quarters.
3. A weekly seminar throughout the academic year to discuss and integrate knowledge about and experience with youth.

For direct work with youth and the weekly seminar, students register for YoSt 5201- 5202-5203—Practicum.

For more information, call 612/624-3700 or write Youth Studies Collateral, 386 McNeal Hall, University of Minnesota, 1985 Buford Avenue, St. Paul, MN 55108.

# Course Descriptions



# Course Descriptions

**Numbers**—Courses primarily for freshmen and sophomores are numbered 1000 through 1999; for juniors and seniors, 3000 through 3999; for juniors, seniors, and graduate students, 5000 through 5999; and for Graduate School registrants only, 8000 and above.

**Symbols**—The following symbols are used throughout the descriptions:

- † All courses preceding this symbol must be completed before credit will be granted for any quarter of the sequence.
- § Credit will not be granted if the equivalent course listed after this symbol has been taken for credit.
- ¶ Concurrent registration is required in the course listed after this symbol.
- # Registration Override Permit, completed and signed by the instructor, is required for registration.
- △ Registration Override Permit, completed and signed by the department offering the course, is required for registration.
- Registration Override Permit, completed and signed by the college offering the course, is required for registration.
- H Honors course (follows the course number).
- f, w, s, su fall, winter, spring, summer (follows the course number).

When no abbreviated department prefix precedes the course number listed as a prerequisite, that prerequisite is in the same department as the course being described.

## Design (Dsgn)

*(Department of Design, Housing, and Apparel)*

### 1201. INTRODUCTION TO COMMERCIAL ART AND GRAPHIC DESIGN. (4 cr)

Overview of advertising communications process and creative procedure, terminology, and technology. Copywriting, design, typography, color separating, printing, photography, and television. Emphasis on commercial artist's relationship with other specialists. (Extension only)

### 1202. DESIGN PROCESS: CREATIVITY. (4 cr; S-N only; prereq 1201)

Overview of creative processes, application to graphic design and creative problem solving. Emphasis on ideas, visual communication of concepts. (Extension only)

### 1203. DRAWING FOR DESIGN AND ILLUSTRATION. (4 cr; prereq 1521 or #)

Fundamentals of drawing for commercial design and illustration. Emphasis on human figure drawing, form, perspective, and shadows. Use of range of commercial art mediums. (Extension only)

### 1204. COMMERCIAL DRAWING I. (4 cr; prereq 1201, 1202, 1203, 1521 or #)

Development of professional skills in illustration and drawing for advertising, ability to render variety of subjects in full range of mediums. (Extension only)

### 1206. SPATIAL LOGIC FOR DESIGNER AND ILLUSTRATOR. (4 cr; prereq 1203 or #)

Drafting, orthographic projection, and scale drawing fundamentals. Emphasis on use of geometry in mechanical construction of 1, 2, 3 point perspective; methods of visually communicating technical, financial, and statistical information. (Extension only)

### 1220. COMMERCIAL ART MEDIA AND STUDIO TECHNIQUES. (4 cr; prereq 1204 or #)

Commercial art media and techniques; color separations; lettering and calligraphy, commercial art tools and terms. Practice and principles; field trip. (Extension only)

### 1501. INTRODUCTION TO DESIGN. (3 cr)

Awareness of design in the near environment.

### 1521. DESIGN PROCESS: COLOR. (4 cr; prereq △)

Color concepts and their applications to design.

### 1523. DESIGN PROCESS: VISUAL PRESENTATION. (4 cr; prereq △)

Development of basic drawing skills for the designer.

### 1525. DESIGN PROCESS: TWO-DIMENSIONAL DESIGN I. (4 cr; prereq △)

Experiments with principles of two-dimensional design.

### 1526. PRESENTATION TO CLIENTS. (3 cr)

Designed to help the consultant in a client-consultant relationship attain and maintain a high level of performance and to present ideas or product in the most favorable manner. (Extension only)

### 1531. SURFACE FABRIC DESIGN I. (4 cr; prereq 1521, 1523, 1525 or #, △)

Exploration of surface pattern and composition with varied media and materials: dyeing, resist, batik, stencil, block printing, and others.

### 1533. METALSMITHING: INTRODUCTION TO TECHNIQUES. (4 cr; prereq 1521, 1523, 1525 or #, △)

Introduction to techniques used in contemporary metalsmithing and jewelry making. (Extension only)

**1541. COSTUME DESIGN I.** (3 cr; prereq 1521, 1523 or 1525 or #,  $\Delta$ )  
Problems in color, texture, design for the individual. Introduction to sketching. Folk and regional costume.

**1543. FASHION ILLUSTRATION.** (4 cr; prereq 1541 or #,  $\Delta$ )  
Human figure sketches and fashion illustration as a form of communication. Emphasis on color, proportion, cut, and fabric detail.

**1544. COSTUME DESIGN: SPECIAL TECHNIQUES.** (4 cr; prereq 1531, 1541,  $\Delta$ )  
Studio problems with emphasis on line, shape, and color for costumes.

**1550. DRAFTING—BASIC DRAFTING TECHNIQUES.** (4 cr)  
Architectural drafting instruction in use of drafting instruments. Emphasis on plans, elevation, details, and architectural symbols and vocabulary as related to interior design. (Extension only)

**1552. INTRODUCTION TO INTERIOR DESIGN.** (4 cr, prereq soph; 1501)  
Orientation to the profession of interior design, with emphasis on residential and commercial interiors.

**1554. INTERIOR DESIGN I: SPATIAL DESIGN EXPERIENCES.** (3 cr; prereq 1501, 1521, 1523, 1552, 1550 or equivalent,  $\Delta$ )  
Application of design elements and principles to interior design problems, including two-dimensional projects, scale models, and three-dimensional design experiments in the space laboratory.

**1555. INTERIOR DESIGN I: INTERIOR DESIGN PROBLEMS.** (3 cr; prereq 1554,  $\Delta$ )  
Problems in designing for living space needs with emphasis on behavioral concerns related to interiors.

**3203. COMMERCIAL DRAWING II.** (4 cr; prereq 1204 or #)  
Emphasis on further development of visual and technical skills. Transparent and opaque washes; ink line, dry brush. (Extension only)

**3214. COMMERCIAL DRAWING III.** (4 cr; prereq 3203 or #)  
Emphasis on execution of portfolio quality professional commercial drawings. (Extension only)

**3241. COMMERCIAL ILLUSTRATION I.** (4 cr; prereq 1220, 1523 or #)  
Projects in various media involving all advertising subject matter. Advertising and story illustration with emphasis on current trends. (Extension only)

**3242. COMMERCIAL ILLUSTRATION II.** (4 cr; prereq 3241 or #)  
Development of illustration skills with encouragement of individual directions. Studio experiences in the media and techniques of commercial illustration. (Extension only)

**3243. COMMERCIAL ILLUSTRATION III.** (4 cr; prereq 3242 or #)  
Further development of individual illustration skills, personal style. Studio experiences in the media and techniques of commercial illustration. Orientation in agency and studio procedures. (Extension only)

**3251. GRAPHIC DESIGN I.** (4 cr; prereq 1220 or #)  
Layout techniques, materials, structure, color theory. Applications of type style and copyfitting. (Extension only)

**3252. GRAPHIC DESIGN II.** (4 cr; prereq 3251 or #)  
Continued development of professional skills in layout and design for advertising. Photographic techniques, color separation, and other printing/production techniques. (Extension only)

**3253. GRAPHIC DESIGN III.** (4 cr; prereq 3252)  
Continued development of layout skills. Exposure to actual working conditions. Advertising psychology, consumer relations, and business management. Printing papers. Orientation in agency, studio, and corporate procedures. (Extension only)

**3255. TYPOGRAPHIC DESIGN.** (4 cr; prereq 1220)  
Theory and application of principles of typographic composition. Emphasis on history of typography, type faces and letter forms, typesetting methods, terminology, type specification, copyfitting. (Extension only)

**3256. PRODUCTION FOR THE GRAPHIC DESIGNER.** (4 cr; prereq 1220)  
Investigation of processes and techniques for production of print communication. Fundamentals of key-line, mechanical art production, specification for printing industry. (Extension only)

**3280. DESIGN PORTFOLIO.** (4 cr; prereq 24 cr of 32xx courses)  
Compilation of individual portfolios; individual and group critiques. Preparation of slides. (Extension only)

**3281. ILLUSTRATION PORTFOLIO.** (4 cr)  
Prepares students for illustration job market, helps them evaluate and compile a portfolio, adding necessary pieces; write a resume; and understand the job market. (Extension only)

**3517. HISTORY OF COSTUME: PRIMITIVE THROUGH 18TH CENTURY.** (3 cr; prereq general art history course)  
Emphasis on European costume.

**3521. DESIGN PROCESS: COLOR II.** (4 cr; prereq 1521, 1523, or #,  $\Delta$ )  
Continued study of color concepts and their application to design.

**3523. DESIGN PROCESS: VISUAL PRESENTATION II.** (4 cr; prereq 1523 or equiv,  $\Delta$ )  
Continued development of drawing skills for the designer.

**3525. DESIGN PROCESS: TWO-DIMENSIONAL DESIGN II.** (4 cr; prereq 1525 or equiv,  $\Delta$ )  
Experiments with principles of two-dimensional design.

**3527. DESIGN PROCESS: THREE-DIMENSIONAL DESIGN.** (4 cr; prereq 1521, 1523, 1525 or #,  $\Delta$ )  
Study and application of principles of three-dimensional design.

# Course Descriptions

**3531. SURFACE FABRIC DESIGN II.** (4 cr; prereq 1531 or #,  $\Delta$ )  
Selection from printed, dyed, woven, or non-woven textiles.

**3532. FIBER STRUCTURE: WEAVING.** (4 cr; prereq 1521, 1525 or #)  
Beginning loom techniques. Studio problems. (Extension only)

**3533. METALSMITHING: FABRICATION.** (4 cr; prereq 1533,  $\Delta$ )  
Techniques of raising and forging and other noncasting techniques to create useful objects. (Extension only)

**3535. DESIGN PROCESS: MATERIALS.** (4 cr; prereq 1521, 1523, 1525 or #,  $\Delta$ )  
Design process to convey visual concepts explored through a series of units in selected materials.

**3536. METALSMITHING: ENAMELING.** (4 cr; prereq 1533 or #, some metals experience,  $\Delta$ )  
Enamel used as surface decoration on metal jewelry or other useful objects.

**3537. FIBER STRUCTURE DESIGN I.** (4 cr; prereq 1521, 1525 or #)  
Individual designing with two- and three-dimensional forms (non-loomed techniques). (Extension only)

**3541. COSTUME DESIGN II.** (4 cr; prereq 1543, 1544,  $\Delta$ )  
Problems in design of children's garments.

**3543. FASHION ILLUSTRATION II.** (4 cr; prereq 1543)  
Advanced study of the human figure and its movements. Techniques developed to express clear perspectives of fashion point of view. Opportunity to develop pre-professional portfolio.

**3548. LIGHTING DESIGN FOR ENVIRONMENTAL SPACES.** (3 cr)  
Examination of types and uses of lighting, its relationship to color, and energy conservation. Evaluation of light quantity and quality for residential and contract spaces.

**3550. INTERIOR DESIGN PRESENTATION.** (3 cr; pass portfolio review,  $\Delta$ )  
Perspective drawing and methods of rapid rendering for interiors.

**3551. INTERIOR DESIGN RENDERING.** (3 cr; prereq 3550)  
Advanced rendering techniques in various media. (Extension only)

**3553. INTERIOR DESIGN II.** (4 cr; prereq 3550 or #,  $\Delta$ )  
Intermediate interior design; working creatively with design elements as related to interiors. Solutions to assigned problems presented in space laboratory and two-dimensionally.

**3557. INTERIOR DESIGN RESOURCES AND MATERIALS.** (3 cr; prereq 1555 or #, TexC 3621)  
Resources and materials used in interiors and their functional and aesthetic relationship to interior design.

**3558. COMMERCIAL INTERIOR DESIGN: THEORY AND PRACTICE.** (3 cr; prereq passed portfolio review)

Design, technical, and business information related to non-residential design. Guest lecturers.

**3571. PROFESSIONAL ISSUES IN APPLIED DESIGN.** (1 cr; to be taken last 2 qtrs before graduation or #)  
Discussion of issues in the field, possible goals, and professionalism.

**3572. SPECIAL TOPICS IN DESIGN.** (1-3 cr [max 9 cr]; prereq depends on specific topic)  
In-depth investigation of single specific topic, announced in advance.

**3576. INTERNSHIP IN INTERIOR DESIGN.** (max 15 cr; S-N only; prereq 3553, pass portfolio review)

Full-time directed professional work experience with a firm, studio, retail store, or community service organization.

**3581. FIELD EXPERIENCE IN INTERIOR DESIGN.** (3 cr; S-N only; prereq 3553, pass portfolio review)

Supervised work-study program with an architectural firm, interior design studio, retail store, or community agency. Class discussion of professionalism and assembly of credentials.

**3582. FIELD EXPERIENCES IN DESIGN.** (3 cr, S-N only; prereq completion of at least one-half of professional sequence and #)  
Minnesota State Fair and other exhibitions. (Extension only.)

**3583. FIELD EXPERIENCE IN COSTUME DESIGN.** (4 cr; S-N only; prereq completion of at least one-half of professional sequence or #)  
Supervised independent work-study program with a professional firm or institution such as a clothing manufacturing firm, accessory design studio, art museum, or free-lance designer.

**3584. FIELD EXPERIENCE IN DESIGN.** (Cr or [max 15 cr]; S-N only; prereq #, plan to be submitted and approved in advance by adviser and employer)  
Supervised work experience with a professional, design studio, retail store, community service, museum, printing or publishing firm, or other appropriate organization. Evaluative report required.

**3586. DESIGN PROBLEMS.** (1-3 cr)  
Special problems designed to develop specific learning experiences in research, resource development, or exhibition design.

**5507. HISTORY OF DECORATIVE ARTS: TEXTILES.** (4 cr; prereq ArtH 1002 or equiv)  
Textiles from early civilization to the 20th century. Design, materials, and techniques.

**5509. HISTORY OF DECORATIVE ARTS: METAL, CERAMICS, WOOD, AND GLASS.** (4 cr; prereq ArtH 1002 or equiv)  
Glass, ceramics, metalwork, wood, and other materials from selected historical periods. Application to interior design.

**5512. HISTORY OF EUROPEAN FURNITURE AND INTERIORS.** (4 cr; prereq ArtH 1002 or equiv) Furniture and interiors from ancient civilizations through the 19th century.

**5514. HISTORY OF AMERICAN FURNITURE AND INTERIORS.** (4 cr; prereq ArtH 1002 or equiv, 5512) Styles of American interiors and furnishings from the 17th to the 20th century.

**5515. 20TH-CENTURY INTERIORS AND FURNISHINGS.** (4 cr; not for grad credit; prereq 5514 or #) In-depth study of 20th-century design of interiors and furnishings from Victorian to the present time.

**5518. HISTORY OF COSTUME: 19TH AND 20TH CENTURIES.** (4 cr; prereq 3517 or #) Emphasis on American costume. Study of historic costumes from the Goldstein Gallery's costume collection.

**5527. THREE-DIMENSIONAL DESIGN II.** (4 cr; prereq 3527,  $\Delta$ ) Lectures and studio work based on unitary systems derived from modules. Application of plans based on visual perception exercises to space division in the space laboratory.

**5531. SURFACE FABRIC DESIGN III.** (4 cr; prereq 3531 and passed portfolio review,  $\Delta$ ) Designing in one special surface textile technique. Studio problems. Readings. (Extension only.)

**5532. FIBER STRUCTURE: WEAVING II.** (4 cr; prereq 3532) Advanced loom weaving. Exploration of pattern weaves and color. (Extension only)

**5533. METALSMITHING: COMBINED TECHNIQUES.** (4 cr; prereq 3533,  $\Delta$ ) Combined cast and fabrication techniques to create jewelry and other useful objects. (Extension only)

**5537. FIBER DESIGN: QUILTING.** (4 cr; prereq 1521, 1525 or #) Application of color and design principles through techniques of patchwork and quilting. (Extension only)

**5541. COSTUME DESIGN III.** (3 cr; prereq 3541, TexC 3604 or #,  $\Delta$ ) Advanced problems in draping and sketching. Pencil, crayon, and watercolor techniques. Studies and reports on selected topics.

**5544. COSTUME DESIGN PROBLEMS.** (4 cr; prereq 5541 or 5541,  $\Delta$ ) Supervised experience in design production; development of a "line"; professional ethics and business practice.

**5552. INTERIOR DESIGN III: RESIDENTIAL DESIGN.** (4 cr; prereq 3553, 3557, TexC 3621, Hsg 1401, or #,  $\Delta$ ; ForP 3310 and TexC 3622 recommended) Advanced problems in planning and furnishing residential spaces to meet individual or family needs.

**5553. INTERIOR DESIGN COLLABORATIVE STUDIO.** (6 cr; prereq 3553) Solving design problems for the near environment utilizing an interdisciplinary team approach.

**5554. INTERIOR DESIGN IV: CONTRACT DESIGN.** (4 cr; prereq 3553, 3557, TexC 3621, or #,  $\Delta$ ; ForP 3310 and TexC 3622 recommended) Design problems related to commercial interiors.

**5555. HONORS THESIS IN INTERIOR DESIGN.** (15 cr; prereq completion of all other professional courses, program committee approval) Independent interior design thesis project under tutorial guidance.

**5570. SEMINAR: DESIGN—SELECTED TOPICS.** (1-3 cr per qtr [max 12 cr]; prereq #) Study of selected topics through assigned readings, discussions, and lectures by resource people.

**5571. SPECIAL TOPICS IN APPLIED DESIGN.** (2-4 cr per qtr [max 9 cr]; prereq dependent on specific topic) In-depth investigation of a single specific topic, announced in advance.

**5572. SPECIAL TOPICS IN COSTUME DESIGN.** (2-4 cr per qtr [max 9 cr]; prereq dependent on specific topic) In-depth investigation of a single specific topic, announced in advance.

**5574. SPECIAL TOPICS IN INTERIOR DESIGN.** (2-4 cr per qtr [max 9 cr]; prereq dependent on specific topic) In-depth investigation of a single specific topic, announced in advance.

**5575. INTERIOR DESIGN RESEARCH.** (3 cr; prereq 3553 or #,  $\Delta$ ; pass portfolio review) Examination and development of studies related to interior design.

**5582. FIELD EXPERIENCE ABROAD.** (1-15 cr [max 15 cr], §Hsg 5882; prereq #) Faculty-directed field study abroad. Focus: interior or applied design, and/or costume. Discovery of design in other cultures; meeting professionals; field trips.

**5584. READINGS IN DESIGN.** (1-3 cr; not open to srs; prereq #) Independent study and review of books and periodicals. Written reports.

**5585. PROBLEMS IN DESIGN: GENERAL.** (2-4 cr per qtr [max 12 cr]; prereq # and  $\Delta$ ) Independent study in design under tutorial guidance.

**5586. PROBLEMS IN DESIGN: INTERIORS.** (2-4 cr per qtr [max 12 cr]; prereq # and  $\Delta$ ) Independent study under tutorial guidance.

**5587. PROBLEMS IN DESIGN: JEWELRY.** (3-4 cr per qtr [max 12 cr]; not for grad credit; prereq passed portfolio review, #,  $\Delta$ ) Independent study under tutorial guidance.



## Course Descriptions

**5588. PROBLEMS IN DESIGN: TEXTILES.** (3-4 cr per qtr [max 12 cr]; prereq passed portfolio review, #,  $\Delta$ )  
Independent study under tutorial guidance.

**5589. PROBLEMS IN DESIGN: COSTUME.** (3-4 cr per qtr [max 12 cr]; prereq 5518 or equiv, passed portfolio review, #)  
Independent study under tutorial guidance.

### For Graduate Students

(For descriptions, see *Graduate School Bulletin*)

**8521. DESIGN PROCESS: COLOR**

**8523. DESIGN PROCESS: DRAWING**

**8525. DESIGN PROCESS: TWO-DIMENSIONAL DESIGN**

**8531. SPECIAL PROBLEMS IN TEXTILE DESIGN**

**8552. SPECIAL PROBLEMS IN HOUSING, INTERIOR DESIGN**

**8556. ENVIRONMENTAL STUDIES IN INTERIOR DESIGN**

**8575. SEMINAR: DESIGN**

**8576. SEMINAR: DESIGN INSTRUCTION**

**8584. READINGS IN DESIGN**

**8585. PROBLEMS: DESIGN**

**8586. PROBLEMS: INTERIOR DESIGN**

**8587. PROBLEMS: DESIGN**

**8588. DIRECTED STUDY IN DESIGN**

## Family Social Science (FSoS)

**1001. DYNAMICS OF FAMILY RELATIONSHIPS.** (3 cr, §1002)  
Application of behavioral sciences to mate selection, interaction in marriage and other committed relationships, sex roles, and maintaining and ending relationships.

**1002. DYNAMICS OF A COUPLE RELATIONSHIP.** (3 cr, 1001; prereq married or engaged couple)  
Designed for couples and individuals in an intimate relationship to improve their awareness of relationship dynamics and their relationship skills.

**1003. SURVEY OF FAMILY SOCIAL SCIENCE.** (2 cr; S-N only)  
Broad view of the field of family social science, orientation to the curriculum of the family relationships program. Presentations by faculty members, field representatives, and other appropriate persons. Students will work on small group projects designed to help them better understand and appreciate the family relations field.

**1025. PARENTHOOD.** (4 cr)

Differing concepts of family roles—father, mother, son, daughter, sister, brother. Their implications for parent-child and sibling interaction. Effects of parenthood on husband-wife relations.

**3001. COMMUNICATION SKILLS AND INTERVIEWING TECHNIQUES: AN INTRODUCTION.** (3 cr; prereq 1001)

Introductory training and experience in various communication skills and interviewing techniques for undergraduates. Integration of didactic and experiential training, and preparation for more advanced course work in the department.

**3015. AMERICAN WOMEN: THEIR CHANGING STATUS.** (4 cr, §WoSt 1005-1006)

Participation of American women in society with emphasis on the period since 1960. Roles, statuses, education, work, problems, the future.

**3240. SPECIAL TOPICS IN FAMILY SOCIAL SCIENCE.** (3 cr per qtr [max 9 cr]; prereq dependent on specific topic, soph or above, and/or #)

**3260. FAMILY RESOURCE MANAGEMENT.** (3 cr; prereq AgEc 1030)

Development of a theoretical systems framework to analyze behavior in families with emphasis on managerial aspects of behavior; goal setting, planning, and implementing in use of resources.

**3500. CONSUMER AND THE MARKET SYSTEM.** (3 cr; prereq Soc 1001, Psy 1001, AgEc 1030; 3260 recommended)

Analysis of the interaction of the family and marketing systems; consumer problems resulting from that interaction.

**5001. HUMAN SEXUAL BEHAVIOR.** (4 cr; prereq 15 cr psychology or sociology)

Nature of sexual functioning, sexual development, ethics and attitudes, research problems.

**5002. ADOLESCENT SEXUALITY.** (3 cr; prereq 5001 or #)

Review of adolescent development. Patterns of sexual behavior during adolescence. Contraceptive use and non-use. Adolescent pregnancy and parenthood. Parental and institutional sex instruction.

**5025. PARENTING.** (4 cr; prereq 5200 or 5202, CPsy 1301)

Parenting methods, the child's development from infancy through adolescence. Designed to help students identify differing parenting techniques, develop their own parenting approach, and conduct parenting classes.

**5200. FAMILY RELATIONSHIPS.** (5 cr; prereq Psy 1001 or equiv, Soc 1001 or equiv)

The family as an institution and system of relationships. Current developments in study of the family. Changes in American society and their influence on family life.

**5201. FAMILY IN AMERICAN SOCIAL STRUCTURE.** (4 cr; prereq 5200, 25 cr social science courses exclusive of economics or #)

The family as a social institution interrelated with the economic, political, and other social institutions of society. Sources of change in the family and effects of other subsystems or social structures on the family viewed within the framework of sociological theories useful in understanding the process or change.

**5202. INTRODUCTION TO SOCIAL PSYCHOLOGY WITH APPLICATIONS TO THE FAMILY.** (5 cr, \$Soc 5201; prereq Psy 1001 and introductory sociology or #)

Social psychology with applications to courtship, marriage, and the family. Social interaction, communication, social effects on individual functioning, the family as a small group, social influence, social ecology, person perception, social motivation, interpersonal attraction, and other topics.

**5205. INTRODUCTION TO FAMILY RESEARCH METHODS.** (3 cr; prereq 3260 and 5200)

Logic and philosophy of scientific method. Family research questions and objectives, standards for evaluating family research, techniques of data gathering (qualitative and quantitative methods), analysis, reporting, and writing.

**5206. DEVELOPING AND EVALUATING FAMILY RESEARCH PROJECTS.** (3 cr; prereq 5205)

Practice in proposal writing, use of various family research techniques, interpreting and reporting research results.

**5210. FAMILY IN WORLD PERSPECTIVE.** (5 cr; prereq 5200 and Anth 1102 or #)

Comparison of kinship, marriage, family organization, the family life cycle, and modes of family functioning across cultures; relationship to economic, political, religious, and other institutions, with emphasis on adaptations of the family to urbanization and industrialization.

**5218. FAMILY FINANCIAL MANAGEMENT.** (4 cr; prereq 3260 or equiv)

Analysis of family financial management principles. Financial planning of savings, investments; credit, mortgages; taxation; life, disability, health, property insurances; public, private pensions; estate planning.

**5219. PROBLEMS IN FAMILY FINANCIAL MANAGEMENT.** (3-4 cr; prereq 3260 or 3001, 5260 or #)

Financial management processes, modification of management behavior by application of behavioral techniques.

**5220. FAMILY ECONOMICS.** (3 cr; prereq 3260 or #)

Variations in family income, saving, spending, and decision making related to socioeconomic factors. Conceptual development and research on economic problems of families.

**5230. INDEPENDENT STUDY IN FAMILY SOCIAL SCIENCE.** (1-5 cr [max 16 cr]; prereq #)

Independent reading or research under faculty supervision.

**5231. INTERNSHIP: PLANNING.** (1 cr; prereq #) Identification and development of professional skills, needs, and goals in relation to a particular professional role. Preparation for an actual, planned work experience.

**5232. INTERNSHIP: WORK EXPERIENCE.** (5 cr; prereq 5231)

Full-time planned work experience in a preprofessional position related to the student's field of study.

**5233. INTERNSHIP: EVALUATION.** (1 cr; prereq 5232)

Evaluation of work experience related to general and specific program and professional goals.

**5240. SPECIAL TOPICS IN FAMILY SOCIAL SCIENCE.** (2-6 cr per qtr [max 16 cr]; prereq dependent on specific topic)

Review of research and discussion. See *Class Schedule* for topics.

**5241. ECONOMIC EFFECTS OF DIVORCE ON FAMILIES.** (4 cr; prereq 5200, 5202 and 5218 or equiv)

Interdisciplinary seminar with readings and research findings in family economics, finance, and law applied to economic well-being of families and resulting policy issues where divorce is a factor.

**5242. DEATH, OTHER LOSSES, AND THE FAMILY.** (3 cr; prereq 5202 or equiv)

Individual and family reactions to dying, death, and other losses or potential losses from perspective of theories of grief work, family systems, others.

**5249. FIELDWORK—DIRECTED COMMUNITY WORK EXPERIENCE.** (3-5 cr per qtr [max 15 cr]; prereq 5200 and #)

Directed preprofessional work experience with families; social, medical, and/or educational orientation.

**5255. APPROACHES TO FAMILY POLICY.** (4 cr; prereq SW 3101 or Pol 3321 or #)

Analysis of interrelationship between families and social policy in areas of welfare, housing, health care, family law, education, and social services.

**5260. DYNAMICS OF FAMILY DECISION MAKING.** (3 cr; prereq 3260 or #)

Conceptual models of decision making and resource management. Review and critique of current research and literature.

**5301. THE FAMILY AND ENERGY ISSUES.** (3 cr, \$Hsg 5301; prereq 5 cr FSoS or #)

For description see Hsg 5301

**Alcohol and Drug Counseling Education Courses (Extension Only)**

**5008. INTROSPECTIVE WORKSHOP AND CLINICAL SUPERVISION.** (1-2 cr; prereq 3035 or 5035)

Special topics, nonregular program or course in family social science for pre-service or in-service helping professionals.

## Course Descriptions

### **5026. ASSESSMENT OF ALCOHOL AND DRUG USE PROBLEMS.** (4 cr)

Series of lectures. Theoretical views of nature of dependency and drug use problems, approaches to diagnosis and/or assessment.

### **5027. CURRENT ISSUES AND PHARMACOLOGY OF ALCOHOL AND DRUG USE.** (4 cr)

Series of lectures. Historical and cultural perspectives of drug use and abuse. Additional topics: men's, women's, adolescents', minority, and sexuality issues. Fundamental principles of pharmacology as applied to various classifications of mood-altering chemicals.

### **5028. TREATMENT OF ALCOHOL AND DRUG USE PROBLEMS.** (4 cr)

Continuum of treatment responses and treatment planning for substance abusers. Prevention, self-help groups, professional ethics, nutrition, alternative treatments, aftercare programming, evaluation, some pragmatics of counseling.

### **5029. COUNSELING SKILLS PRACTICUM I.** (4 cr)

Role playing and group exercises to increase competency in basic counseling skills. Assessment of counselor needs and motivations, nonverbal communication, accurate empathy, self-disclosure, and questioning. Video tape gives students feedback.

### **5030. COUNSELING SKILLS PRACTICUM II.** (4 cr; prereq 3029 or 5029 or #)

Facilitating client's exploration of self and understanding of the problem, assisting in setting therapeutic goals. Concreteness, advanced empathy, immediacy, confrontation, reframing, and problem solving. Videotape gives students feedback.

### **5031. COUNSELING SKILLS PRACTICUM III.** (4 cr; prereq 3030 or 5030 or #)

Advanced therapeutic methods, double bind theory, use of paradox, working with resistant clients, neurolinguistic programming.

### **5032. CHEMICAL ABUSE AND THE FAMILY: AN OVERVIEW.** (4 cr)

Introduction to marriage and family therapy, with particular application to families in which alcohol or drug abuse is a problem. Family types, family of origin, structural family therapy, family systems theory, and alcoholism. Review of literature.

### **5034. TOPICS IN ALCOHOL AND DRUG ABUSE.** (1-5 cr; prereq written #)

Selected readings or projects in alcohol and drug use problems and evaluation of students' mastery of assigned study.

### **5035. CLINICAL INTERNSHIP IN CHEMICAL USE PROBLEMS.** (2-18 cr; prereq 3026, 3027, 3028, 3030, 3032, 3037, written #; admission requests must be made to internship coordinator of ADCEP)

Rotating clinical intership (1,000 hours) in three to four community agencies or treatment centers (separate registration required for each placement, required closed class permission slip available at program office)

### **5037. GROUP THERAPY: THEORY AND PRACTICE.** (3 cr)

Lectures and small group experiences. Stages of group development, stages of affective development, Hill Intervention Matrix, leadership roles and functions, Yalom's curative factors, and understanding of group process.

### **For Graduate Students**

(For descriptions, see *Graduate School Bulletin*)

### **8200. SEMINAR: RESEARCH AND INTERPRETATION**

### **8203. FAMILY STRESS, COPING, ADAPTATION**

### **8214. THEORIES OF MARITAL AND FAMILY THERAPY**

### **8215. CLINICAL ISSUES IN MARITAL AND FAMILY THERAPY**

### **8216. MARITAL AND FAMILY ASSESSMENT**

### **8221, 8222, 8223. INTERNSHIP IN TEACHING COLLEGE LEVEL FAMILY COURSES I, II, III**

### **8230. DIRECTED STUDY IN FAMILY SOCIAL SCIENCE**

### **8231. SEMINAR IN GENDER ROLES**

### **8251. PROBLEMS: FAMILY SOCIAL SCIENCE**

### **8252. PROBLEMS: FAMILY SOCIAL SCIENCE**

### **8255. CONCEPTUAL FRAMEWORKS IN THE FAMILY**

### **8261, 8262, 8263. PROCESS SEMINAR FOR FAMILY I, II, III**

### **8266. FAMILY RESEARCH METHODOLOGY I**

### **8267. FAMILY RESEARCH METHODOLOGY II**

### **8270. PRACTICUM IN FAMILY RESEARCH**

### **8317, 8318. FAMILY OF ORIGIN I, II**

### **8551, 8552, 8553. INTERNSHIP IN MARITAL AND FAMILY THERAPY I, II, III**

## **Food Science and Nutrition (FScN)**

### **1010. MAN'S FOOD.** (4 cr, §1012)

Human nutritional needs; food composition, world food supply, consumption patterns, acceptance, quality programs and regulations, food preservation, commercial processes, packaging, marketing, national and international food programs.

**1012. NUTRITION: CONCEPTS AND ISSUES.** (3 cr, §1010)

Fundamental concepts of nutrition, including human nutritional requirements, function of nutrients in body, and nature of nutrient deficiencies. Selection of foods for balanced diet. Dietary survey. Vegetarianism, weight loss, fad diets. Relationship of nutrition to physical activity, obesity, cancer, heart disease, food processing, world food problems.

**1020. INTRODUCTORY MICROBIOLOGY.** (4 cr; especially for students in home economics; prereq 3rd-qr fr, #)

Fundamental principles of microbiology. Characteristics of bacteria, yeasts, molds, and other microorganisms; their importance in the preparation and preservation of foods, and their relation to the health and well-being of the individual and the family.

**1030. UNDERSTANDING CHEESE.** (2 cr; intended for nonmajors)

Conversion of milk into cheese; cheese curing, optimum characteristics of many varieties of natural cheese; fondue, process, and club cheese; nutritional value and care of cheese in the home.

**1102. TECHNOLOGY OF FOOD PROCESSING.** (4 cr; prereq high school chemistry and biology)

Introduction to the technology of processing of foods with special reference to the prevention of biological, microbiological, physical, and chemical deterioration. Changes in food composition, microbiological safety, food laws and regulations, technologies of the major food processes such as canning, freezing, and drying.

**1212. SCIENTIFIC PRINCIPLES OF FOOD PREPARATION.** (5 cr; prereq Chem 1002 or 1005)

Introduction to composition and chemical and physical properties of foods; interaction and reaction of foods in preparation procedures; evaluation of food products prepared in the laboratory using quality standards.

**1215. HOME PRESERVATION OF FOODS.** (2 cr; intended for nonmajors)

Description and demonstration of safe methods of home food preservation. Students prepare various products in laboratory. Methods covered include canning, freezing, fermenting, and drying.

**1500. MEAT SCIENCE.** (4 cr; prereq Biol 1009) (Same as AnSc 1500) Role of antemortem and post-mortem factors in altering the anatomy, function, and biochemical properties of muscle during its conversion to meat; importance of these changes to meat quality and the manufacture, selection, preparation, and palatability characteristics of meat and meat products.

**3110. FOOD CHEMISTRY.** (4 cr; prereq BioC 1302 or Biol 5001)

Structures, properties, reactions, and functions of basic chemical components of foods. Chemical properties of food systems, influence of processing, storage, and preparation.

**3112. FOOD CHEMISTRY LABORATORY.** (2 cr; prereq 3110 or §3110)

Laboratory experiments to investigate chemical properties and reactions of selected food systems and food components.

**3123. MICROBIOLOGY OF FOODS.** (5 cr, §MicB 3103, §VPB 3103; not for majors in food science and technology; prereq Biol 1009 and 10 cr college chemistry . . . or 1020 or #)

Incidence and sources of microorganisms in foods. Principles involved in the control of microorganisms in foods for prevention of spoilage and public health hazards. Enhancement of keeping quality, nutritive value, and flavor attributes of food by the activities of microorganisms, as found in the manufacture of cheese or other fermented food products. Principles involved in sanitation and destruction or inhibition of growth of microorganisms through use of physical and chemical agents.

**3272. INTRODUCTION TO FOOD DECISION MAKING.** (2 cr; prereq 3600)

Factors considered when making food decisions to plan nutritionally adequate and aesthetically pleasing menus for various eating patterns and cost levels. Use of computer to calculate menu nutrient content and to plan menus.

**3400. FOOD COMMUNICATION TECHNIQUES.** (3 cr; prereq 1212 or 3403)

Communication of information about food products (from proposal to marketing strategy) or recipes (from proposal to cookbook page). Individual and team oral and written presentations, demonstrations, food photography.

**3403. EXPERIMENTAL FOODS.** (4 cr; prereq 3110)

Principles and modern concepts of food systems and preparation; laboratory projects to illustrate effects of different procedures and ingredients.

**3472. PRINCIPLES OF FOOD PURCHASING.** (4 cr; prereq 5 cr in food science and nutrition)

Principles of purchasing the basic groups of foods. Relative cost of key nutrients from different foods within a food group. Food prices and indices of change. Laws and regulations pertinent to the labeling of food. Food standards and grades. Relation of these factors to the purchase of food.

**3600. PRINCIPLES OF NUTRITION.** (4 cr; prereq Biol 1009 and Chem 1004 or equiv)

Fundamental principles of nutrition, including essentiality and metabolism of nutrients and results of nutritional deficiencies or excesses. Presented in context of personal, national, and global aspects of human nutrition.

**3602. NUTRITION IN PROFESSIONAL HEALTH CARE.** (4 cr, §3600; prereq chemistry, human physiology, pharmacology, pathophysiology, regis in a professional health discipline) General principles of nutrition in professional health care. Nutrition as a factor in attaining and maintaining health. The role of the health practitioner in nutrition education.

## Course Descriptions

### **3622. LIFE CYCLE AND COMMUNITY NUTRITION.** (4 cr; prereq 3600 or equiv, physiology or human biology, 6 cr psychology, sociology, anthropology, or economics)

Application of nutrition principles to meet the specific requirements of growth, development, adult maintenance, and aging. Concepts and methodologies in community nutrition practice. Consideration of community-based nutrition-related services and resources, public policy and government systems influencing them, and sociocultural factors affecting nutritional status.

### **3662. INTRODUCTION TO THE CLINICAL PRACTICE OF DIETETICS.** (2 cr; prereq 12 cr in food science and nutrition, regis in coordinated undergrad program in dietetics)

The practice of dietetics in hospitals, outpatient clinics, public service agencies, and food services.

### **3703. FIELD EXPERIENCE IN FOODSERVICE MANAGEMENT.** (3-18 cr; prereq regis in coordinated undergrad program in dietetics or #)

Supervised foodservice production and management experience in a community or health care facility.

### **3730. QUANTITY FOOD PRODUCTION MANAGEMENT.** (5 cr; prereq 1212 or 3403, 3472)

Participation in the management procedures used in the selection, storage, preparation, pricing, and service of food in quantity. A quantity foodservice is used as a laboratory.

### **3732. LECTURE IN QUANTITY FOOD PRODUCTION MANAGEMENT.** (2 cr; prereq 3403, 3472, and #)

Understanding of management procedures used in selection, storage, preparation, pricing, and service of food in quantity.

### **5000. PROFESSIONAL EXPERIENCE PROGRAM.** (4 cr; not for grad cr; A-N only; prereq 15 cr food science and nutrition and #)

Up to 12 weeks of planned experience in a selected position in the food industry; evaluative reports and consultations with faculty advisers and employers.

### **5100. GENERAL SEMINAR.** (1 cr; S-N only; prereq sr or #)

Literature review and presentation of papers in selected areas of food science and nutrition.

### **5111. INDEPENDENT STUDY IN FOOD SCIENCE AND NUTRITION.** (1-5 cr [may be repeated for cr]; prereq $\Delta$ )

Individual laboratory or library research in some area related to food science or nutrition.

### **5120. FOOD MICROBIOLOGY.** (5 cr; prereq MicB 3103)

Relationship of environment to occurrence, growth, and survival of microorganisms in foods; evaluation of microbiological quality of dairy and food products; characteristics and activities of bacteria, yeasts, and molds related to food spoilage; utilization of microorganisms in manufacture of dairy and food products; recognition and control of food-borne pathogens and food poisoning.

### **5122. CONTROL OF MICROORGANISMS IN FOOD PROCESSING.** (2 cr; prereq 5120 or #; ¶5123 advised, especially for food science and technology majors)

Factors that influence the control and destruction of microorganisms; chemical, physical, and microbiological principles in cleaning and sanitizing food processing equipment; inactivation of microorganisms and thermal process evaluation; microbiological preservation methods; development of sanitation programs; microbiological criteria, hazard analysis, and critical point concept.

### **5123. MICROBIOLOGY OF FOOD FERMENTATIONS.** (2 cr; prereq 5120 or #; ¶5122 advised, especially for food science and technology majors)

Characteristics of bacteria, yeasts, and molds involved in dairy and food fermentations; properties of lactic bacteriophages and methods of control in dairy fermentations; composition and factors that influence activity of dairy and food starter cultures; microbiology of natural and controlled fermentations; use of microorganisms in production of single cell protein, in products consumed as food, and in waste utilization.

### **5135. FOOD ENGINEERING UNIT OPERATIONS.** (5 cr; prereq 1102 or ¶1102, Math 1142, Phys 1041-1046)

Principles and food system applications of these unit operations: fluid flow, heat transfer, drying, evaporation, contact equilibrium (distillation, extraction, crystallization, and membrane processes), and mechanical separation (filtration, centrifugation, sedimentation, and sieving).

### **5136. UNIT OPERATIONS LABORATORY.** (2 cr; prereq 5135)

Applications of food engineering unit operations; experiments involving fluid flow, heat and mass transfer.

### **5310. ADVANCED FOOD CHEMISTRY.** (3 cr; prereq 3110)

Changes in chemical structure and functional properties of foods as modified by processing. Additional topics in areas of flavor, color, safety, nutritive value, sweeteners, and irradiation of food.

### **5312. CHEMICAL AND INSTRUMENTAL ANALYSIS OF FOODS.** (5 cr; prereq 3112 or BioC 5025 or #)

Application of quantitative physical, chemical, and instrumental methods of analysis to the examination of food products; evaluation of methods and interpretation of results.

### **5320. FOOD BIOTECHNOLOGY.** (3 cr; prereq 5123, Biol 5001)

Impact of biotechnology in agriculture, nutrition, and food processing. Discussion of recombinant DNA and related technologies, bioprocess engineering, and fermentation technology.

### **5350. APPLICATION OF EXPERIMENTAL DESIGN IN THE FOOD INDUSTRY.** (4 cr; prereq course in statistics; lab hrs ar)

Application of concepts and techniques of experimental design to the solution of food science problems. Case studies, computer programming and use emphasized.

**5360. SENSORY EVALUATION OF FOOD QUALITY.** (4 cr; prereq 3110, Stat 3081, Stat 5021 or equiv, consumer food science sr or #)  
Fundamentals of sensory perception. Test designs and methods used in studying sensory quality of foods.

**5380. FOOD PACKAGING.** (3 cr; prereq 3110, Phys 1042 or equiv)  
Lectures on and demonstrations of packaging principles as applied to food and the food industry.

**5390. INTRODUCTION TO FOOD LAW.** (4 cr; prereq 1102 or #)  
Federal and state legal requirements and case law history affecting the production, processing, packaging, marketing, and distribution of food and food products.

**5402. MODERN FOOD PREPARATION PRINCIPLES AND PRACTICES.** (2-4 cr; prereq organic chemistry and 15 cr food science and nutrition)  
Experimental bases of principles underlying present-day food preparation practices; development of experiences to illustrate such principles in high school teaching, dietetics, and foods in business.

**5403. EXPERIMENTAL STUDY OF FOODS.** (5 cr; prereq 3112, 3403, 5360)  
Individual laboratory experimentation and comprehensive literature search on a problem in foods. Statistics and computers as research tools. Data analysis and interpretation for a scientific paper.

**5404. CURRENT ISSUES IN FOOD AND NUTRITION.** (2-4 cr; prereq 15 cr food science and nutrition or #)  
Evaluation of popular and scientific literature dealing with nutrition, food additives, food safety, food fads, health foods, environmental contamination, the consumer movement, naturally occurring food toxicants, processed foods, synthetic foods, organically grown foods.

**5406. CURRENT LITERATURE IN FOODS.** (2-4 cr per qtr [max 6 cr]; prereq 5413,  $\Delta$ )  
Assigned readings, reports, and discussions of topics in the experimental study of foods.

**5412. PHYSICOCHEMISTRY OF FOODS.** (3 cr; prereq 3110)  
Characterization of crystalline systems, gels, emulsions, foams, and rheological systems; functionality of food macromolecules in these systems.

**5413. STRUCTURAL-FUNCTIONAL RELATIONS IN FOOD SYSTEMS.** (3 cr; prereq 3110)  
Food as a complex biochemical system. Functionality of various biological entities and chemical constituents of food systems.

**5462. ADVANCED TOPICS IN SENSORY EVALUATION OF FOOD.** (2-4 cr; prereq 5360)  
Review of current literature pertinent to specific topics under active investigation.

**5472. FOOD PURCHASING.** (4 cr; prereq principles of economics and 15 cr food science and nutrition)  
Cost-quality relationships of diverse food products as affected by technological changes. Composition and nutritive value of processed and formulated food products. Function of food additives. Recent legislation pertinent to labeling and grading food products.

**5473. ADVANCES IN THE MANAGEMENT AND PREPARATION OF FOOD.** (2-4 cr; prereq 3403, 3472 or equiv)  
Recent developments in food materials and methods of preparation; their implications for the management of time, money, and energy expenditures.

**5474. FOOD CONSUMPTION ECONOMICS.** (4 cr, \$AgEc 5550; prereq 3472, AgEc 3101, Stat 5021, or #)  
An analytical and empirical treatment of consumer food behavior. Concentrates on data and methods used to study economic and nutritional aspects of food consumption. Each student pursues an individual project.

**5512. MEAT TECHNOLOGY.** (5 cr; prereq 3110, 5120)  
Processing of meat, fish and poultry products, including protein functionality, thermal processing, curing, smoking, and deterioration during storage. Use of pre-blending and least-cost analysis in product formulation. Recent developments including restructured and gel-type products.

**5522. TECHNOLOGY OF FLUID AND CONCENTRATED MILK PRODUCTS.** (4 cr; prereq 3110, 5120, 5135 or #)  
Application of scientific principles to problems involved in processing fluid and dehydrated milk systems and their control. Demonstration of basic processing operations including heating, cooling, homogenization, evaporation, drying, crystallization, and freezing.

**5523. TECHNOLOGY OF FERMENTED DAIRY PRODUCTS.** (4 cr; prereq 3112, 5123)  
An integration of chemical, microbiological, and physical principles involved in the manufacture and storage of cheeses and fermented milks.

**5524. SENSORY EVALUATION OF DAIRY PRODUCTS.** (1 cr; prereq 3110 or #)  
Laboratory and commercial procedures for evaluating the sensory properties and market quality of dairy products. Cause and identification of common defects in flavor, physical properties, and appearance.

**5530. INDUSTRIAL PROCESSING OF FRUITS AND VEGETABLES.** (4 cr; prereq 3110, 5120, and 5135 or #; 3 lect and 3 lab hrs per wk)  
Relationship of chemical, physical, and microbiological principles to commercial processing of fruits and vegetables from procurement of raw products through preparation, preservation, packaging, storage, transportation, and merchandising. Emphasis on preservation methods involving heat sterilization, freezing, dehydration, and fermentation.

## Course Descriptions

### **5540. FATS AND OILS CHEMISTRY AND TECHNOLOGY.** (4 cr; prereq 3112 or #)

Nature of fats and oils; their structure, composition, and chemical and physical properties; raw materials for fat and oil products; extraction, refining, hydrogenation, and other industrial manipulations; handling, storage, and analysis and grading of raw materials and finished products.

### **5555. FREEZING AND DEHYDRATION OF FOODS.** (5 cr; prereq 3110, 5120, 5135 or #)

Principles involved in the processing, handling, and storage of frozen, dry, and intermediate moisture foods with emphasis on the physicochemical properties of water in foods.

### **5562. FLAVOR TECHNOLOGY.** (3 cr; prereq 1102, 3110 or #)

Flavor and off-flavor development in foods. Industrial production of food flavorings, their proper application to food systems.

### **5600. NUTRITION SEMINAR.** (1 cr; prereq #)

Literature review and presentation of papers in selected areas of nutrition. (Extension only.)

### **5612. EXPERIMENTAL NUTRITION.** (4 cr; prereq 5622 or #BioC 5024 or #)

Principles and methods of diet formulation, dietary manipulation, energy and nitrogen balance, and body composition analyses in experimental animal models. Use and evaluation of methods and interpretation of results.

### **5622. MACRO-NUTRIENT METABOLISM.** (5 cr; prereq 3600, Biol 5001, Phsl 3051 or #)

Physiological function and metabolic fate of carbohydrates, lipids, and proteins; their involvement in fulfilling energy needs for maintenance, growth, and work.

### **5623. VITAMIN AND MINERAL BIOCHEMISTRY.** (4 cr; prereq 3600, 5622, Biol 5001, Phsl 3051 or #)

Nutrition/biochemical and physiological function of essential vitamins and minerals in humans and experimental animal models.

### **5624. A METABOLIC APPROACH TO CLINICAL NUTRITION.** (4 cr; prereq 5622, 5623)

Focus on the individual human in the clinical setting; interaction of calorie deprivation, metabolic demands of illness, and nutritional implications of medical treatment.

### **5642. FIELD EXPERIENCE IN COMMUNITY NUTRITION.** (3-18 cr; prereq at least one course in human nutrition and #)

Application of nutrition information to problems of health and welfare; assigned readings, discussions, and experience in a community agency.

### **5643. SEMINAR: WORLD FOOD SUPPLY PROBLEMS.** (3 cr, \$AgEc 5790, \$Agro 5200, \$Soc 5675, \$LACS 5280; limited enrollment; prereq sr or grad student with #)

A multidisciplinary approach to social, economic, and technical problems of feeding the world's growing population.

### **5662. CLINICAL NUTRITION.** (3 cr; prereq 5622, Biol 3021 or #)

Application of principles of normal nutrition to clinical problems, with description of altered nutrient requirements under conditions of human disease. Nutritional therapy for common clinical conditions and the effects of treatment on the nutritional status of the patient.

### **5664. FIELD EXPERIENCE IN CLINICAL NUTRITION.** (3-18 cr; prereq a course in human nutrition and #)

Application of nutrition information to problems of health and disease; assigned readings, discussions, and experience in a clinical facility.

### **5665. APPLIED CLINICAL NUTRITION I.** (2 cr; prereq Biol 5001 or #5001, Phsl 3051 or 1002, LaMP 5177)

Description of fluid and electrolyte balance; common clinical tests; interrelationships of medications and nutrition; diet therapies for common diseases of gastrointestinal tract and selected medical conditions.

### **5666. APPLIED CLINICAL NUTRITION II.** (2 cr; prereq 5665, 5622 or #5622, or demonstrated equiv) (Continuation of 5665) Description of pathology, treatment, and diet therapy for diseases of cardiovascular system and common diseases of endocrine system, notably diabetes mellitus.

### **5667. APPLIED CLINICAL NUTRITION III.** (2 cr; prereq 5665, 5666, or demonstrated equiv)

(Continuation of 5666) Description of pathology, treatment, and diet therapy for diseases of kidney and urinary tract. Emphasis also on therapeutic management of selected central nervous system disorders, inborn errors of metabolism, and allergies. Special nutritional considerations in care of geriatric patients with common pathological disorders.

### **5668. ADVANCED CLINICAL NUTRITION.** (2 cr; prereq 5662 or #)

An integrated approach to prevention and treatment of illness focusing upon the role of nutrition in total medical care.

### **5675. CLINICAL NUTRITION LABORATORY I.** (1 cr; A-N only; prereq 5665 or #5665)

Application of nutrition principles to clinical problems related to hypermetabolic conditions and gastrointestinal disorders. Techniques of nutritional assessment and planning.

### **5676. CLINICAL NUTRITION LABORATORY II.** (1 cr; A-N only; prereq 5666 or #5666)

Application of nutrition principles to clinical problems related to endocrine, cardiovascular, renal, and energy disorders. Techniques of diet calculation and patient education.

### **5693. SELECTED ASPECTS OF NUTRITION.** (2-4 cr per qtr [max 12 cr]; prereq sr, 1212, 3600 or #)

In-depth investigation of a single, preselected aspect of nutrition. Teaching procedure and approach determined by nature of topic and student needs. Specific topic announced in advance.

**5694. METABOLIC BASIS FOR THERAPEUTIC NUTRITION.** (4 cr; prereq 5664 or #)

Physiological and biochemical bases for dietary treatment, dietary principles related to adequate nutrition. Case study presentations and clinical experience included.

**5702. SELECTED ASPECTS OF FOODSERVICE MANAGEMENT IN HEALTH CARE FACILITIES.** (3 cr; prereq 3 cr elementary statistics, 6 cr economics, #)

Management techniques applied to foodservices for health care facilities. Methods of analysis and control.

**5705. FIELD EXPERIENCE IN FOODSERVICE MANAGEMENT.** (3-18 cr; prereq regis in coordinated undergraduate program in dietetics)

Application of principles of foodservice management to problems in community, commercial, or health care facility.

**5732. (formerly 3702). PRINCIPLES OF FOODSERVICE ORGANIZATION AND MANAGEMENT.** (4 cr; prereq sr, 3732, Mgmt 3001, regis in coordinated undergraduate program in dietetics)

Management of foodservice personnel, financial control, regulations, related administrative problems.

**5750 (formerly 3750). PRINCIPLES OF FOODSERVICE MANAGEMENT.** (4 cr; prereq 3730 or 3732, Mgmt 3001)

Application of management principles in a foodservice. Business procedures, personnel management, cost control, financial management, and related administrative problems. Field trips may be required.

**5755. CURRENT TOPICS IN FOODSERVICE MANAGEMENT.** (4 cr [may be repeated for cr, max 8 cr]; prereq #)

In-depth examination of timely issues. Content varies from quarter to quarter.

**For Graduate Students**

(For descriptions, see *Graduate School Bulletin*)

**8101. RESEARCH SEMINAR****8205. GENERAL SEMINAR****8311. FLAVOR CHEMISTRY****8312. REACTION KINETICS OF FOOD DETEIORATION****8313. TOPICS IN LIPID CHEMISTRY****8315. FOOD PROTEINS****8322. MICROBIOLOGY AND ENGINEERING OF FOOD STERILIZATION PROCESSES****8323. MICROBIAL STARTER CULTURES****8324. MICROBIAL TOXINS AND TOXIC MICROORGANISMS IN FOODS****8401. INDEPENDENT STUDY: FOOD SCIENCE****8403. ADVANCED TOPICS IN FOOD SCIENCE****8412. INTERRELATIONSHIPS AND FUNCTIONS OF FOOD COMPONENTS****8621. INDEPENDENT STUDY: NUTRITION****8622. ADVANCED HUMAN NUTRITION I****8623. ADVANCED HUMAN NUTRITION II****8624. ADVANCED HUMAN NUTRITION III****8627. HUMAN NUTRITION AND AGING****Nutr 8745. SEMINAR****Nutr 8990. GRADUATE RESEARCH****Home Economics (HE)****1003. SEMINAR: COOPERATIVE EDUCATION PROGRAM.** (1 cr; S-N only)

Preparatory training for participation in off-campus work experience. Allows student to identify and develop professional skills, needs, and goals related to a particular professional role. Emphasis on placement skills and defining objectives for a planned work experience with employers and faculty adviser.

**1191. CAREER PLANNING STRATEGIES.** (2 cr; S-N only)

Identification and development of professional and personal goals. Examination of role and expectations of College of Home Economics graduate in today's society.

**3010. INTERNATIONAL TOPICS SEMINAR.** (1 cr; S-N only)

Introductory course focusing on interrelationship of people of all nations. Overview of basic international systems and organizations governing or affecting global interactions in various spheres that impact on individuals and families.

**3191. PROSEMINAR: HOME ECONOMICS.** (2 cr; S-N only; prereq 3rd quarter soph, regis in HE program, or #)

Introduction to organizational structure, philosophy, and current issues in home economics; exploration of career alternatives.

**5000. FARMING SYSTEMS.** (3 cr)

Introduction to Farming Systems Research and Extension, an interdisciplinary and holistic approach to understanding limited resource family farms and integrating family farm research and extension.

**5001. FARM SYSTEMS PRACTICUM.** (3 cr; prereq 5000 or #)

Advanced theory of and practice in Farming Systems Research and Extension with opportunities for student fieldwork.

**5003. FIELD EXPERIENCE.** (1-5 cr [max 15 cr]; prereq #)

Directed preprofessional work experience in home economics position in business or industry.



## Course Descriptions

### **5191. DEVELOPMENT IN HOME ECONOMICS.**

(2 cr)

Discussion of the development of home economics with emphasis on current problems.

### **5600. INTERNATIONAL DEVELOPMENT SEMINAR: AGRICULTURE, HOME ECONOMICS, WOMEN, AND YOUTH.**

(3 cr; prereq Econ 1001, Soc 1001, Psy 5303, or #)

An interdisciplinary seminar integrating aspects of agriculture and home economics in the context of women, youth, and families in order to establish a working concept of rural economic development.

### **5601. INTERNATIONAL DEVELOPMENT PRACTICUM.**

(Cr ar; prereq participation in International Development Collateral)

Work or research in Third World countries arranged by individual students with faculty advice and counsel, including an approved academic exercise.

## Home Economics Education (HEEd)

### **1500. INTRODUCTION TO HOME ECONOMICS EDUCATION.**

(2 cr; prereq soph)

Exploration of profession of home economics education, home economics educator's alternative roles; implications of contemporary and future social forces for home economics education.

### **1510. KNOWLEDGE AND VALUES IN TEACHING.**

(4 cr; prereq 1500 or #)

Processes of developing, acquiring, and integrating knowledge and values; application to home economics education.

### **3021. EDUCATION THROUGH EXTENSION METHODS.**

(3 cr, \$AgEd 3021; prereq soph)

Role of nonschool agencies in rural and agricultural education; method and techniques of formal and informal instruction in school and nonschool educational programs.

### **3315. ADULT EDUCATION IN HOME ECONOMICS.**

(3 cr)

Resources and processes for community analysis and design of educational programs to enable adults of all ages to identify and solve problems in personal and family life.

### **3325. PRACTICUM IN CHILD DEVELOPMENT.**

(1 cr; A-N only)

Observation and experience with children as a method of teaching child development in the home economics program.

### **3331. CHILDREN AND PARENTING: CURRICULUM, METHODS, AND MATERIALS.**

(2 cr; prereq \*special section of CPsy 3330 for HEEd majors or #)

Appropriate methods and materials for teaching concepts at the secondary and adult levels.

### **3520. HOME ECONOMICS CURRICULUM AND INSTRUCTION: COGNITIVE LEARNING.**

(5 cr; prereq 1510)

Broad overview of elements of curriculum; objectives, assessment, and strategies related to cognitive learning.

### **3530. HOME ECONOMICS CURRICULUM AND INSTRUCTION: AFFECTIVE LEARNING.**

(4 cr; prereq 3520 and 6 credits in learning psychology and educational processes)

Objectives, assessment, and strategies related to affective learning.

### **3601. CLINICAL EXPERIENCE.**

(3-18 cr; S-N only; prereq 3620 and ¶3611, Δ)  
Classroom teaching in consumer homemaking, family life, and home economics occupational education in selected Minnesota schools.

### **3611. FIELDWORK.**

(3 cr; S-N only; prereq 3620 and ¶3601, Δ)  
Individualized instruction in consumer homemaking, family life, or occupational education programs in the field and on campus.

### **3620. CURRICULUM MANAGEMENT.**

(3 cr; prereq 3530 or ¶3530)  
Planning, developing, organizing, and evaluating home economics program.

### **3900. INDEPENDENT STUDY.**

(1-9 cr per qtr [max 9 cr]; prereq jr and #)  
Study of selected topics in home economics chosen in collaboration with staff.

### **3910. EDUCATIONAL METHODS FOR HOME ECONOMISTS AND RELATED PROFESSIONALS.**

(3 cr; S-N optional; prereq jr, non-HEEd major)  
Designed for professionals whose work includes educating people. Skills necessary to organize, implement, and evaluate presentations and programs for individual clients and groups.

### **5001. SPECIAL TOPICS.**

(1-6 cr; S-N optional)  
Study of topic not covered by available courses.

### **5003. INTERNSHIP: COMMUNITY/WORK SETTINGS.**

(3-12 cr [max 12...max 3 cr may be used in

MEd and MA programs]; S-N only; prereq #)

Planned work experience focusing on educational competencies in community and work settings. Students assume defined responsibilities of a position.

### **5021. EDUCATION THROUGH EXTENSION METHODS.**

(3 cr, \$AgEd 5021; prereq grad student or #)

Methods and techniques of formal and nonformal education used by Extension Service and other organizations.

### **5023. EXTENSION METHODS FOR DEVELOPING COUNTRIES.**

(3 cr, \$AgEd 5023)  
Extension methods to promote the rapid adoption of improved practices.

**5024. EXTENSION HISTORY AND PHILOSOPHY.** (3 cr, §AgEd 5024)

Origin, philosophy, historical development, objectives, organizational structure of Extension Service.

**5025. EXTENSION PROGRAM DEVELOPMENT.** (3 cr, §AgEd 5025)

Planning, implementing, and evaluating the program development process.

**5026. EXTENSION ADMINISTRATION** (3 cr, §AgEd 5026; prereq #)

Administration of the Cooperative Extension Service at the county, area, and state levels.

**5027. PRACTICUM: PLACEMENT FOR EXTENSION EXPERIENCES.** (2-9 cr [max 9 cr], §AgEd 5027; S-N optional)

Observation of and participation in activities of Extension Service staff at county and state level; familiarization with staffing, program planning and development, and educational and administrative functions.

**5055. INTRODUCTION TO FARMING SYSTEMS RESEARCH AND EXTENSION.** (3 cr)

Introduction to theory and practice; interdisciplinary approach to holistic view of farm family agricultural enterprise.

**5056. APPLICATION OF FARMING SYSTEMS RESEARCH AND EXTENSION.** (3 cr; prereq HEEd 5055 or AgEd 5055)

Seminar and fieldwork projects; sondeos and on-farm trials conducted.

**5100. SERVICE OCCUPATIONS EDUCATION.** (3 cr [max 12 cr], §5331)

Development of occupational programs; exploration of career opportunities; identification of competencies for career clusters; development of objectives, learning experiences, and appraisal techniques; preparation of teaching materials; licensure course for instructors.

**5102. SERVICE OCCUPATIONS WORK EXPERIENCE.** (3-6 cr [max 3 cr applied to a graduate degree, max 12 cr], §5336; S-N optional; prereq #)

Observation and directed experience in selected occupational cluster with application to teaching. Each credit requires 85 hours of paid occupational experience; work experience course for licensure requirements.

**5104. CURRICULA, METHODS, AND MATERIALS FOR SERVICE OCCUPATIONS.** (3 cr, §5301)

Examination of curricula, including methods and materials, for occupational clusters related to cooperative secondary and postsecondary programs; licensure course for instructor-coordinators.

**5106. COORDINATION TECHNIQUES FOR SERVICE OCCUPATIONS.** (3 cr)

Responsibilities of instructor-coordinators in cooperative secondary and postsecondary programs: guidance, selection, and placement of students in training agencies; articulation, supervision, and evaluation of training; licensure course for instructor-coordinators.

**5108. SEMINAR IN SERVICE OCCUPATIONS.** (3-9 cr [max 3 cr applied to a degree program, max 9 cr], §5337; prereq #)

Exploration of current practices and career opportunities in business and industry, including planned experiences in work environments.

**5109. SPECIAL TOPICS IN SERVICE OCCUPATIONS EDUCATION.** (1-6 cr; S-N optional)

Study of emerging issues, current literature, technological development, and technical updating relevant to service occupations education.

**5153. CONSUMER EDUCATION; CURRICULA, METHODS, AND MATERIALS.** (3-4 cr, §BME 5153)

Objectives, content, curriculum organization, teaching methods, materials, and evaluation methods for the elementary, secondary, postsecondary, and adult levels.

**5200. SEMINAR: WORKING WITH YOUTH THROUGH ADULTS.** (1-3 cr per qtr [max 9 cr incl AgEd 5200 and YoSt 5200]; S-N optional)

Interdisciplinary seminar focusing on definition of the youth work profession; essential skills for youth workers; youth needs, roles, relationships with adults; development and management of a system of support for youth work.

**5244. TOPICS IN PROGRAM PLANNING FOR EXTENSION EDUCATION.** (1-6 cr [max 9 cr])

Effective extension educational programming in relation to situation and needs analysis; coordination of content, people, methodology; specific aspects in development of program models; managing resources available.

**5245. TOPICS IN ADMINISTERING EXTENSION EDUCATION.** (1-6 cr [max 9 cr])

Issues and current literature; focus on personnel hiring and supervision, financial management, leadership styles, long-range planning; application of theory to administrative practice.

**5246. TOPICS IN TEACHING AND DELIVERING EXTENSION EDUCATION.** (1-6 cr [max 9 cr])

Teaching techniques related to concepts of use of media, telecommunications, computers, group process methods, experiential learning in extension education settings.

**5247. TOPICS IN EVALUATING AND DELIVERING EXTENSION EDUCATION.** (1-6 cr [max 9 cr])

Overall evaluation design; issues in choosing quantitative versus qualitative evaluation methods; developing skills and conceptual frameworks to apply theory to extension settings.

**5300. HOME ECONOMICS CURRICULUM.** (3 cr)

Examination of research and literature; development of units of study and programs at elementary and secondary levels; production and evaluation of materials.

## Course Descriptions

### **5305. HOME ECONOMICS CURRICULUM: COLLEGE LEVEL.** (3 cr; prereq #)

Examination of research and literature; course and program development in higher education; analysis of current college programs; production and evaluation of curriculum materials.

### **5310. METHOD IN TEACHING HOME ECONOMICS: ATTITUDES, VALUES, AND KNOWLEDGE.** (3 cr)

Derivation of theory for educational method from relevant research; application to educational objectives, strategies, and student motivation.

### **5315. EVALUATION: THEORETICAL AND TECHNICAL ASPECTS.** (3 cr)

Collecting and interpreting evidence related to achievement of objectives, emphasizing higher levels of cognition and affective behaviors.

### **5320. ADULT EDUCATION IN HOME ECONOMICS.** (3 cr)

Planning a community program; teaching procedures; special problems.

### **5321. INTERNATIONAL PERSPECTIVES IN HOME ECONOMICS EDUCATION.** (3 cr)

Examination of field (formal and nonformal) around world; commonalities and differences in purpose, problems, history, methods of delivery, and context.

### **5325. TRENDS IN HOME ECONOMICS EDUCATION.** (1-4 cr per qtr [max 12 cr])

Current status; purposes, programs, content emphasis, research, problems and issues in the field.

### **5400. HOUSING EDUCATION.** (1-4 cr [max 12 cr]; A-N only)

Objectives, content, curriculum organization, teaching methods, materials, and evaluation approaches for teaching youth and adults about concepts, issues, and current trends related to housing and home furnishing problems.

### **5403. TEXTILES AND CLOTHING EDUCATION.** (1-4 cr [max 12]; A-N only)

Curricula, methods, and materials for teaching consumer, social, cultural, psychological, and technical aspects; analysis of family clothing and textile-related problems; decisions at middle, secondary, and adult levels; evaluation and critique of instructional design.

### **5404. INTRODUCTION TO EARLY CHILDHOOD FAMILY EDUCATION PROGRAMS.** (1 cr)

Introduction to concept and philosophy of early childhood family education programs as basis for program implementation.

### **5405. CHILD DEVELOPMENT AND PARENT EDUCATION.** (1-6 cr [max 12 cr]; A-N only)

Objectives, content, curriculum organization, teaching methods, materials, and evaluation approaches for teaching youth and adults about social, cultural, psychological, economic, and technical aspects of child development, parenting, and parent-child interaction.

### **5406. SPECIAL TOPICS IN PARENT AND FAMILY EDUCATION.** (1-6 cr; S-N optional)

Study of issues and current literature focused on emerging topics relevant to parent and family education.

### **5407. FAMILY LIFE EDUCATION.** (1-4 cr [max 12 cr]; A-N only)

Objectives, content, curriculum development, methods, materials, and evaluation approaches for teaching diverse groups of youth and adults family life concepts, including current research in communication, relationships, sexuality, self-esteem, and decision making.

### **5408. EDUCATION FOR WORK-FAMILY RELATIONSHIPS.** (3 cr)

Examination of interactions between work and family, with focus on educational applications for youth and adults.

### **5409. GROUP METHODS FOR PARENT AND FAMILY EDUCATION.** (2 cr)

Methods and theories applied to developing skills for leading parent and family education groups.

### **5410. FOOD AND NUTRITION EDUCATION.** (1-4 cr [max 12 cr]; A-N only)

Objectives, content, curriculum organization, teaching methods, materials, and evaluation approaches for teaching youth and adults about nutrition principles; psychological, social, cultural, political, economic, and technical aspects of food and nutrition-related problems, decisions, and issues.

### **5415. WORKSHOP: MATERIALS FOR INSTRUCTION.** (1-4 cr per qtr [max 12 cr])

Problems in selection and use of new materials for instruction in home economics.

### **5420. WORKSHOP: ADULT EDUCATION.** (1-4 cr per qtr [max 12 cr])

Procedures in teaching adults; planning the program; use of new materials and techniques; group and individual problems.

### **5430. WORKSHOP: CONTEMPORARY PROBLEMS IN HOME ECONOMICS EDUCATION.** (1-6 cr per qtr [max 12 cr])

Consideration of topic of current concern in home economics education.

### **5440. COMPUTER APPLICATIONS IN HOME ECONOMICS.** (3 cr)

Accession and use of information, evaluation of home economics data bases and software, impact of computers on families and consumer behavior.

### **5500. PROSEMINAR: HOME ECONOMICS EDUCATION.** (2 cr; required of all new grad students)

Relation of the processes and standards of rational thought to professional competence and the goals of a graduate program of study.

### **5505. SEMINAR: SUPERVISION OF STUDENT TEACHING.** (2 cr)

Examination of research pertinent to purposes, procedures, evaluation, and interpersonal relations.

**5520. PHILOSOPHY OF HOME ECONOMICS.** (4 cr; prereq #)

Application of philosophic thought to conceptions of home economics upheld in literature and practice.

**5600. PRACTICUM: ADULT EDUCATION.** (3 cr; prereq #; A-N only)

Individual field assignments under supervision.

**5900. READINGS IN HOME ECONOMICS EDUCATION.** (1-3 cr per qtr [max 12 cr]; prereq #)

Independent study under tutorial guidance.

**5910. INTEGRATING PAPER.** (3 cr; prereq MED student)

Independent paper integrating learnings from a course or courses in education with learnings in home economics education.

**5920. DIRECTED STUDIES.** (1-6 cr; S-N optional; prereq #)

Opportunity for individualized learning experience not covered by regular courses.

**For Graduate Students**

(For descriptions, see *Graduate School Bulletin*)

**8300. RESEARCH METHODS****8305. RESEARCH METHODS****8500. SEMINAR: CURRICULUM DEVELOPMENT****8510. SEMINAR: IMPROVEMENT OF INSTRUCTION IN ADULT EDUCATION****8515. SEMINAR: TEACHER EDUCATION****8520. SEMINAR: HISTORY AND PHILOSOPHY OF HOME ECONOMICS EDUCATION****8525. SEMINAR: ADMINISTRATION AND SUPERVISION OF HOME ECONOMICS PROGRAMS****8530. SEMINAR: HOME ECONOMICS EDUCATION****8631. PRACTICUM: HOME ECONOMICS TEACHER EDUCATION****8900. PROBLEMS: HOME ECONOMICS EDUCATION****Housing (Hsg)**

(Department of Design, Housing, and Apparel)

**1801. HOUSEHOLD EQUIPMENT.** (4 cr; prereq soph or #; Phys 1001 or 1041 recommended)

Survey of appliances and technological systems in near environment, with emphasis on consumption and conservation of natural resources and energy sources and human considerations in kitchen and equipment design. Lecture, discussion, and laboratory.

**1851. CONSUMER ASPECTS OF HOUSING.** (4 cr; prereq Dsgn 1501)

Survey of family housing in relation to needs, processes, and alternatives: buying versus renting; policy, economic, and other variables; and constraints affecting housing decisions.

**3862. REAL ESTATE PRACTICE.** (3 cr; prereq 1851 or Dsgn 1552 or #)

Essentials of real estate practice including appraisal, contract preparation, financing, investment, land development, property management, and sales brokerage. Fulfills requirement to take real estate license examination.

**3863. ENVIRONMENT: HOUSING AND COMMUNITY.** (4 cr; prereq 1851 or Dsgn 1552, or #)

Housing process from development to occupancy, the many factors involved. Emphasis on design of physical environment and relationship of housing to neighborhood, community, city, and metropolitan area.

**3870. PROFESSIONAL SEMINAR IN HOUSING.** (1 cr; S-N only; prereq 3863)

Discussion of professionalism and problems in the field, job opportunities, and assembly of credentials.

**3880. INTERNSHIP IN HOUSING.** (Cr or [5-15 cr]; S-N only; prereq completion of one-half of professional sequence, 3870 and #)

Intercultural, or other directed community work that offers varied experience in housing problems. Seminar, readings, and major paper required.

**3888. DIRECTED STUDY IN HOUSING.** (1-4 cr per qtr [max 4 cr]; prereq #)

Independent study in housing.

**5801. THE FAMILY AND ENERGY ISSUES.** (3 cr, \$FSoS 5301; prereq 5 cr FSoS or #)

Analysis of family behavior as it relates to energy use, impact of scarce resources on quality of family functioning, family/energy issues in future.

**5804. EVALUATION PROCEDURES FOR HOUSEHOLD EQUIPMENT.** (3-4 cr; prereq 1801 or equiv, 8 addtl cr home economics)

Procedures and instruments used to determine operating characteristics of selected household appliances and to assess selected physical characteristics of houses.

**5809. CONSUMER SELECTION GUIDES FOR HOUSEHOLD EQUIPMENT.** (3-4 cr; prereq 1801 or equiv, #; FSoS 5220 recommended)

Construction and operating components of current models of selected appliances. Suitability of appliances in light of research-based recommendations for kitchen and laundry planning.

**5861. HOUSING MANAGEMENT.** (5 cr; prereq 3863 or #)

Career demands for professionalism in housing management. Emphasis on increasing interpersonal skills. Includes historical perspectives, current status of housing, management approaches, psychosocial impact of housing and community design, specific residential populations.

## Course Descriptions

### **5865. HOUSING IN WORLD PERSPECTIVE I. (4 cr; prereq 3863 or equiv)**

Indigenous housing forms from around the world with emphasis on village and rural housing; analysis of cultural differences; assessment of the nature and quality of forms; application and implications for housing locally and nationally.

### **5866. HOUSING IN WORLD PERSPECTIVE II. (4 cr; 5865 recommended)**

Response of selected countries to housing problems of low- and middle-income people in urban areas; implications of cultural values and technological changes for housing solutions; examples from Eastern Europe, India, Japan, and other areas.

### **5867. HOUSING ALTERNATIVES FOR THE FAMILY. (4 cr; not for grad credit; prereq 3863 or #)**

Alternative housing choices for the family in today's market; emphasis on design for special needs of the elderly, the handicapped, and differing lifestyles.

### **5868. HOUSING PROBLEMS OF THE FAMILY. (5 cr; prereq 1851 or Dsgn 1555, 3863 or #)**

Housing problems of low-income, elderly, and minority individuals and families. Emphasis on rehabilitation of older housing including rehabilitation process, programs, and projects. Students work with a low-income inner-city client family on a home improvement project.

### **5869. HOUSING RESEARCH: INTERPRETATION AND EVALUATION. (4 cr; prereq at least one course in statistics)**

Students develop skills in interpretation and evaluation of housing research. Conceptual framework(s), methodological approaches and findings of published research reviewed and critiqued.

### **5873. SPECIAL TOPICS IN HOUSING. (2-4 cr per qtr [max 9 cr]; prereq dependent on specific topic)** In-depth investigation of single specific topic, announced in advance.

### **5881. DESIGNED ENVIRONMENTS AND AGING. (4 cr; prereq 3863 or Dsgn 1555 or #; offered alt yrs)**

Design of environments with potential to compensate for deficits in physical and mental functioning; emphasis on older adults and on barrier-free, flexible, and responsible physical environments.

### **5882. FIELD EXPERIENCE ABROAD. (1-15 cr [max 15 cr], §Dsgn 5582; prereq #)** Faculty-directed field study abroad of housing in other cultures. Meeting professionals, taking field trips.

### **5888. DIRECTED STUDY IN HOUSING. (1-4 cr per qtr [max 4 cr]; prereq #)** Independent study in housing.

### **8888. DIRECTED STUDY IN HOUSING.**

## Rhetoric (Rhet)

(College of Agriculture)

### **1101. WRITING TO INFORM AND PERSUADE. (4 cr, §Comp 1011)**

Relationship of fact finding and clear thinking to informative and persuasive writing. Importance of thesis sentence, evidence, coherence, clarity, and correctness. Emphasis on writing process in producing a number of relatively short papers (250-750 words).

### **1104. LIBRARY RESEARCH METHOD. (1 cr;**

A-N only; taught by St. Paul campus library staff) On-site instruction in information retrieval techniques. Lectures, audiovisual presentations, and problem-solving assignments designed to strengthen skills in using the library.

### **1147. EFFICIENT READING. (4 cr)**

Exploration of the adult reading process with emphasis on comprehension, speed, and vocabulary development. For persons of average or above-average reading ability who wish to develop and refine college-level reading skills. Not a basic course. (Meets with 5147)

### **1151. WRITING IN YOUR MAJOR. (4 cr; prereq ¶Rhet 1104, freshman communication requirement, and soph status)**

Students investigate and write on subjects related to their majors. The criterion of appropriateness: good writing meets the expectation of readers and the conventions of a particular form. Assignments such as literature review, abstract, fact sheet, instructions, and feature article.

### **1220. PRINCIPLES OF HUMAN COMMUNICATION. (4 cr)**

Introduction to the elements and contexts of human communication. Readings, discussions, lectures, and experiential assignments; focus on communication that affects interpersonal gatherings and that entertains, persuades, and instructs public audiences.

### **1222. PUBLIC SPEAKING. (4 cr; prereq freshman communication requirement)**

Practical course in fundamentals of speechmaking. Emphasis on organizing the speech and projecting it to the audience.

### **1251. EFFECTIVE LISTENING. (3 cr)**

Designed to increase listening comprehension by developing four central abilities. Readings, research, theory, and practice.

### **1301. HUMANITIES: MODERN THOUGHT AND THE ENLIGHTENMENT. (4 cr)**

Introduction to humanities tracing the impact of the scientific revolution on human thought. Scientific and religious movements and countermovements as they influence modern thinking.

### **1302. HUMANITIES: MODERN THOUGHT AND THE INDUSTRIAL REVOLUTION. (4 cr)**

The industrial transformation of Europe; laissez-faire capitalism and liberalism; the romantic response; socialism.

**1303. HUMANITIES: MODERN THOUGHT AND THE IMPACT OF EVOLUTION.** (4 cr)

The impact of evolutionary thought; philosophy, religion, and morality in a changing society.

**1310. HUMANITIES: THE LAND IN AMERICAN EXPERIENCE.** (4 cr)

American attitudes toward the land from colonial times to the present as expressed in social history, literature, and the fine arts. Social thought and the relationship between farm and city, wilderness and countryside. The changing appearance of America.

**1311. HUMANITIES: THE FAMILY IN AMERICAN EXPERIENCE.** (4 cr)

American attitudes toward family life from colonial times to the present as expressed in literature, the fine arts, and social history. The impact of Protestantism, democracy, capitalism, and reform movements, including women's rights, on the family ideal.

**1376. HUMANITIES: TOPICS IN HUMANITIES AND LITERATURE.** (4 cr)

Topics vary from quarter to quarter and are listed in the *Class Schedule*. For full details, inquire at the department office prior to registration.

**1500. INTRODUCTION TO WORD PROCESSING.** (2 cr; prereq #,  $\Delta$ ; 5 weeks long; S-N only)

Individualized programmed instruction in the use of the Xerox 820 Word Processing System. Students work independently through five two-hour lessons, learning how to log onto the system, create and edit files, type and edit a text, use seven menus to perform basic text editing processes, and print a text. Three hours of lab time each week for practicing and confering with instructor or lab assistant.

**3101. FUNCTIONAL PHOTOGRAPHY.** (4 cr; prereq Dsgn 1501 or Rhet 3562)

Practical course in basic photographic communication. Emphasis on techniques of producing 35 mm color transparencies for group presentations, teaching, publications, and AV productions.

**3130. PUBLICITY.** (4 cr; prereq Rhet 1151 or equiv)

For students planning careers in agriculture, forestry, home economics, veterinary medicine, or some allied industry in which cooperation of mass media needed. Mass media relationships, news and direct mail writing, radio and TV broadcasting, preparation of visuals.

**3159. PUBLICATIONS EDITING.** (4 cr; prereq 3562 and #)

Publication process from copy selection, editing, and preparation to scheduling and supervising production of small publications and periodicals. Business, technical, educational, and general publications. Editing copy, writing headlines and outlines, marking and fitting copy, typesetting, proofreading, and keylining.

**3176. THE USE OF SCIENTIFIC AND TECHNICAL FILM.** (4 cr)

The uses of motion pictures as a communication tool by science and industry. Students learn to apply film concepts and aesthetics in evaluation of films. The emphasis is on theory rather than production.

**3180. AGRI-MARKETING COMMUNICATIONS.**

(4 cr, §AgEc 3180; prereq 3562 and #, AgEc 1020 and AgEc 1030, basic communications and speech courses; not open to AgEc grads)

Research and development of complete marketing plan for agricultural product from development through final marketing communications stages.

**3254. ADVANCED PUBLIC SPEAKING.** (4 cr; prereq 1222)

Training for specific speech situations most likely to be encountered professionally. Emphasis on analysis, design, preparation, and delivery of presentations to provide greater flexibility within a variety of speech environments.

**3266. COMMUNICATION, DISCUSSION IN SMALL GROUP DECISION MAKING.** (4 cr; prereq completion of freshman communication requirement)

Role of communication techniques in the small group decision-making process. Emphasis on discussion within a variety of decision-making modes such as voluntary groups, business meetings, and conflict groups.

**3270. SPEECH: SPECIAL PROBLEMS.** (1-5 cr; prereq #,  $\Delta$ )

Supervised reading and research on advanced speech-communication topics not covered in regularly scheduled speech offerings.

**3370. AMERICAN HUMANITIES.** (4 cr)

Examination of the American character and changes it has undergone in the 19th and 20th century as exemplified by the social, artistic, literary, and architectural record.

**3374. HUMANITIES: SPECIAL PROBLEMS.** (1-2 cr; prereq #,  $\Delta$ )

Primarily for supervised reading and research on topics not covered in regularly scheduled humanities offerings.

**3375. HUMANITIES: AGRICULTURAL HERITAGE.** (4 cr)

Examination and analysis of significant events or periods affecting rural agricultural peoples as expressed in historical, cultural, and literary documents. Understanding of major values, attitudes, and philosophies related to agricultural change and development.

**3380. HUMANITIES: THE LITERATURE OF SOCIAL REFLECTION.** (2 cr)

Brief examination of contemporary social issues as reflected in cultural documents. Emphasis on imaginative literature as a forum where social questions are discussed, evaluated, and resolved.

**3381. HUMANITIES: 20TH-CENTURY CULTURE.** (4 cr)

The changing structure of 20th-century culture from World War I to the present. Communism, fascism, and democracy. Modern movements in literature, the visual arts, and architecture.

## Course Descriptions

**3562. WRITING IN YOUR PROFESSION.** (4 cr; prereq freshman communication requirement, 1151, and jr status)

Projects in professional writing. Relationship between structuring information to meet the needs of particular readers and writing effectively. Assignments such as the feasibility report, proposal, memorandum, letter of application, and résumé.

**3572. GRAMMATICAL EDITING FOR TECHNICAL WRITERS.** (2 cr; prereq tech comm students only; 5 weeks long; S-N only)

Students work independently through exercises in grammar and punctuation, learning proofreading marks and correcting manuscripts. Completing the exercises and passing a final exam required to receive credit. Not a remedial grammar course.

**3582. SENIOR SEMINAR.** (2 cr; prereq sr)

Discussions of professional and ethical issues and problems related to technical communication. A capstone course, integrating oral, written, visual, organizational, and theoretical competencies.

**3700. RHETORICAL THEORY: PERSUASION AND THE LITERATURE OF SCIENCE.** (4 cr; prereq completion of freshman communication requirement)

Introduction to principles of rhetorical analysis. Emphasis on Aristotelian theory. Practice in rhetorical criticism of contemporary communication.

**5000. PROFESSIONAL EXPERIENCE PROGRAM.** (4 cr; prereq #; S-N only; free elective for rhetoric undergrads; not for grad cr; extension regis only)

Professional experience in firms or government agencies through supervised practical experience; evaluative reports and consultations with faculty advisers and employers.

**5100. TECHNICAL COMMUNICATION: SPECIAL PROBLEMS.** (Cr ar; prereq #,  $\Delta$ )

Designed for supervised reading, research, and work on advanced technical communication projects not covered in regularly scheduled courses.

**5110. SEMINAR IN AGRICULTURAL COMMUNICATION.** (3 cr [max 6 cr]; prereq sr, #)

Study of selected topics through reading, discussion, lectures by resource people, and preparation and presentation of papers.

**5136. SPECIAL PROBLEMS IN AGRICULTURAL COMMUNICATIONS.** (Cr ar; prereq #)

Communications problems related to specific aspects of student's major field of study.

**5147. EFFICIENT READING.** (4 cr)

Exploration of the adult reading process with emphasis on comprehension, speed, and vocabulary development. For persons of average or above-average reading ability who wish to develop and refine college-level reading skills and to understand linguistic, psychological, and physiological aspects of the complex human skill of reading. An evaluative paper and some seminar meetings are required. (Meets with 1147)

**5150. DIRECTION OF TRAINING IN BUSINESS AND SERVICE ORGANIZATIONS.** (4 cr; prereq freshman communication or equiv)

Business, industrial, and service organizations and their in-post and out-post training programs. Scope and sequence of specialized training and development programs, job of typical director of training and development, and skills required for entry into field. Students visit a training and development office in a selected business or service organization and conduct descriptive research on effectiveness of program involved.

**5165. STUDIES IN ORGANIZATIONAL COMMUNICATION, CONFLICT, AND CHANGE.** (4 cr; prereq freshman communication or equiv)

The roles of internal and external organizational communication, conflict-problem identification, and change processes. Contemporary theory and research in organizational development. Methods of problem identification and diagnosis. Change processes and applications to actual organizational settings.

**5170. MANAGERIAL COMMUNICATIONS.** (4 cr; prereq freshman communication or equiv)

Systematic analysis of communication techniques and procedures for the manager. Emphasis on manager's ability to achieve vertical and horizontal understanding and acceptance. Readings, guest speakers, and a term project.

**5180. INTERNSHIP IN TECHNICAL COMMUNICATION.** (2-6 cr; prereq #,  $\Delta$ )

Designed to give technical communication majors on-the-job experience at the University or in industry or government.

**5257. SCIENTIFIC AND TECHNICAL PRESENTATIONS.** (4 cr; prereq 1222, 3562 or #)

Presentations for specific situations related to technical or scientific topics. Audience analysis and adaptation, techniques of support and visualization, organization for clarity and accuracy, and techniques of interpreting and answering questions. Students will make and evaluate technical and scientific presentations. Emphasis on seminar reports and professional conference papers.

**5258. INTERVIEWING: DYNAMICS OF FACE-TO-FACE COMMUNICATION.** (4 cr)

Designed to improve intrapersonal and interpersonal skills in interviewing situations. Students learn to understand and use appraisal, reprimand, complaint, persuasion, problem solving, and counseling interview techniques, and participate in a research interview project. Equal emphasis on the interviewer and interviewee roles.

**5375. HUMANITIES: SEMINAR IN AMERICAN AGRARIANISM.** (3 cr; prereq #)

Interdisciplinary seminar in humanities. The roots of the agrarian ideal in European thought and in early America. Individual research into and evaluations of the agrarian tradition in American social and political philosophy, and in history of imaginative literature, fine arts, and popular culture.

**5400. DISSEMINATION AND UTILIZATION OF INFORMATION.** (4 cr; prereq jr, sr, or grad standing)

Methods and processes of using specialized information. Study of cases and development of materials for application in professional fields. Emphasis on channels for dissemination and utilization.

**5500. RESEARCH IN COMMUNICATION STRATEGIES.** (4 cr)

Introduction to basic research design and methodology in communication. Emphasis on application of various research methods to particular communication strategies or settings.

**5531. TECHNICAL WRITING COURSE DEVELOPMENT.** (2 cr; prereq 3562, sr status)

Students plan and develop a technical writing course. Special attention to development of course objectives, syllabus, and bibliography of readings on teaching technical writing. Textbook selection.

**5541. READINGS IN SCIENTIFIC AND TECHNICAL PROSE.** (2 cr; S-N only; prereq sr status, Δ)

Tutorial in which students read selected books, essays, and reports exemplifying effective scientific and technical communication (actual scientific and technical discourse as well as philosophical and historical discussions about science and technology).

**5551. REPORT AND THESIS WRITING.** (3 cr; prereq 3562 or #)

For graduate students and seniors actually working on reports or theses. Organization of reports and theses; library investigation; presentation of data; methods of documentation. Emphasis on revision of manuscripts and improvement in style of writing.

**5561. ADVANCED EDITING SEMINAR; ELECTRONIC PUBLISHING.** (2 cr; A-N only; prereq 1500, 3562, 3572)

Procedure for copy preparation for publication. Practice copy coding for electronic publishing; use of telecommunications systems; coding and transmitting tables and charts; editing copy and code. Principles of composing and typesetting an article for publication, communicating with typesetters and printers electronically.

**5565. WRITING FOR PUBLICATION.** (4 cr; prereq 3562 and #)

The professional as communicator; analysis of markets; professional, trade, and general publications; information sources and topic selection; adaptation to specialized and general reader; writing and preparing manuscripts for publication; marketing techniques.

**5571. WRITING FOR SPECIAL PURPOSES.** (2 cr; 5 weeks long; prereq technical communication major or minor, freshman communication, 3562 or #)

Analysis of and writing practice in a specific genre of practical writing (grant proposal, procedures and policies manual, operations manual, newsletter). Content varies from quarter to quarter.

**5581. DOCUMENT DESIGN.** (4 cr; A-N only; prereq 3562, sr status, #)

Designing document to meet user's need, completing draft, and evaluating effectiveness. Forms and software documentation (user guides, reference manuals, tutorials, and input sheets) for databases, decision aids, computer-aided instruction, on-line programs, or visual displays. Mandatory lab time as part of project team of programmers, subject matter specialists, and communication specialists.

**5600. TRANSFER OF TECHNOLOGY.** (4 cr; prereq work experience in scientific communication or #)

Methods of transferring scientific and technical knowledge and practice. Review of research in diffusion and transfer methods at different technical levels. Tools, methodologies, and assessment procedures for managing a program. Assessment and design plan.

**5700. COMMUNICATION IN TECHNOLOGICAL AND ENVIRONMENTAL IMPACT ASSESSMENT.** (4 cr; prereq sr or grad standing, one course in statistics, #)

Theories and processes involved in technological assessment and environmental impact statement preparation. Case studies of technology assessments, forecasts, and environmental impact statements. Term project on planning of process and project management in an actual impact assessment.

**Social Work (SW)**

*(School of Social Work)*

**1001w. INTRODUCTION TO SOCIAL WELFARE AND COMMUNITY SERVICES.** (5 cr)

History of American social services; rise of professional social work in response to human need. Social, political, and economic factors influencing public policy and services. Role of social workers with individuals, families, groups, and communities; values and ethics of professional helping role.

**1005f. ORIENTATION TO INTERDISCIPLINARY HUMAN RELATIONSHIPS MAJOR AND FIELD STUDY.** (1 cr)

Orientation to disciplines in the major, career options, field study.

**3004. SOCIAL WORK ISSUES AND HUMAN DEVELOPMENT THROUGH THE LIFE CYCLE.** (4 cr, 1001, CPsy 1301)

Normative development for social, psychological, biological, and cultural perspectives. Integration of theoretical concepts with practice issues.

**3005f,w. SOCIAL WORK: THE ART OF HELPING PEOPLE.** (4 cr; prereq 1001)

Function of values and knowledge in social work practice; meaning of giving and receiving help; process of intervention; use of self in the professional relationship.



## Course Descriptions

### **3006. SOCIAL WORK PRACTICE IN SELECTED SETTINGS.** (4 cr; prereq 1001, 3004, 3005, or #)

Social work practice theory in adaptations to specific target populations—children and youth, the emotionally ill, offenders, the aged, the disabled.

### **3020H. HONORS SEMINAR: SPECIAL TOPICS.** (3 cr per qtr; prereq 1001, jr or sr honors candidate)

### **3031-3032-3033f, w, s. FIELD PRACTICE: SUPPORTING SEMINAR.** (4 cr)

Supervised practice in primary service roles in community service delivery systems; supporting seminar.

### **3101w. CURRENT SOCIAL POLICY PROBLEMS AND SOCIAL WELFARE.** (4 cr, §5111; prereq 1001)

Development and future course of U.S. social welfare system particularly since mid-1960s. Interplay of historical, economic, and political factors in shaping our contemporary social welfare system. Examination and evaluation of system's response to social problems (e.g., income inequality, discrimination, unemployment).

### **3102s. SOCIAL SERVICE PROGRAMS FOR CHILDREN AND ADULTS.** (4 cr; prereq 3101 or #)

Historical development, philosophies, and characteristics of programs for dependent or neglected children, the mentally retarded, the mentally ill, the physically handicapped, and juvenile and adult offenders.

### **3970f, w, s. DIRECTED STUDIES.** (1-15 cr per qtr; prereq #)

Guided individual reading or study.

### **3984f, w, s. COMMUNITY ORGANIZATION/DEVELOPMENT/PRACTICE.** (4 cr; prereq 1001)

Community processes, change, and organization. Community organization: theory and principles, stressing citizen participation, and value base. Comparison of three strategies for social work intervention at community level in terms of constituencies, influence on decision making, and suitability.

### **3990f, w, s. DIRECTED RESEARCH.** (Cr ar; prereq #)

### **5010f, w, s. SEMINAR: SPECIAL TOPICS.** (3 cr)

### **5013w. INTERDISCIPLINARY TEAM TRAINING IN HEALTH SERVICES DELIVERY.** (3 cr, §HSU 5001, §PubH 5013; prereq #)

Interpersonal, group communications with application to team health projects, organization, function, and membership. Emphasis on team leadership styles, professional roles and functions, active listening, giving and receiving feedback, and conflict resolution to enhance quality of project outcome.

### **5021f. HUMAN SEXUALITY FOR HEALTH AND HELPING PROFESSIONALS I.** (3-4 cr, §HSU 5025, §PubH 5021, §FSoS 5240)

Multidisciplinary approach to human sexuality from perspective of public and social health and well-being of community, society, and individuals. Develops personal skills for imparting sexual knowledge to other health professionals and consumers. (For 3 credits, complete regular course grading requirements. For 4 credits, do same plus attend 13-hour Sexual Attitude Reassessment workshop scheduled during the quarter.)

### **5022w. HUMAN SEXUALITY FOR HEALTH AND HELPING PROFESSIONALS II.** (3 cr, §HSU 5027, §PubH 5022, §FSoS 5240; prereq 5021)

Examination of rationales for sexual health care and methods of intervention into sex-related problems of various publics. Focus on methods of assessment, creation of comfortable climate for exploration of sexual concerns, provision of sex-related information, techniques for behavior change, and referrals to specialized resources for treatment.

### **5023s. IMPLEMENTATION OF SEXUAL HEALTH PROGRAMS AND POLICIES.** (3 cr, §PubH 5023, §HSU 5028, §FSoS 5240; prereq 5021)

Issues, controversies, alternative approaches to preventive programs, policies. Ethical/legal aspects, sexual normalcy, variants/deviance, and health care. Emphasis on sexual health education for adults, children.

### **5024f. MULTIDISCIPLINARY PERSPECTIVES ON AGING.** (4 cr, §CPsy 5305, §Educ 5440, §HSU 5009, §Phar 5009, §PA 5671, §Soc 5960)

A multidisciplinary introduction to aging and the aging process.

### **5111f. CONTEMPORARY POLICY AND PROGRAMS IN SOCIAL WELFARE.** (3 cr for grads, 4 cr for undergrads, §3101; prereq grad standing or 12 cr social sciences)

Concepts and principles of social policy for social welfare programs and services.

### **5102. THE CHANGING ROLES OF MEN AND WOMEN.** (3 cr; prereq WoSt 1005 or 1006 or equiv)

Changing relationships between men and women. Factors of race, ethnicity, and social class in changing roles in economic, social, and psychological dependencies; family and work; child rearing and custody issues; child support, work, welfare, poverty. Implications for social services and social welfare policies.

### **5211w. ADVANCED THEORIES OF HUMAN GROWTH AND CHANGE.** (3 cr for grads, 4 cr for undergrads; prereq grad standing or 12 cr in social sciences)

Socio-psycho-biological factors associated with individual and group development as applied to social work practice.

**5228s. RURAL ISSUES IN SOCIAL WORK PRACTICE.** (3 cr)

Examination of practicing social work in rural environment. Rural service system, public policies affecting rural service delivery, and professional concerns.

**5349. SOCIAL WELFARE IN AMERICA.** (3-4 cr, §Hist 5349)

Advanced survey of social services, public policies, and profession of social work—colonial era to present. Issues include dependency, deviancy, crime, social security, public health, social reform, and functions of public and voluntary institutions (charities, settlements).

**5404. BEGINNING CHILD WELFARE PRACTICE.** (3 cr for grads, 4 cr for undergrads; prereq 1001, 3005)

Exploration, organization, and application of knowledge about demands of child welfare practice. Analysis of and intervention in problems and cases; worker functioning.

**5414. FUNDAMENTALS OF SOCIAL GROUP WORK.** (3 cr, §8414; prereq 3005)

Principles of social group work practice applicable to both task and treatment groups. Small group as a social process to achieve task and treatment goals. Sociophilosophic orientation, theoretical frames of reference, application of structure, task and process variables, use of member-to-member interactions, group goal setting, and professional relationships with groups, individual members, and systems external to small groups.

**5601f,w,s. ETHNOCULTURAL CONCEPTS IN SOCIAL WORK PRACTICE.** (3 cr for grads, 4 cr for undergrads; prereq 1001)

Relation of ethnocultural concepts to development of social welfare policies and services and social work practice. Common principles and cross-ethnic issues; significant orientations toward welfare issues and practices among American Indian, Asian American, black, and Hispanic groups. Contributions of each to effective interpersonal and intragroup relationships within the social service delivery system.

**8010. FIELD INSTRUCTION I****8020. FIELD INSTRUCTION II****8102. POLICY ISSUES IN SOCIAL WELFARE: POLICY AND PROGRAM ISSUES IN CORRECTIONS****8104. CHILD WELFARE AND THE LAW****8111. INTERNATIONAL SOCIAL WELFARE****8120. SOCIAL WORK AS A PROFESSION****8121. SOCIAL POLICY AND DELIVERY SYSTEMS FOR FAMILY AND CHILDREN'S SERVICES****8122. HEALTH/MENTAL HEALTH POLICY****8130. SEMINAR: HISTORY OF SOCIAL WORK****8132. COMMUNITY MENTAL HEALTH: HISTORY, LEGISLATION, AND POLITICS****8140. SEMINAR IN SOCIAL WORK EDUCATION****8150. SPECIAL TOPICS IN SOCIAL POLICY****8180. SOCIAL POLICY FORMULATION AND ANALYSIS****8203. FAMILY STRESS****8300. ORGANIZATIONS AND COMMUNITY SYSTEMS****8301. ORGANIZATIONAL ANALYSIS, MANAGEMENT, AND ADMINISTRATION****8305. COMMUNITY DEVELOPMENT****8307. THEORIES OF SOCIAL PLANNING AND SOCIAL CHANGE****8350. PLANNED SOCIAL CHANGE****8400. A FRAMEWORK FOR SOCIAL WORK INTERVENTION****8401. SOCIAL WORK METHODS WITH INDIVIDUAL CLIENTS****8406. SUPERVISION AND CONSULTATION IN SOCIAL WORK PRACTICE****8407. STRATEGIES OF FAMILY INTERVENTION****8408. DIRECT WORK WITH CHILDREN****8414. SOCIAL WORK METHODS WITH GROUPS****8415. COMPARATIVE GROUP MODALITIES****8416. GROUP PSYCHOTHERAPY****8417. THE MANAGEMENT OF TEAM AND STAFF****8421. SOCIAL WORK PRACTICE: PSYCHOPATHOLOGY AND INTERVENTION****8422. SOCIAL WORK PRACTICE WITH THE CHRONICALLY MENTALLY ILL****8423. CHRONIC ILLNESS-IMPACT ON FAMILIES****8450. SPECIAL TOPICS: PRACTICE WITH INDIVIDUALS, FAMILIES, AND GROUPS****8460. SPECIAL TOPICS IN THE PERSONAL SOCIAL SERVICES: MODELS OF DIRECT PRACTICE****8901. SCIENTIFIC INQUIRY****8903. PROGRAM EVALUATION****8950. SPECIAL TOPICS IN SOCIAL WORK RESEARCH**

## Course Descriptions

### 8970. DIRECTED STUDY

### 8990. RESEARCH PROJECTS

### 8991. SEMINAR ON RESEARCH

### 8992. SEMINAR ON RESEARCH

### 8993. SEMINAR ON RESEARCH

*See additional School of Social Work courses under Youth Studies (YoSt).*

## Textiles and Clothing (TexC)

*(Department of Design, Housing, and Apparel)*

### 1601. LABORATORY IN BASIC APPAREL PRINCIPLES. (2 cr, 1601-1602†)

Programmed learning approach to basic principles of apparel construction. Introductory experience for novices only.

### 1602. FITTING THE HUMAN SUBJECT. (2 cr; prereq Δ)

Analysis of a variety of body forms. Use and modification of sizing systems. Relation of fabric to the human body.

### 1603. ADVANCED PRINCIPLES OF APPAREL PRODUCTION. (2 cr; prereq 1602 or †1602)

Problem solving approach to apparel construction. Analysis of materials, labor cost, and production techniques.

### 1641. INTRODUCTION TO MERCHANDISING. (3 cr; prereq †1642)

Techniques and psychology of selling related to consumer needs, store organization and policies.

### 1642. SEMINAR: ORIENTATION TO RETAIL MERCHANDISING. (1 cr; S-N only; prereq †1641; to be taken 1st or 2nd qtr on campus)

Orientation to careers in retailing and preparation for field experience.

### 1643. APPAREL INDUSTRIES. (4 cr; prereq Econ 1002 or AgEc 1030)

Structure, operation, and problems of domestic and foreign apparel industries including ready-to-wear, couture, and auxiliary fashion sector. Interrelationships with the textile industry and distributors.

### 1680. OPPORTUNITIES IN TEXTILES AND CLOTHING. (1 cr; S-N only)

Professional opportunities; useful educational background; program planning to maximize individual potential.

### 3003. COOPERATIVE EDUCATION PROGRAM. (1-3 cr; S-N only; prereq soph, HE 1003, #)

A planned work experience relating activity in business, industry, or government to the student's area of study. Written consent of faculty supervisor prior to registration is required.

### 3601. TAILORING. (4 cr; prereq 1603 or #)

Principles of structuring tailored garments. Analysis of hand, machine, and fusing methods.

### 3603. READY-TO-WEAR-ANALYSIS. (3 cr; prereq 3621)

Analysis of garments relative to product performance, mass production principles, and consumer value.

### 3604. FLAT PATTERN DESIGN. (3 cr; prereq soph, 1603, 3662 or Dsgn 1525, or Δ)

Principles of flat pattern design; drafting and advance pattern development.

### 3605. DRAPING DESIGN AND CONSTRUCTION. (3 cr; prereq soph, 1603, 3662 or Dsgn 1525, or Δ)

Techniques in fitting and draping as a basis for creative designing in fabric. Emphasis on relation of fabric to design and construction methods.

### 3621. TEXTILES. (5 cr; prereq soph, Chem 1002, or Chem 1003, or Chem 1005, or #)

Basic physical, chemical, and biological characteristics of fiber, yarn, and fabric structures; interrelationship with choice, maintenance, and performance of consumer textiles.

### 3622. TEXTILES FOR INTERIORS. (3 cr; prereq 3621, #)

Developments and trends with reference to fiber, yarn, construction and finish of textiles for upholstery, and floor, wall, and window coverings.

### 3623. PERFORMANCE EVALUATION OF TEXTILES. (3 cr; prereq 3621)

Standard laboratory methods for rapid prediction of textile performance in the consumer environment; problems in specifying care procedures for labeling.

### 3641. FIELD STUDY IN TEXTILES AND CLOTHING. (1 cr; S-N only; prereq soph, Δ)

One-week field trip between winter and spring quarters to a major market city (e.g., New York, Los Angeles, Dallas). Scheduled visits to apparel and textile manufacturers' showrooms, pattern companies, major designers' workrooms, fashion publications, resident buying offices, museums, etc. Opportunity to survey major retail operations. Preparatory and follow-up seminars required.

### 3643. RETAIL MERCHANDISING. (5 cr; prereq 1641, Mktg 3065)

Merchandise selection and controls, sales analysis, model stocks and buying plans.

### 3644. RETAIL EXPERIENCE SEMINAR I. (2 cr; S-N only; prereq 3rd-qtr soph, 1641, 1642, and 200 hrs or †200 hrs approved selling experience)

Integration of work experience with classroom study accomplished through individual analysis and participation in group discussion of selected topics.

### 3645. RETAIL EXPERIENCE SEMINAR II. (2 cr; S-N only; prereq 3643 or †3643, 3644 and addtl 200 hrs or †addtl 200 hrs approved selling experience)

Integration of work experience with classroom study accomplished through individual analysis and participation in group discussion of selected topics.

**3646. RETAIL SUPERVISION.** (3 cr; prereq Mgmt 3001, Mgmt 3002 or #)

Techniques of management, motivation, and supervision with specific attention to retailing environment. Participation through case study in discussion of management by objectives and participative management approach to retail supervision.

**3647. RETAIL OCCUPATIONAL SEARCH.** (1 cr; S-N only; prereq sr, 400 hrs approved selling experience)

Development of employment search techniques to identify and locate specific retail and related employment opportunity.

**3661. CULTURAL PERSPECTIVES ON DRESS.** (3 cr; prereq Anth 1102 or Soc 1001)

The influence of cultural ideals and standards on dress. How dress evolves in response to society's needs, values, and technology.

**3662. AESTHETICS OF CLOTHING.** (3 cr; prereq Psy 1001, Dsgn 1501 or #)

Perception of design elements and artistic principles for clothing applied in specific laboratory problems.

**3663. WOMEN'S TEXTILE ARTS: AN HISTORICAL PERSPECTIVE.** (3 cr)

Historical overview of women's involvement in textile arts in domestic environment of everyday life; aesthetic, economic, and social significance. (Extension only)

**3664. FASHION TREND ANALYSIS.** (4 cr; prereq jr, sr, Soc 1001, Psy 1001)

Factors that influence the acceptance or rejection of apparel and other textile products at the consumer level. Analysis of current trends and future projections.

**5003. COOPERATIVE EDUCATION PROGRAM.** (4-8 cr; 5003-5004†; not for grad cr; S-N only; prereq sr, †5004, #, minimum GPA of 2.50)

A planned work experience relating activity in business, industry, or government to the student's area of study. Written consent of faculty supervisor prior to registration is required.

**5004. COOPERATIVE EDUCATION INTEGRATIVE PAPER.** (2-4 cr; 5003-5004†; not for grad cr; A-N only; prereq sr, †5003, #)

Paper analyzing a problem encountered in the planned work experience in terms of the student's area of study.

**5600. ADVANCED APPAREL DESIGN AND CONSTRUCTION PROBLEMS.** (2-4 cr per qtr [max 12 cr]; prereq 3621, #)

Analytical study of and construction for advanced apparel design utilizing draping and flat pattern techniques. Relating the latest technological developments in textiles to garment design.

**5603. EXPERIMENTAL STUDIES IN APAREL.** (3-5 cr; prereq 6 cr in construction or teaching experience, #)

Study of selected procedures in areas of apparel production and design.

**5621. MACRO-MICRO PROPERTY RELATIONSHIPS.** (5 cr; prereq 3622 or 3623)

Relating visual and tactile properties of textiles to microscopically and submicroscopically detectable physical and chemical determinants.

**5622. ISSUES AND TRENDS IN TEXTILE CONSUMER PROTECTION.** (3 cr)

The needs of the textile consumer for protection from deception and hazard; analysis of federal, state, and local legislation as well as voluntary industrial systems; case histories; change mechanisms.

**5623. THE DYEING MEDIUM AND COLOR.** (3 cr; prereq 3621, Dsgn 1521, or #)

Principles of dye selection for specific fibers; precision dyeing for exploring perceived color relationships and expanding the utility of this medium. (Extension or Summer School only.)

**5624. TEXTILE COLORATION AND FINISHING.** (5 cr; prereq 5621)

Comprehensive survey of processes and operations for coloring and finishing textiles; development of a rational base for predicting hazard and performance in service and recycling, and a realistic limiting perspective for textile design.

**5625. COLOR METROLOGY.** (3 cr; prereq #)

Theory of color perception and measurement; analysis of color order systems; instrumentation; application to unambiguous numerical color specification and description of small color differences; noncolor components of surface appearance.

**5626. RECYCLING PROCESSES.** (3 cr; prereq 5621)

Principles and practices in recovery of initial appearance and properties of textile products; application to restoration of historic textile materials; water pollution by effluent from wet cleaning processes.

**5627. ANALYTICAL METHODS FOR CONSUMER TEXTILES.** (3 cr, †3623; prereq 3621)

Standard laboratory methods for rapid prediction of performance of textile fabrics and products.

**5628. CHARACTERIZATION OF YARNS AND WOVEN FABRICS.** (3 cr; prereq 3621)

Techniques of dimensional and structural characterization of yarns and woven fabrics; the relationship of these characteristics to performance of such fabrics in textile products.

**5629. CHARACTERIZATION OF KNITTED FABRICS.** (3 cr; prereq 5628 or #)

Techniques of dimensional and structural characterization of knitted fabrics; the relationship of these characteristics to performance of such fabrics in textile products.

**5630. PRINCIPLES OF TEXTILE METROLOGY.** (3 cr, prereq #)

Metrology as a dynamic and vital adjunct of the distribution and use of textile materials. Test evaluation, development, and use; interpretation of results; data reduction; case studies; investigative metrology.

## Course Descriptions

### **5631. TEXTILES FOR INTERIOR ENVIRONMENTS.** (3 cr, §3622; prereq 3621)

Study of textiles for interiors with reference to fiber, yarn, construction, and finish.

### **5641. TOPICS IN MERCHANDISING.** (3 cr per qtr [max 6 cr]; prereq 3643, 3644, Δ)

Study of a current issue related to merchandising textile and clothing products. Topic may vary.

### **5660. TOPICS IN APPAREL AND ADORNMENT.** (3-5 cr per qtr [max 10 cr]; prereq Δ)

Discussion and laboratory work in sociocultural and aesthetic area of clothing. Topic will vary.

### **5661. CLOTHING AND HUMAN BEHAVIOR.** (4 cr; prereq sr, Soc 1001, Psy 1001 or #)

Clothing in relation to individual and group behavior patterns; personal and social meaning attributed to dress; conventions and standards influencing clothing choice and use.

### **5662. CLOTHING CONSUMPTION PROBLEMS.** (3 cr; prereq 3621, AgEc 1030 or Econ 1002, Soc 1001, Psy 1001 or #)

Clothing problems as part of the consumption process of individuals and families; consequences of personal and socioeconomic conditions; impact of technology and public and private policy on the planning, acquisition, use, maintenance, and discard of clothing.

### **5668. AFRICAN DRESS.** (3 cr; prereq 3661, Anth 1102, Soc 1001 or #)

Sociocultural analysis of dress (apparel, accessories, and body modification) of various African peoples with emphasis on cultural patterns of technology, aesthetics, ritual, morality, and symbolism as related to dress. External influences on Africa as well as African influence on other continents.

### **5680. SPECIAL TOPICS IN TEXTILES AND CLOTHING.** (2-5 cr per qtr [max 10 cr]; prereq dependent on topic, Δ)

Review of research and methodology in organized group sessions. Topics in developing areas of the discipline vary and will be announced prior to registration.

### **5685. INTERNATIONAL DEVELOPMENTS IN TEXTILES AND CLOTHING.** (4 cr; prereq #)

Comparison of production, distribution, and consumption in the United States and Europe. Effects of world trade on supply and distribution.

### **5686. EUROPEAN FIELD EXPERIENCE IN TEXTILES AND CLOTHING.** (6-12 cr; prereq 5685 and #)

One quarter abroad in comparative study of design, production, distribution, and consumption of textiles and clothing in European market centers. Includes lectures, field trips, individual study projects, and observations of activities in selected textile and clothing industries, businesses, and related organizations.

## For Graduate Students

(For descriptions, see *Graduate School Bulletin*)

### **8621. READINGS IN TEXTILES**

### **8622. STRUCTURE AND PROPERTIES OF TEXTILE MATERIALS**

### **8623. MECHANICAL-PHYSICAL METROLOGY**

### **8624. CHEMICAL METROLOGY**

### **8625. PROBLEMS: TEXTILES AND CLOTHING**

### **8627. THERMAL PROPERTIES OF TEXTILE MATERIALS**

### **8661. READINGS IN CLOTHING**

### **8662. SOCIOCULTURAL LITERATURE OF DRESS**

### **8663. PROBLEMS: CLOTHING AND TEXTILES**

### **8664. FASHION THEORY AND ANALYSIS**

### **8666. AESTHETIC CONCEPTS RELATED TO APPAREL DESIGN**

### **8667. THEORETICAL ORIENTATIONS IN CLOTHING AND HUMAN BEHAVIOR**

### **8668. METHODOLOGICAL ORIENTATIONS IN CLOTHING AND HUMAN BEHAVIOR**

### **8680. SEMINAR: TOPICS IN CLOTHING AND TEXTILES**

### **8681. INTEGRATIVE SEMINAR**

## Youth Studies (YoSt)

(*School of Social Work*)

### **3100. INTRODUCTION TO YOUTHWORK.** (3 cr)

Exploration of settings in which youthwork is done—schools, informal education, juvenile justice, mental and physical health organizations, religious organizations. Key issues, policy and programmatic responses, roles and tasks of youthworker, and career patterns discussed for each setting.

### **5120. INDEPENDENT STUDY IN YOUTH STUDIES.** (Cr or [max 12 cr]; prereq #)

Independent reading and/or research under faculty supervision.

### **5130. SPECIAL TOPICS IN YOUTH STUDIES.**

(3-5 cr per qtr [max 15 cr]; prereq dependent on specific topic)  
In-depth investigation of one area of youth studies. Teaching procedure and approach determined by specific topic and student needs. Topic announced in advance.

### **5132. EXPERIENTIAL LEARNING.** (3 cr; prereq CPsy 5303 or #)

Purpose and models of experiential learning in schools and agencies serving youth. Emphasis on how to develop, implement, and evaluate such programs.

**5133. YOUTH AND HEALTH.** (3 cr; prereq 5131, Soc 1001, CPsy 5303, PubH 3004, or #)

A basic course on the medical and health status of youth. Age-specific morbidity data with respect to youth. Introduction of youth development concepts for use in sociomedical and sociohealth problem analysis and program development.

**5200. WORKING WITH YOUTH THROUGH ADULTS.** (1-3 cr per qtr; prereq BA degree or #)

Interdisciplinary 3-quarter seminar on essential knowledge and skills to meet youth needs, through relationships with adults; development and management of system of support for youth work.

**5201-5202-5203. PRACTICUM.** (4 cr per qtr; prereq acceptance into youth studies collateral)

Two-hour seminar and 8 to 10 hours of fieldwork each week. Students reflect on and integrate knowledge about youth with ongoing experience in work with youth.

**5230. WORK WITH YOUTH—INDIVIDUAL.** (3 cr per qtr; prereq Soc 1001, Psy 1001, CPsy 5303, or #)

Basic assumptions underlying work with youth. Emphasis on how adolescents, in particular, learn to get along with themselves. Special issues and concerns of adolescents and of persons who work with them.

**5231. WORK WITH YOUTH—FAMILY.** (3 cr per qtr; prereq 5230, FSoS 5200 or #)

Basic assumptions underlying work with youth. Emphasis on how adolescents, in particular, learn to get along with themselves and their role in the family. Special issues and concerns of adolescents and of persons who work with them.

**5232. WORK WITH YOUTH—GROUP.** (3 cr per qtr; prereq 5230, Spch 5411, or #)

Basic assumptions underlying work with youth. Emphasis on how adolescents, in particular, learn to get along with themselves, their role in the family, their relationships with peers and on the job. Special issues and concerns of adolescents and of persons who work with them.

**5330. CHILD AND ADOLESCENT PSYCHOLOGY FOR PRACTITIONERS.** (3 cr; prereq courses in educational psychology, child or adolescent psychology)

Emphasis on application of theory and research about children and adolescents, including how findings can be utilized and how theories facilitate understanding their behavior.

**5331. YOUTH AGENCIES, ORGANIZATIONS, AND SERVICE SYSTEMS.** (3 cr; prereq two courses in sociology/anthropology and work experience in youth agency or organization)

Overview of major forms of youth agencies, organizations, system. Emphasis on sociopolitical structures, legitimacy, ideologies, goals, programs, services. Focus on staff, legal, ethical issues; youth participation.

**5332. UNDERSTANDING AND WORKING WITH SPECIAL POPULATIONS OF YOUTH.** (3 cr; prereq 5331 or #)

Range of treatment methods and their rationale for working with adolescents with a variety of special problems, from normalizing, developmental perspective.

**5333. UNDERSTANDING AND WORKING WITH ADOLESCENTS.** (4 cr)

Normal range of changes, experiences in adolescent development. Roles of parents, adults, youthworkers in relationship to young people. Methods and approaches to foster healthy growth and development. (TV course, Extension only.)

**5401. COMMUNICATING WITH ADOLESCENTS ABOUT SEXUALITY.** (3 cr; prereq 6 cr social sciences, experience in work with youth, or #)

Sexual development and experience, emphasizing how adults can be comfortable to communicate more effectively with young people. Sexual patterns, variations, roles, power, exploration, sex education.

**5402. SERIOUS ADOLESCENT SEXUALITY PROBLEMS: SEXUAL ABUSE, RAPE, INCEST, PROSTITUTION, AND UNPLANNED PREGNANCY.** (3 cr; prereq 6 cr social sciences, experience in work with youth, or #)

Focus on serious sexuality problems some adolescents face, knowledge and skills needed by adults to prevent or respond helpfully to these problems.

**5403. INTERVENTION AND COUNSELING WITH ADOLESCENTS AND FAMILIES REGARDING SERIOUS SEXUALITY PROBLEMS.** (3 cr; prereq YoSt 5402, experience working with adolescents on serious sexuality problems, or #)

Exploration, in greater depth than 5402, of social and psychological dynamics of serious sexuality problems, available methods of intervention.

**5501. YOUTH AND WORK.** (3 cr; prereq Soc 1001, Econ 1001, CPsy 3303, or #)

Development of frame of reference to guide/structure/direct work with youth in the context of policies and programs concerning youth in the labor market.

**5631. HEALTH NEEDS AND PROBLEMS OF ADOLESCENT FEMALES.** (4 cr)

Major health concerns, behaviors, and problems of adolescent females. Current and alternative approaches to service delivery and intervention. Assessment of needs of specific groups (parents, abused youth) and local program response.

**5636. ADOLESCENT PARENTHOOD.** (3 cr)

Focus on current research about adolescent parenthood and strategies to promote successful outcomes for young parents and children. Health, psychosocial, and developmental problems included. (Extension only.)

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## Course Descriptions

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**5711. INTRODUCTION TO CONSULTATION IN YOUTHWORK.** (3 cr; prereq at least two courses in sociology and/or anthropology, major in human services profession, some paid or voluntary experience in youth or other human services organization)

Overview of major conceptual models for understanding consultation and analyzing range of foci (program development, research, program evaluation, and clinical cases). Role of both consultant and consultee. Emphasis more on learning about process than on learning how to do consultation. Ethical issues theme throughout.

### **For Graduate Students**

(For description, see *Graduate School Bulletin*)

**8001-8002-8003. ADVANCED SEMINAR IN YOUTH STUDIES**

# Administration and Faculty





# Administration and Faculty

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Family Social Science (290D McNeal)  
Jerome Beker, Director, Center for Youth  
Development and Research (386C  
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Natalie Gallagher, Assistant Dean for  
Student Affairs (32E McNeal)  
Lila Moberg, Acting Director, Career Ser-  
vices Center (37A McNeal)  
Miriam Seltzer, Coordinator of  
International Activities (37C McNeal)  
Gertrude Strinden, Coordinator of  
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Home Economics Education—Ruth  
Thomas  
Housing—Evelyn Franklin  
Human Relationships: Family, Youth,  
and Social Services—Paul Rosenblatt  
Interior Design—Delores Ginthner, Ann  
Erickson  
Nutrition and Dietetics—Louise M. Mul-  
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Retail Merchandising—Stowe Badenoch  
Textiles and Clothing—Gloria Williams

## Department Faculty

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#### *Associate Professor*

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Natalie Gallagher, *assistant dean for  
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*Assistant Professor*  
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*Assistant to the Dean*  
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(240 McNeal Hall)

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(290 McNeal Hall)

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**Food Science and Nutrition**

(228 Food Science and Nutrition)

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Allen S. Levine  
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Irving J. Pflug  
Gary A. Reineccius  
Patricia B. Swan  
Sita R. Tatini  
Shirley W. Thenen  
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Edmund A. Zottola

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Zata M. Vickers

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Madge N. Hanson  
Louise M. Mullan, Jr.  
Stephen D. Phinney

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*Assistant Clinical Specialist*

Margaret L. Olson

Carolyn P. Thomas

*Lecturer*

Lorraine F. Anderson

Mary A. Jones

Alfred T. May

Karen E. Moxness

Sister Mary Moira Tighe

### Home Economics Education

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Marilyn Rossmann

*Assistant Professor*

Jerry McClelland

Jane Plihal

*Lecturer*

Joyce DeBoe

### Extension Home Economics— Family Living

(48 McNeal Hall)

*Associate Professor*

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Lorilee Sandmann

*Assistant Professor*

Lois Goering

### School of Social Work

(400 Ford Hall)

*Professor*

C. David Hollister, *director*

Michael Baizerman

Jerome Beker

Neil F. Bracht

Miriam R. Cohn

Burton R. Galaway

George Hoshino

Rama S. Pandey

Robert Spano

Richard Sterne

Esther Wattenberg

*Associate Professor*

Irl Carter

Jeffrey Edleson

Diane Hedin

Jean Quam

Ronald Rooney

Byron Schneider

*Assistant Professor*

Merrilyn Belgium

Jane Gilgun

Linda Jones

Miriam Seltzer

Annalee Stewart

*Coordinator and Instructor*

Nancy Abramson

Frances Guminga

Nancy Johnston

Maura Sullivan

*Adjunct Faculty*

Clarke Chambers

Robert Schwanke

Ira Schwartz

Shirley Zimmerman

### Youth Development and Research, Center for

(386 McNeal Hall)

*Professor*

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Michael Baizerman

Miriam Cohn, *adjunct*

Robert ten Bensel

*Associate Professor*

Robert W. Blum, *adjunct*

Diane Hedin

Irl Carter, *adjunct*

Ruth Teeter, *adjunct*

Byron Schneider

*Assistant Professor*

F. Herbert Barnes, *adjunct*

Willis Bright, *adjunct*

James Kielsmeier

Miriam Seltzer

Joyce Walker

*Instructor*

J. Pamela Weiner

*Lecturer*

Veryl Andre

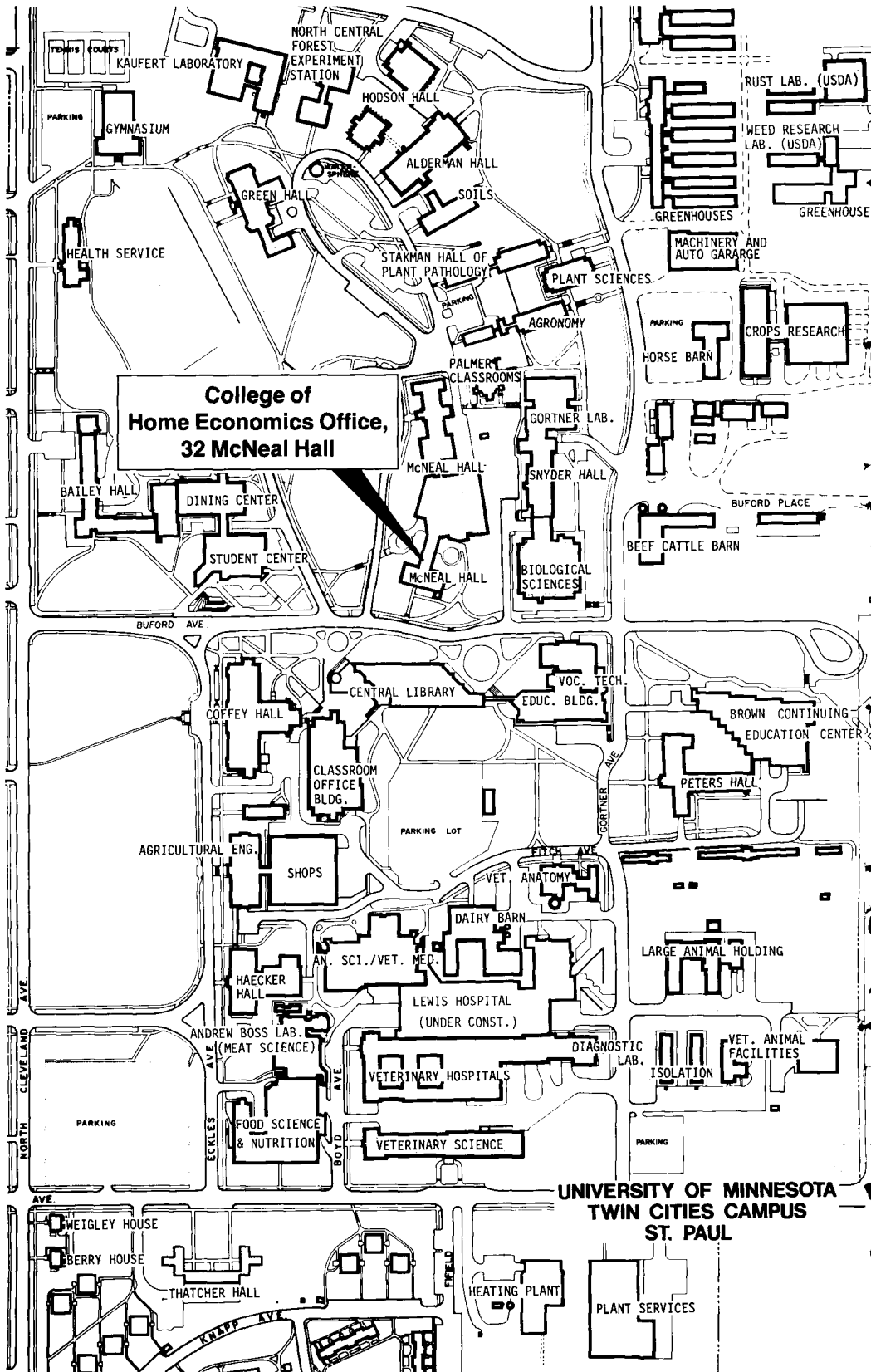
Judith Erickson, *adjunct*

*Senior Fellow*

Ira Schwartz

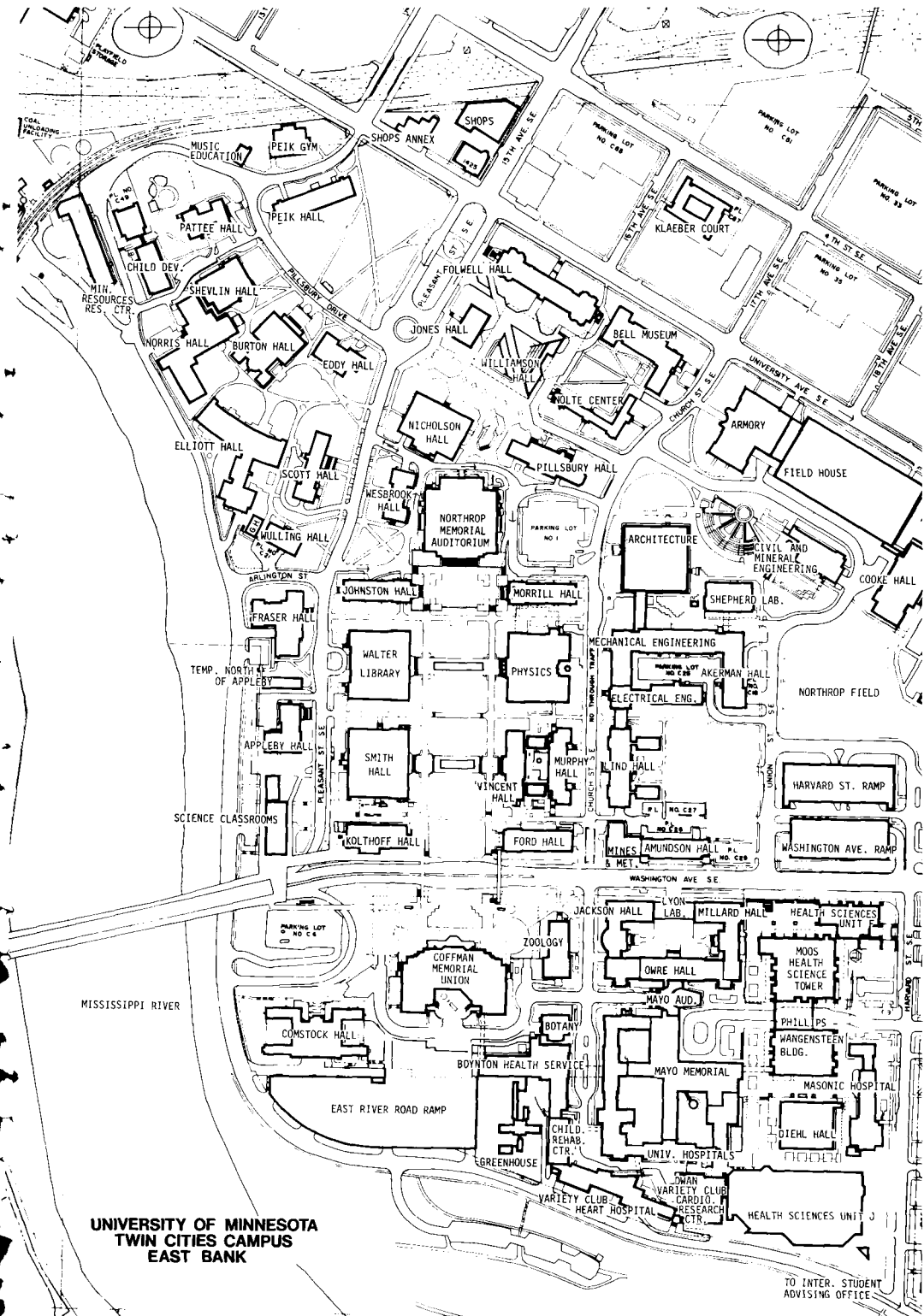
# Campus Maps





**College of  
Home Economics Office,  
32 McNeal Hall**

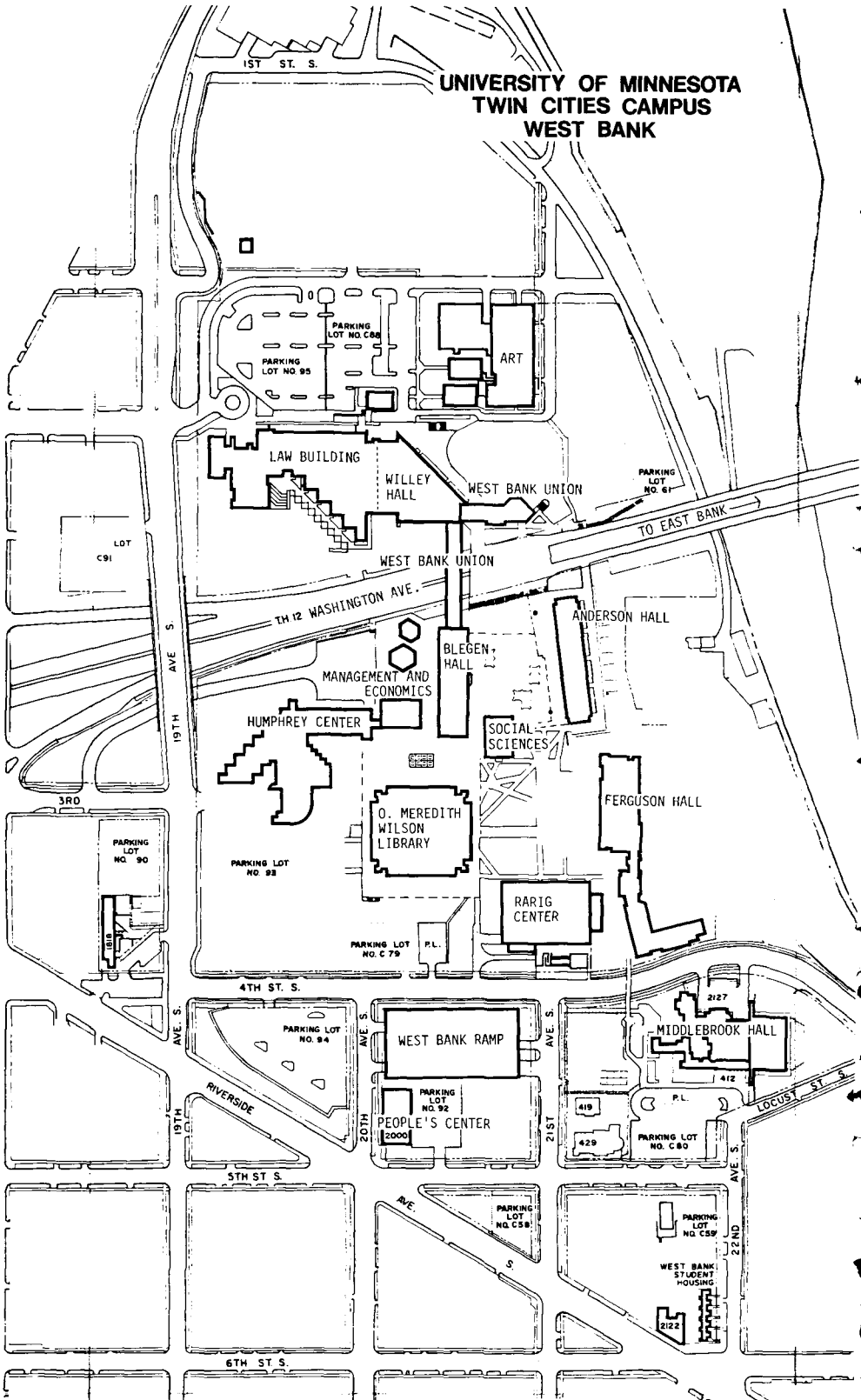
**UNIVERSITY OF MINNESOTA  
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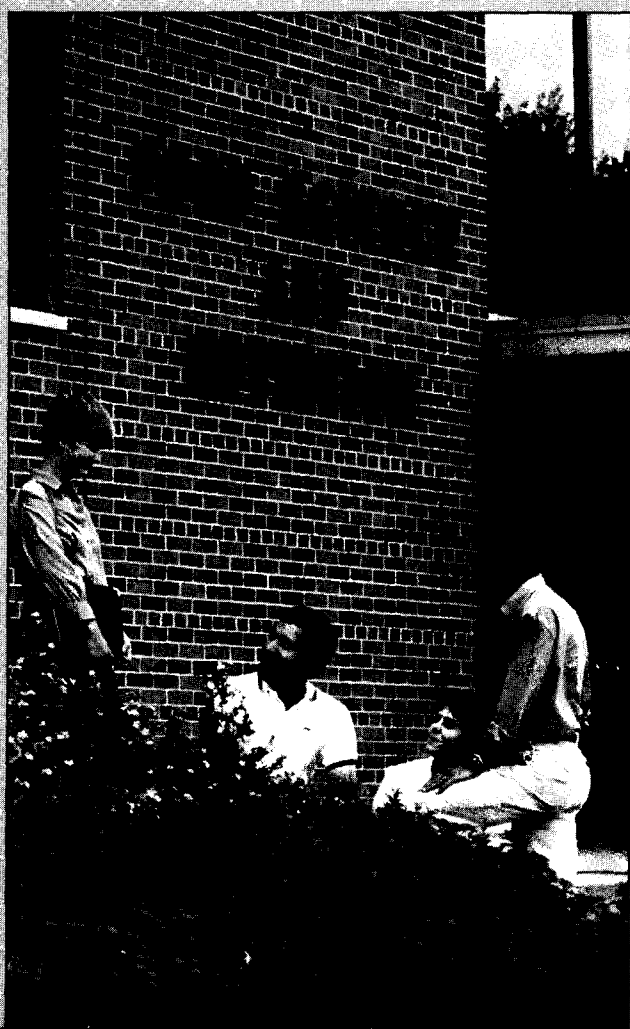
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TO INTER. STUDENT  
ADVISING OFFICE

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WEST BANK**



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