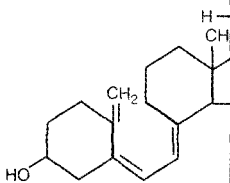


College of Human Ecology

# UNIVERSITY OF MINNESOTA

BULLETIN

1994 - 1996



*Human Ecology*

**On the cover:**

Design by Lori Townsend, junior, *Design Communication Program*

Photo credits—

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gesture drawing: Mary Kubik, drawing instructor, *Design, Housing, and Apparel*

interior model: photo files, Interior Design Program, *Design, Housing, and Apparel*

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# College of Human Ecology

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# Introduction

## Resources

**Bulletins**—This biennial bulletin, the basic source of information about the College of Human Ecology (CHE), should be kept handy for repeated reference. Its contents and the contents of other University bulletins, publications, or announcements are subject to change without notice. University offices can provide current information about possible changes. This publication is available in alternative formats upon request. Please contact the Office of Admissions, University of Minnesota, 240 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455 (612/625-2008).

This bulletin also is available in electronic format on Internet and may be accessed via Gopher.

In addition, students are expected to be aware of the following resources.

**College Office**—For more information about policies and program requirements, check with CHE, 32 McNeal Hall (612) 624-1717.

**Adviser**—At your first registration, you will be assigned an adviser who will guide you in planning a course of study.

**Class Schedule**—Each quarter you may pick up a *Class Schedule* with other registration materials in the CHE Office, 32 McNeal Hall. This publication lists University day school courses complete with hours, rooms, instructors, prerequisites, registration instructions, fees, maps, final exam schedules, grading definitions, and other valuable information.

**Other Bulletins**—Evening and summer courses are featured in the *Continuing Education and Extension Classes Bulletin* and *Summer Session Bulletin*, respectively. Separate bulletins are also published for other University colleges. Most may be obtained from the Office of the Registrar—St. Paul, 130 Coffey Hall.

## Policies

**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, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

In adhering to this policy, the University abides by the Minnesota Human Rights Act, Minnesota Statute Ch. 363; by the Federal Civil Rights Act, 42 U.S.C. 2000e; by the requirements of Title IX of the Education Amendments of 1972; by Sections 503 and 504 of the Rehabilitation Act of 1973; by the Americans With Disabilities Act of 1990; by Executive Order 11246, as amended; by 38 U.S.C. 2012, the Vietnam Era Veterans Readjustment Assistance Act of 1972, as amended; and by other applicable statutes and regulations relating to equality of opportunity.

Inquiries regarding compliance may be directed to Patricia A. Mullen, Director, Office of Equal Opportunity and Affirmative Action, University of Minnesota, 419 Morrill Hall, 100 Church Street S.E., Minneapolis, MN 55455 (612/624-9547).

**Immunization**—Students born after 1956 who take more than one University class are required under Minnesota law to submit an Immunization Record form.

The form, which is sent along with the official University admission letter, must be filled out and returned to Boynton Health Service within 45 days of the first term of enrollment in order for students to continue registering for classes at the University. Complete instructions accompany the form.

**Extracurricular Events**—No extracurricular events requiring student participation may be scheduled from the beginning of study day to the end of finals week. Exceptions to this policy may be granted by the Senate Committee on Educational Policy. The Senate advises all faculty that any exemption granted pursuant to this policy shall be honored and that students who are unable to complete course requirements during finals week shall be provided an alternative and timely opportunity to do so.

**Smoke-Free Campus Policy**—Smoking is prohibited in all facilities of the University of Minnesota, Twin Cities campus except for designated private residence hall rooms.

**Important Offices**

**College of Human Ecology (CHE)**

**Administration**

32 McNeal Hall  
1985 Buford Avenue  
St. Paul, MN 55108 ..... 612/624-1717

Admissions/Prospective Student Services  
..... 612/624-1717

Career Services ..... 612/624-6762

Student Services ..... 612/624-4244

Transfer Credits ..... 612/624-1725

**Departments**

Design, Housing, and Apparel  
240 McNeal Hall ..... 612/624-9700

Family Social Science  
290 McNeal Hall ..... 612/625-1900

Food Science and Nutrition  
225 Food Science and Nutrition Building  
..... 612/624-1290

Family Education  
325 Vocational Education Building  
..... 612/624-3010

School of Social Work  
400 Ford Hall ..... 612/624-5888

**Office of Admissions**

240 Williamson Hall  
213 Pillsbury Drive S.E.  
Minneapolis, MN 55455  
..... 612/625-2008, 1-800-752-1000

**African American**

**Learning Resource Center**  
323 Walter Library ..... 612/625-1363

**American Indian Learning Resource Center**  
125 Fraser Hall ..... 612/624-2555

**Asian/Pacific American**

**Learning Resource Center**  
306 Walter Library ..... 612/624-2317

**Bookstore**

Books Underground  
7 St. Paul Student Center ..... 612/624-9200

**Bus Service**

216 Printing Services  
2818 Como Avenue S.E. .... 612/625-9000

**Chicano/Latino Learning Resource Center**  
332 Walter Library ..... 612/625-6013

**Counseling Services**

190 Coffey Hall, St. Paul ..... 612/625-3115  
*or*  
109 Eddy Hall, Minneapolis  
..... 612/624-3323

**Disability Services**

16 Johnston Hall ..... 612/624-4037

**Dispute Resolution Center**

(formerly Student Ombuds Service)  
102 Johnston Hall ..... 612/626-0891

**Extension Classes**

Continuing Education and Extension  
101 Wesbrook Hall ..... 612/625-3333

**Extension Counseling**

314 Nolte Center ..... 612/625-2500

**Financial Aid**

130 Coffey Hall  
1420 Eckles Avenue  
St. Paul, MN 55108  
*or*  
210 Fraser Hall  
106 Pleasant Street S.E.  
Minneapolis, MN 55455  
..... 612/624-1665, 1-800-400-8636

**Graduate School**

306 Johnston Hall ..... 612/625-9364

**Housing Services**

Comstock Hall—East  
210 Delaware Street S.E.  
Minneapolis, MN 55455 ..... 612/624-2994

**International Student and Scholar Services**

20 Nicholson Hall ..... 612/626-7100

**Learning and Academic Skills Assistance**

104 Eddy Hall ..... 612/624-7654

**Minnesota Women's Center**

212 Nicholson Hall ..... 612/625-9837

**St. Paul Student Center** ..... 612/625-7200

**Student Employment**

120 Fraser Hall ..... 612/624-8070

**Student Health Service and Insurance**

Boynton Health Service  
410 Church Street S.E. .... 612/625-8400

**Student Legal Service**

106 West Bank Union Skyway  
..... 612/624-1001

**Student Organizations**

340 Coffman Memorial Union  
..... 612/624-5101

### Greetings from the College of Human Ecology

You will find CHE an exciting place to study. Our programs are top ranked nationally, and our faculty and staff are knowledgeable and concerned about your learning environment.

Some of you will know exactly what you are interested in studying at the University of Minnesota in preparation for your future. Others of you may scan our programs hoping to find something of interest. Regardless, we hope our course offerings tempt you to join us for your academic preparation. Our programs require an inquiring mind, a concern for people, and an integrative approach to artistic and scientific creativity and problem solving.

We offer undergraduate degrees in the Department of Family Social Science; Department of Design, Housing, and Apparel; and Department of Food Science and Nutrition (jointly with the College of Agriculture). The School of Social Work only offers graduate degrees, but its courses may be used to support and enhance the major undergraduate programs. The family education program is primarily geared toward graduate degrees, but undergraduates may earn a family education



minor. Our departments are highly specialized and concerned with how humans live and interact in their near environment.

We welcome you to CHE and the Twin Cities campus.

A handwritten signature in cursive script that reads "Mary E. Heltsley".

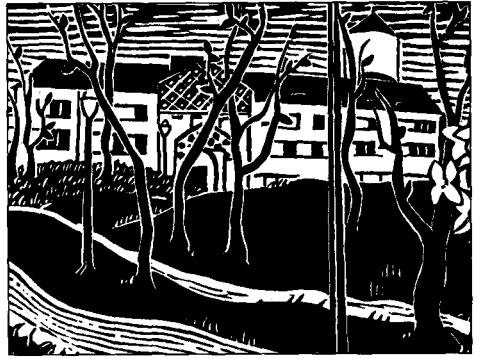
Mary E. Heltsley, Dean  
College of Human Ecology

### Mission

The CHE is committed to the study of individual and family well-being, food, clothing, shelter, and the community, and the interaction among them. Students are prepared for professional careers in related services and industries. Research efforts contribute to the body of knowledge in these areas and provide foundations for undergraduate and graduate education, informal educational outreach activities, policy formulation, and community leadership and service.

The work of the college encompasses several disciplines and encourages interaction among them in their application to teaching, research, and community service from local to international levels.

The mission of the college is implemented through resident teaching, research, and outreach. Members of the faculty provide instruction day or evening, on and off campus, to undergraduate, postbaccalaureate, and graduate students (B.S., M.Agric., M.Ed., M.S.W., M.S., M.A., and Ph.D.). Joint degrees and other programs link the college to every major unit of the University. The Minnesota Agricultural Experiment Station provides major assistance to the college's research program. Extension specialists in the departments support the field staff of the Minnesota Extension Service in research-based information dissemination.



General Information

# General Information



## The College

CHE offers courses of study for undergraduate, graduate, and adult learners. Degree programs draw upon the broad resources of the University as well as metropolitan and statewide communities and reflect the college's commitment to experiential learning and problem solving to enhance human well-being. They prepare students to be skilled and knowledgeable professionals with the 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, family groups, and the community. Faculty work closely with colleagues from a variety of disciplines, both within the college and throughout the University.

About 75 faculty members teach, conduct research, and engage in community outreach—including continuing education—in the area of their special expertise. Our undergraduate student enrollment during a typical fall quarter is about 800.

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.

McNeal Hall, on the St. Paul campus, houses the administrative offices and provides outstanding facilities for the college's teaching and research programs. All department offices are located on the St. Paul campus with the exception of the School of Social Work which is located on the Minneapolis campus. All locations provide access and facilities for the disabled.

## The Goldstein Gallery

The Goldstein Gallery is a nationally recognized design museum founded in 1976 to support the curriculum of the Department of Design, Housing, and Apparel. The gallery collects and exhibits the taken-for-granted art closest to people's lives: clothing, textiles, and decorative and graphic arts, with an emphasis on objects of the late 19th and 20th centuries. These examples of art and design in everyday



life play a role in classroom teaching and student and faculty research. Students are involved in all aspects of gallery operations from collections care to exhibition development and installation. Through its exhibitions, public lectures, and tours, the gallery has attracted a strong following in the Twin Cities community, furthering the University's mission to serve the public.

## Baccalaureate Degrees

The major programs in human ecology all lead to the bachelor of science degree.

## Major Programs

CHE is organized into five major departments and schools that provide the courses and the faculty for the college's academic and professional programs:

- Design, Housing, and Apparel
- Family Education
- Family Social Science
- Food Science and Nutrition
- School of Social Work

Programs focus on a major interest area but maintain an interdisciplinary approach, drawing from a variety of disciplines in communications, the natural sciences, the social sciences, and the humanities. They are unified by their unique focus on human needs and on improving the quality of life for all people:

- Clothing Design
- Design Communication
- Family Social Science
- Food Science
- Housing
- Human Ecology
- Interior Design
- Nutrition
- Retail Merchandising

## Collaterals

Some of the college's programs offer collateral areas as a way to make each student's curriculum unique. The collateral is a sequence of courses that acts as a

supporting field for the major, enhances career opportunities, capitalizes on special interests or talents, and helps prepare students to respond to newly emerging societal needs with expertise.

## Minors

A minor is an approved concentration of 15 to 24 3xxx and 5xxx credits in a single department or program. A minor is not required for graduation but is an option for students who wish to supplement their major program coursework. You may apply for a minor in any University department or program that offers such an option. When you graduate the minor will be listed on your transcript with your degree and major. CHE offers two minors to all interested students, international studies and family education, which are explained in the Programs section of this bulletin.

## Honors Program

The Honors Program is for highly motivated students whose academic potential has already been demonstrated and who wish to participate in stimulating learning experiences using the faculty and research facilities of the college.

To be eligible, you must have declared a major in CHE, completed at least 90 credits, and completed a minimum of 12 credits at the University of Minnesota with a GPA of 3.50 or above.

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

## Postbaccalaureate Degrees and Programs

Professional degrees are available for students who have completed baccalaureate programs and are interested in developing practical skills and competencies to apply in a particular area. A master of education degree focusing on family studies is offered by the College of Education. This degree

## General Information

serves both those who are preparing for licensure to teach family education in secondary schools and those preparing to work as educators with individuals and families in a variety of settings. See the Family Education section of the *College of Education Bulletin*.

### 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* or call (612) 624-3014.

### Expenses and Financial Aid

#### Expenses

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

#### Financial Aid

Student financial aid is available in the form of grants, loans, scholarships, and work-study. Most aid application packets are available at the Office of Student Financial Aid:

130 Coffey Hall	210 Fraser Hall
1420 Eckles Avenue	106 Pleasant Street S.E.
St. Paul, MN 55108	Minneapolis, MN 55455

Walk-in service is available at both offices. Questions can be answered by calling 612/624-1665 or 1-800-400-8636.

#### Scholarships and Grants

CHE scholarships are awarded to new and continuing students based on academic performance and financial need. Students are encouraged to apply early for scholarships. Awards are made for new students throughout the winter and spring.

Continuing student awards are for the coming academic year with applications due mid-spring quarter. The college also assists students by providing applications for a variety of affiliated organizations. All applications are available in the College Office, 32 McNeal Hall. Also available through the college are travel study grants and awards for undergraduate research programs, awarded to students on a competitive basis.

**New Student Scholarships**—Awards of \$1,000 to \$3,000 are awarded to entering freshmen and transfer students who show high academic ability and leadership qualities. Selection criteria include merit/scholarship, diversity, extracurricular activities/contributions, and financial need. Renewable each year to recipients who meet academic requirements. Supported by Augustus Searle and others. *Applications are due January 15 for priority consideration.* (Applications received after January 15 will be considered on a funds-available basis).

**CHE Continuing Scholars Program**—Annual awards range from \$200 to \$2,000 supported by friends and alumni of the college. Selection criteria include GPA of 3.00 or above, financial need, professional promise, and leadership. *Applications are due in May* for awards beginning in the fall.

**Dora A. Waller Awards**—For CHE juniors and seniors participating in *international* study or internship experiences. Monies may be applied to student tuition, fees, travel arrangements, and living expenses during the course of the internship. *Applications are due March 15.*

**Caleb Dorr Scholarships**—Up to 100 awards annually (\$500 maximum per student) for professional development and travel. *Applications are accepted throughout the academic year and awards are ongoing.*

**Undergraduate Internship Grants**—One-time nonrenewable grants are available to upper-division undergraduates on a competitive basis to support their U.S.

internship experience. Supported by Dora A. Waller and Caleb Dorr funds. Contact Jeanne Exline, Director, Career Services, 68 McNeal Hall, (612) 624-6762, for information and applications. *Applications are taken throughout the academic year and awards are made quarterly.*

### Food Science and Nutrition

**Scholarships**—Multiple awards of \$1,000 to \$3,000 are awarded to new students who show high academic achievement. Some scholarships have specific program requirements, such as dairy processing, cheese making, food marketing, and consumer issues. Supported by Samuel T. Coulter, North Central Cheese, Marylee Duehring, Minnesota Dairy Science and Technology, Food Science and Nutrition faculty, and others. *Applications are due October 24.*

**Food Science Scholars Program**—Several \$5,000 annual scholarships are awarded to students in the top 10 percent of their high school graduating class who have competitive college entrance scores, high achievement in math and science, and are entering the Food Science Program. Renewable each year upon meeting academic requirements. Sponsored by General Mills, Inc. *Applications are due February 1 for priority consideration.*

For applications or more information, contact the college office, 32 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612/624-1717).

## Admission

The University of Minnesota is made up of more than twenty different colleges and schools. Rather than being admitted to the University of Minnesota in general, students are admitted to a specific college or school and to a specific major. Various colleges and programs may have different admission requirements (see below). CHE is one of six colleges on the Twin Cities campus that admit freshmen.

Send your undergraduate application to the Office of Admissions, University of Minnesota, 240 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455 (612/625-2008 or toll free 1-800-752-1000).

You must submit the following items for your application to be complete:

- University of Minnesota domestic or international application form
- nonrefundable application fee: \$25.00 domestic, \$50.00 international
- official high school transcript (*required for freshmen and transfer students*)
- official transcripts from *each* postsecondary institution attended
- financial certification statement (international students only)

### Application Deadlines

Your complete application (see above) must be received in the Office of Admissions by the deadline that corresponds to the quarter you wish to begin your studies. Students whose *complete applications* are received by the December 15 priority deadline will be admitted *if they meet admission requirements*. Applications received between December 15 and June will be reviewed on a *space-available* basis. Students are encouraged to apply well in advance of the final deadline.

	Domestic	International
Fall quarter	June 1	April 1
Winter quarter	October 15	October 1
Spring quarter*	January 15	January 1

\* *The University of Minnesota does not admit freshmen for spring quarter.*

It is CHE policy that *cultural diversity shall be welcomed and promoted among students, faculty, staff, and visitors. Therefore, the faculty, students, and staff of CHE strongly encourage applications from those who have traditionally not found educational opportunities in our programs, including persons of color, older and male students, persons with disabilities, and recent immigrants.*

## General Information

### Visiting the College

The personal attention you get as a CHE student begins with your first visit to the college as a prospective student. We invite you to meet with an adviser for more information about our exciting programs; tour the facilities, including the state-of-the-art computer lab; and discuss internship and career opportunities related to our programs. Call us at (612) 624-1717 to arrange your visit.

### Freshman Admission Requirements

#### 1. High school rank and test scores

All freshmen must submit an ACT (or SAT) score to be considered for admission. We multiply your ACT composite score by two and add your high school rank percentile; this is called the AAR score. The minimum AAR score for automatic admission is 110. Refer to the box below for the minimum high school rank and minimum ACT or SAT scores required for automatic admission.

Test score/high school rank (HSR) percentile thresholds for automatic admission to CHE

If your ACT score is...	or your SAT score is...	HSR %ile must be at least
25-36	1000+	60
24	980-990	62
23	960-970	64
22	940-950	66
21	920-930	68
20	900-910	70

If your HSR or ACT/SAT score is below the minimums above, your application will be considered through an individual review process.

#### 2. Preparation requirements

In addition, all freshmen are expected to have completed the following preparation requirements while in grades 9-12:

- **Four years of English** with emphasis on writing.
- **Three years of mathematics**, including one year each of elementary algebra, geometry, and intermediate algebra.

- **Three years of science**, including one year each of biological and physical science.
- **Two years of social studies**, including U.S. history.
- **Two years of a single second language.**

Students who graduated from high school before 1987 are not expected to have completed all the high school preparation requirements. However, *all applicants must have completed high school intermediate algebra or its equivalent to be considered for admission.*

Applications of students who do not meet the automatic admission requirements are reviewed individually. You may seek exception to the above requirements if you can provide information indicating promise of academic success.

**Tuition Deposit**—If you are admitted to CHE as a freshman, you must submit a nonrefundable \$50 tuition deposit to hold your place in the freshman class. When you enroll, your deposit will be applied to your first quarter's tuition. The tuition deposit deadlines are May 1 for fall quarter and November 1 for winter. You must pay the deposit by the deadline or within two weeks after the date on your admission notification letter (whichever is later). If you do not submit the deposit by the deadline, you may lose your place in the freshman class.

If you are admitted through and certified by the Office of Minority Student Affairs (OMSSA) (i.e., as a disadvantaged or minority student), you are exempt from this requirement and do not need to pay a deposit. If you have questions about the tuition deposit contact the Office of Admissions (612/625-2008 or, toll-free, 1-800-752-1000).

### Planning to Transfer?

Minnesota's public colleges and universities are working to make transfer easier. You can help if you **PLAN AHEAD, ASK QUESTIONS, and USE PATHWAYS** created by transfer agreements.

### ***Preparing for Transfer***

If you are currently enrolled in a college or university:

- Discuss your plans with the campus transfer specialist in 32 McNeal Hall.
- Call or visit your intended transfer college. You should obtain the following materials and information:
  - college catalog
  - transfer brochure
  - information on admissions criteria and on materials required for admission (e.g., portfolio, transcripts, test scores). Note that some majors have limited enrollments or their own special requirements such as a higher grade point average.
  - information on financial aid (how to apply and by what date)
- After you have reviewed these materials, make an appointment to talk with an adviser/counselor in the college or program you want to enter. Be sure to ask about course transfer and admission criteria.

If you are not currently enrolled in a college or university, you might begin by meeting with a transfer specialist or an admission officer at your intended transfer college to plan the steps you need to take.

### ***Understanding How Transfer of Credit Works***

- The receiving college or university decides what credits transfer and whether those credits meet its degree requirements. The accreditation of both your sending and your receiving institution can affect the transfer of the credits you earn.
- Institutions accept credits from courses and programs like those they offer. They look for similarity in course goals, content, and level. "Like" transfers to "like."
- Not everything that transfers will help you graduate. Baccalaureate degree programs usually count credits in three

categories: general education, major/minor courses and prerequisites, and electives. The key question is, "Will your credits fulfill requirements of the degree or program you choose?"

- If you change your career goal or major, you might not be able to complete all degree requirements within the usual number of graduation credits.

### ***Applying for Transfer Admission***

- Application for admission is always the first step in transferring. Fill out the application as early as you can prior to the deadline. Enclose the application fee.
- Request that official transcripts be sent from every institution you have attended. You might be required to provide a high school transcript or GED test scores as well.
- Recheck to be certain you supplied the college or university with all the necessary paperwork. Most colleges make no decisions until all required documents are in your file.
- If you have heard nothing from your intended college of transfer after one month, call to check on the status of your application.
- After the college notifies you that you have been accepted for admission, your transcribed credits will be evaluated for transfer. A written evaluation should tell you which courses transfer and which do not. How your courses specifically meet degree requirements may not be decided until you arrive for orientation or have chosen a major.
- If you have questions about your evaluation, call the Office of Admissions and ask to speak with a credit evaluator. Ask why judgments were made about specific courses. Many concerns can be cleared up if you understand why decisions were made. If not satisfied, you can appeal. See "Your Rights as a Transfer Student" below.

## Your Rights as a Transfer Student

- A clear, understandable statement of an institution's transfer policy.
- A fair credit review and an explanation of why credits were or were not accepted.
- A copy of the formal appeals process.

Usual appeals steps are: 1) Student fills out an appeals form. Supplemental information you provide to reviewers—a syllabus, course description, or reading list—can help. 2) Department or committee will review. 3) Student receives, in writing, the outcome of the appeal. 4) Student can appeal decision to the Student Scholastic Standards Committee, 32 McNeal Hall.

- At your request, a review of your eligibility for financial aid or scholarships.

*For help with your transfer questions or problems, see your campus transfer specialist.*

## Transfer Student Admission Requirements

If you have completed 39 quarter or 26 semester credits at a regionally accredited college, you may apply for admission to CHE as a transfer student. If you have fewer credits, you must meet freshman admission requirements.

### 1. Math and GPA requirements

All transfer students must have completed high school intermediate algebra or its equivalent before admission. You must also meet the following major-specific GPA requirement:

Clothing Design*	2.50
Design Communication*	2.50
Family Social Science	2.50
Food Science**	2.50
Housing	2.00
Human Ecology	2.00
Interior Design*	2.60
Nutrition**	2.50
Retail Merchandising	2.50

\* These majors require a formal portfolio review to move from pre-major status to full major status.

\*\* These majors require strong mathematics and science backgrounds.

### 2. Transfer Preparation Requirements

In addition to the above admission requirements, transfer students who graduated from high school *June 1987 or later* must meet the following preparation requirements:

- **Four years of English** with emphasis on writing.
- **Three years of mathematics**, including one year each of elementary algebra, geometry, and intermediate algebra.
- **Three years of science**, including one year each of biological and physical science.
- **Two years of social studies**, including U.S. history.
- **Two years of a single second language.**

You may complete the preparation requirements with high school or college courses before transferring to CHE. *If you graduated from high school before 1987, you are not expected to have completed all the high school preparation requirements. However, all applicants must have completed high school intermediate algebra or its equivalent to be considered for admission.* Contact CHE for information about completing preparation requirements before admission.

If you are planning to start your college career elsewhere with the intention of transferring to CHE, program descriptions and curricular requirements presented in this bulletin can help you select appropriate courses so that the maximum number of credits are accepted when you transfer. For information about transfer of coursework, write to Transfer Specialist, College of Human Ecology, University of Minnesota, 32 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108. Enclose a photocopy of your current transcript, indicate the major you are planning to transfer into, and include your current return address and phone number. You may also arrange to meet with an adviser to discuss your transfer admission by calling (612) 625-1725.

**Change of College Within the University**—To transfer to CHE from another college of the University, you must meet the entrance requirements of CHE and the specific requirements of the major to which you are applying (see above). Apply for transfer at the admissions office on the campus where you are currently registered or where you last attended classes.

**Transfer of Credit From Continuing Education and Extension**—If you have credits and grades for Continuing Education and Extension (CEE) courses *taken before fall quarter 1989*, submit your CEE transcript to the Office of Admissions with your application. Both the admissions office and the Office of the Registrar (OTR) will evaluate your CEE transcript and determine which credits and grades will be included on your record in CHE.

#### **International Student Admission**

For information on transfer of international credits and admission requirements, please contact International Admissions, University of Minnesota, 240 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455 (612/625-2006 or toll free 1-800-752-1000).

**English Proficiency**—If English is not your native language, you may be required to take the Test of English as a Foreign Language (TOEFL) or the Michigan English Language Assessment Battery (MELAB). To register for the TOEFL, contact the agency that handles TOEFL registration in your country or write to the Educational Testing Service (Box 899, Princeton, NJ 08540 USA) at least 10 weeks before any scheduled test date. If you are an international student already in the Twin Cities area, you may register for the MELAB with the Minnesota English Center, 320 16th Ave. S.E., University of Minnesota, Minneapolis, MN 55455, or call (612) 624-1503. If you are a U.S. citizen, permanent resident, or refugee, you may sign up for the test in the Asian/Pacific American Learning Resource Center,

University of Minnesota, 306 Walter Library, 117 Pleasant St. S.E., Minneapolis, MN 55455, or call (612) 624-2317. To register for the MELAB outside the Twin Cities area, contact the English Language Institute, Testing and Certification Division, University of Michigan, Ann Arbor, MI 48109 USA, or call (313) 764-2416.

### **Special Admissions**

**Readmission to the College**—Students returning to the college after an absence of more than one year must meet current admission requirements and complete the curricular requirements in effect when they reenter. Call (612) 624-1725 for a readmission appointment.

Those who filed for graduation or completed all requirements except the final 24 credits (or fewer) when they last attended the college may follow either current requirements or those in effect when they 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 Office of the Registrar—St. Paul, 130 Coffey Hall, 1420 Eckles Avenue, St. Paul, MN 55108 (612/624-2241).

If you decide at a later date to seek a baccalaureate degree in CHE, you must file an application for a change of status with the Office of Admissions and pay a \$25 fee. To be admitted as a degree-seeking student, you will be expected to meet CHE admission requirements for the particular undergraduate program you select.

Contact the Graduate School if you plan to transfer adult special credits to a graduate program.

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

**Summer-Only Student Admission**—Refer to the *Summer Session Bulletin*, or call the Summer Session office (612/624-4000).

**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 and obtain written permission from the instructor. 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 modest fee per credit as well as any special fees are charged. Eligible persons should contact the Office of the Registrar—St. Paul, 130 Coffey Hall, 1420 Eckles Avenue, St. Paul, MN 55108 (612/624-2241).

### Registration

Each quarter you and the University complete a contract through the registration and payment process. The University agrees to provide certain instruction and facilities; you agree to attend and pay tuition and fees for the classes you have chosen. Although changes sometimes occur in course listings, the responsibility for accurate, timely registration and payment rests primarily with you.

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

The Office of the Registrar also produces a preliminary schedule of winter/spring offerings that is available with the fall *Class Schedule* so students can plan coursework for the entire academic year.

Registration periods begin in mid-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**—As a continuing student, you will receive registration instructions at your current mailing address before the first day of registration for the upcoming term. Registration materials may be picked up in the college office, 32 McNeal Hall.

To ensure an efficient registration carefully follow instructions in the quarterly *Class Schedule*.

**Working with Your Adviser**—Your adviser approves your course selections, follows your academic progress, and offers assistance with other aspects of your college career.

You are expected to take the initiative in keeping your adviser informed of your academic progress. Make registration appointments in advance and reschedule if necessary. Before meeting with your adviser, develop a tentative program for the quarter, using the curriculum requirements and course descriptions in this bulletin and the *Class Schedule* as guides.

Students are expected to work out a yearly plan of coursework with their adviser each spring for the coming academic year.

**Credit Load**—The average course load is 4 courses or 16 credits per quarter. You must carry a minimum of 12 credits per quarter to be classified as a full-time student (15 credits for state aid programs). 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 Academic Standards Committee, 32 McNeal Hall.

**Repeating a Course**—You must repeat any required course in which you received a W, F, or an N grade. You may repeat any course in which you received a D grade. Grades of C or better may not be repeated without special permission from the Student Academic Standards Committee. The higher grade is used when computing the GPA. W, D, F, and N grades from the first attempt remain on the transcript but will not be factored into your GPA.



**Registering for Extension Courses**—Many students take courses offered by their departments through Continuing Education and Extension (CEE). Undergraduate degree courses offered through CEE are accepted for full credit and grade value by CHE. To register for courses through CEE, obtain a registration form found in the *Extension Classes Bulletin* available in 101 Westbrook Hall (612/624-2388), 130 Coffey Hall, or 32 McNeal Hall. CEE registration automatically appears on your day school transcript.

*Note:* CEE-only course registrations are not factored into the day school tuition plateau.

**Registration Changes**—Use a course request form, available from the Office of the Registrar—St. Paul, 130 Coffey Hall, or the college office to change registration. Make all such changes as early as possible in the quarter. *Note:* Cancel/adds are official only after you have submitted an approved course request form to the Office of the Registrar.

<i>Week of Class</i>	<i>Required to Cancel</i>	<i>Required to Add</i>
Week 1 .....	Nothing required.	Nothing required.
Week 2 .....	Nothing required.	Instructor approval.
Weeks 3-6 ...	Nothing required, though students are encouraged to consult their adviser.	Instructor approval and college scholastic committee approval.
Weeks 7-10.	College scholastic committee approval.	College scholastic committee approval.

**Cancel Procedures**—When you cancel a course, you are subject to the following procedures and requirements:

- Cancellations during the first two weeks of a quarter are deleted from your record.
- Cancellations during the third through sixth weeks of a quarter require your instructor's signature on the course request form. A W is assigned. The withdrawal (W) will not affect your GPA.
- Withdrawal from a course after the sixth week of a quarter is strongly discouraged unless there are extenuating circumstances. Cancellations after the sixth week require CHE's scholastic committee (Student Academic Standards Committee) approval. *Cancellations during the ninth and tenth week of a*

*quarter are seldom approved by the Student Academic Standards Committee.* If a cancellation is approved, a W is assigned.

**Add Procedures**—No signatures are required to add a class during the first week of a quarter. You must have your instructor's signature during the second through fifth weeks of the quarter. After the sixth week of the quarter, adding a course requires approval of the Student Academic Standards Committee representative. In CHE, you must have the instructor's approval to add a course before you get approval of the Student Academic Standards Committee.

**Cancellation of Entire Registration**—If you leave the University before the end of a quarter, you must cancel your registration when you stop attending classes. Submit a course request form to the Office of the Registrar—St. Paul, 130 Coffey Hall. Cancellations are effective the day they are processed. Refunds are based on the date you officially cancel. You are entitled to a full refund if you cancel before the first day of classes. Contact the Office of the Registrar—St. Paul, 130 Coffey Hall, for current refund information.

**Grading Change**—A change from one grading system selected for a course to another (e.g., from A-F to S-N or Audit) must be made during the *first two weeks of a quarter*. The choice of grading system *may not be changed after the end of the second week*.

## Special Registration Options

Certain special registration procedures allow you to audit courses, take them as independent study or reading courses, or take them for extra credit.

**Auditing**—As an auditor you enroll in, pay tuition and fees for, and attend classes but do not complete assignments or take examinations. An audited course is listed on your transcript with a V and does not confer credit. However, the credit value counts toward the credit total for assessment of student services fees. V courses cannot be

## General Information

applied toward degree requirements, nor may they be retaken for credit. Check with Continuing Education and Extension for additional or different requirements.

**Extra Credit Registration**—Under extra credit (X) registration you can earn up to three extra credits in a regularly taught course by arranging with the instructor to complete additional work or explore a subject in more depth. Requirements for extra credit registration must be agreed upon by you and the instructor, and registration requires both instructor and department approval. Contact your instructor or academic adviser for more information.

**Independent Study Registration**—You have two options for obtaining credit through independent study (Y) registration. The first option is to earn independent study credits by arranging with an instructor to cover course material independently, though instructors are not obligated to approve independent study credits. Requirements and permission for independent study registration must be agreed upon by you and the instructor in advance, and registration requires both instructor and department approval. Contact your instructor or adviser for more information.

The second option is to register for a course through the Department of Independent Study (IS), which offers a catalog of self-directed and self-paced courses through Continuing Education and Extension. You may take up to one year to complete an IS course. For more information, contact the Department of Independent Study, 45 Westbrook Hall (612/624-0000).

## Credit

**Credit Value**—A credit, by University Senate definition, is earned through “about three hours of academic work a week”—30 hours in a 10-week quarter. A 4-credit course typically represents 120 hours of acceptable work. The time may be spent in combinations of classroom, laboratory, library, off-campus, and homework.

**Advanced Placement**—The Advanced Placement (AP) program of the College Board provides a way for high schools to offer college-level studies to their more advanced students and for such students to demonstrate satisfactory achievement in those studies. Through this program students may earn college credit, exemption from requirements, or placement in advanced courses when they enroll in college. For more information, contact the Office of Admissions, University of Minnesota, 240 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455 (612/625-2008).

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

CHE grants both credit and advanced placement based on scores earned in the English and humanities tests of the College Level Examination Program (CLEP). For permission to earn CLEP credit in these or other subjects, contact CHE, 32 McNeal Hall. To arrange to take a CLEP examination after obtaining college approval, contact 109 Eddy Hall (612/624-3323).

## Grading

The University uses two grading systems: the traditional letter grade (A-F) 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 second week of the quarter.

**A-F System**—Under the A-F 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 F. For computation of the GPA, each credit of A is equivalent to four grade points; B, three grade points; C, two grade points; D, one grade point; and F, no grade point. The GPA is computed by dividing the

total number of grade points earned by the total number of A, B, C, D, and F credits earned/attempted. Transfer credits from other schools are not reflected in your University GPA.

**S-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 GPA; credits of S are, however, counted toward the total credits required for graduation. Instructors determine their own criteria for satisfactory work in a course. The S is not tied to any letter grade equivalent in the A-F system. The following restrictions apply to the use of the S-N system.

*Note:* Courses that are specifically listed in your curriculum by department designator and number (e.g., Rhet 1101) must be taken under the A-F 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 required professional courses in the major must be taken A-F unless otherwise indicated.

- 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.
- The S-N system is available to students of the college regardless of their academic standing.
- 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.
- A course previously registered on the A-F 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).

**Dean’s List**—The Dean’s List is posted quarterly on the bulletin board in the lobby of McNeal Hall, and a Dean’s List notation is added to the student’s transcript. 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.

## Academic Progress and Probation

CHE students are expected to maintain an academic standing that will enable them to graduate. To aid in the early identification of students who are not making satisfactory progress so that appropriate assistance can be provided, the following guidelines have been developed.

An overall as well as unit (those courses taken after admittance to CHE) GPA of 2.00 (C) is required. In addition, many major programs require students to maintain a GPA well above 2.00. Students in premajor programs not maintaining the GPA required to obtain full major status are placed on a scholastic progress warning and are monitored quarterly until they have raised their GPA.

Students whose cumulative and/or unit GPA is below 2.00 are placed on academic probation and referred to their academic adviser for planning. If a student’s GPA deficiency can be remedied within a quarter, the student is placed on the *first level* of academic probation. If the GPA deficiency is too great to remedy within a quarter or the student’s GPA does not improve, the student is placed on a *strict academic* probation by the Student Academic Standards Committee and referred for academic counseling. Students remain on academic probation until their unit and cumulative GPA is 2.00 or greater.

Students on academic probation will not be permitted to register in the college until they have received permission to do so from their academic adviser and/or the college office. If this approval is granted, specific goals may be established and the student will be expected to meet them. Students who do not meet these goals may be suspended from the college.

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Students are encouraged to seek help from advisers, instructors, and University Counseling and Consulting Services (190 Coffey Hall, St. Paul and 109 Eddy Hall, Minneapolis), which maintains a Reading and Study Skills Center and also provides personal and career counseling. If you believe you are having difficulties, check with your instructor, adviser, or a University Counseling and Consulting Services staff member immediately rather than waiting until you receive a low grade.

### Student Records

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

An end-of-the-year transcript, which includes your spring quarter grades, is mailed to you each summer from the Office of the Registrar.

If you have any questions about grading symbols and transcripts, contact the Office of the Registrar—St. Paul, 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. (Exceptions under the law include state and federal educational and financial aid institutions.) The policy also permits students to review their educational records and to challenge the contents of those records.

**Some student information—**name, address, electronic (E-mail) address, telephone number, dates of enrollment and enrollment status (full time, part time, not enrolled, withdrawn and date of withdrawal), college and class, major, adviser, academic awards and honors received, and degrees earned—is considered public or directory information. Students may prevent the release of public information only during their terms of

enrollment. To do so, they must notify the records office on their campus.

Students have the right to review their educational records. The regents' policy, including a directory of student records, is available for review at 150 Williamson Hall, Minneapolis, and at records offices on other campuses of the University. Questions may be directed to the Office of the Registrar, 150 Williamson Hall (612/625-5333).

**Student Access System—**You can view your academic record, including cumulative credits, GPA, academic/financial holds, coursework, and grades through the Student Access System available on any University library or public lab computer terminal. From the Public Access main menu, select *option 13*, key in your student ID or social security number and your birthdate (6 digits) in the Password field.

### Student Conduct and Behavior

**Scholastic Conduct—**The college expects ethical conduct of its students as specified in the University of Minnesota Student Conduct Code. Copies are available in the college office, 32 McNeal Hall.

Scholastic misconduct includes: 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 college's policy for responding to apparent scholastic misconduct is found in the college brochure, "Policy and Procedures Concerning Scholastic Misconduct," available in the college office, 32 McNeal Hall.

## Petitions and Appeals

**Petitioning**—To request permission to depart from procedures and regulations, you must complete a petition form available at the college office, 32 McNeal Hall. Consultation with your adviser is required. Submit your petition and a transcript to the college office for a decision. The decision and your transcript will be mailed to you.

**Student Academic Standards Committee**—The Student Academic Standards Committee interprets and enforces faculty policy concerning academic regulations and requirements. The committee is also authorized to consider alternative ways of meeting those requirements when permission to depart from normal procedures is requested. For more information, call (612) 624-9764.

**College of Human Ecology Appeals Procedures**—When you have problems or questions, your adviser, the program chairpersons, the department heads, and the Student Services staff in the college office are good sources of information and support.

Should you encounter a situation in which you question some aspect of your college program, you may wish to carry your concern to your adviser, department program committee, or department head. The college office (612/624-4244) provides 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 as specified in your degree program.
2. earn at least 45 credits after admission to CHE. Of the last 45 credits earned before graduation, 30 must be awarded by the University. All credits awarded by the University, regardless of the type of instruction or the unit offering them, count toward the residence credit requirement for the degree.

3. earn a minimum cumulative GPA of 2.00 or higher, depending on the requirements of your major program, and the specific minimum GPA as spelled out in the program requirements.
4. officially apply for graduation.
5. meet all financial obligations to the University.

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

Two quarters before your expected graduation date request your updated program sheet from your adviser. Submit your program sheet with the degree application to 130 Coffey Hall.

<i>Term you plan to graduate</i>	<i>Program sheet and degree application to 130 Coffey Hall on or before</i>
SSI or SII.....	Fifth day of winter quarter
Fall .....	Fifth day of spring quarter
Winter .....	Fifth day of fall quarter
Spring .....	Fifth day of winter quarter

Your degree application initiates the preparation of the graduation clearance checklist 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. If your graduation date changes from that indicated on your degree application, it is your responsibility to inform the college office and the Office of the Registrar of this change.

**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 program sheet, you must submit a program update on a petition. Your adviser must approve any changes. Take the petition to 32 McNeal Hall.

**Honors**—You must rank in the top 10 percent of your class scholastically to graduate “with distinction” from CHE. To graduate “with high distinction,” you must rank in the top 3 percent of your class. The Office of the Registrar identifies graduating seniors who qualify for these honors based

## General Information

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on the cumulative GPA for courses completed at the University of Minnesota.

To graduate with designated honors (*cum laude*, *magna cum laude*, *summa cum laude*), you must participate in the college's Honors Program. Students with 90 credits and a cumulative GPA of 3.50 or above may apply for admission to the Honors Program. For more information, consult the honors brochure or the Honors Program director in the college office (612/624-4244).

**Commencement**—The college holds official commencement exercises once a year in June. Students who have applied to graduate will be given information about commencement.

### International Study

CHE encourages students to participate in an international study experience as part of their degree program. There are many University of Minnesota-sponsored programs available, as well as those offered by other agencies and educational institutions. Options for international study range in length from a few weeks to an academic year. Study in English is possible at many sites. You need not necessarily seek credit in your major for international study. The college also encourages study for language acquisition or cultural learning. The resulting credits can often be used as electives or to make up deficiencies in the language admission requirement. The University and other institutions sponsor a broad range of intensive language and area studies programs, some taught in another language, others requiring no prior language study. Students may choose to supplement their degree with an international studies minor offered through CHE. See the Programs section of this bulletin for detailed requirements.

**Identifying International Study Opportunities**—Contact the CHE international adviser in 32 McNeal Hall (612/624-1717) for assistance in exploring international study options. The International Study and Travel Center

(ISTC) and the Global Campus in 102/104 Nicholson Hall (612/626-9000) offer another international work/study/travel information resource.

**Credit and Financial Aid**—Advance planning and college endorsement are essential to ensure that credit from international study fits smoothly into your degree program. For nearly all international study programs, students can arrange to retain their University financial aid eligibility and/or defer past loans. Additional financial aid is available for some programs. In addition, CHE has special scholarship money for students' international study programs. Check with the CHE international adviser for more information.

**International Study Opportunities for Human Ecology Students**—Several specialized programs are available to CHE students. For example, the Department of Design, Housing, and Apparel sponsors a three-week summer Interior Design in Europe program in even-numbered years. The University also cosponsors semester-long urban studies programs in Colombia (Spanish required) and Norway; summer, semester, and year-long architecture/design programs in Denmark; and a program in the Dominican Republic on Latin American health and nutrition that offers both a summer field study track requiring no prior Spanish and, for students competent in Spanish, a fall semester track at a Dominican university. Check with the CHE international studies adviser for more options.

### Student Services

**College Information Desk**—The person at the college information desk in 32 McNeal Hall (612/624-1717) can give you information about CHE programs and activities. College bulletins and brochures describing the various curricula are available. You will be referred to appropriate staff members for answers to specific questions.

**Academic Student Services**—The Student Services office in 32 McNeal Hall processes admission applications, maintains student files, acts as the agent for the Student Academic Standards Committee, and coordinates undergraduate advising.

**Career Services and Internships**—The Career Services Center, 68 McNeal Hall (612/624-6762), offers individual counseling, classes and workshops, and maintains a Career Resource Library to help students clarify career goals, secure internships, and plan for a proactive job search. Students, graduates, and alumni may use the Job Referral Service to learn about current internship and job opportunities. Staff members teach career planning courses and are available to discuss career choices and employment opportunities. Full- and part-time positions are posted in departments and listed in *Career Highlights*, a biweekly newsletter. During the year the center sponsors programs dealing with various career planning topics.

An important part of the college experience is participating in an internship. Some CHE programs require students to participate in a preplanned internship experience and other programs strongly encourage it. You may earn up to 15 credits for an internship, depending on your program area. The Career Services Center acts as a clearinghouse for internship information. See the Scholarships and Grants section of this bulletin for information about undergraduate internship grants.

For questions concerning career planning, internships, and job opportunities, call the Career Services Center (612/624-6762).

**Undergraduate Research Opportunities Program**—The Undergraduate Research Opportunities Program (UROP) is a competitive, merit-based program that offers financial awards to undergraduates for research, scholarly, or creative projects undertaken in partnership with a faculty member. Application deadlines generally

occur twice each year, in early November and mid-April. Interested students should contact the UROP coordinator, 32 McNeal Hall (612/624-4244), to obtain current guidelines and application forms.

**University Counseling and Consulting Services**—University Counseling and Consulting Services (UCCS), 190 Coffey Hall (612/625-3115 and 109 Eddy Hall (612/624-3323), offers counseling for academic, career, personal, or relationship concerns. Besides counseling, UCCS features a variety of services. The Career Development Center and the Learning and Academic Skills Center offer workshops, courses, and materials for career development or academic skills improvement. The Organizational Development Program offers consultation, assessment, team building, conflict mediation, training, and workshops. UCCS's Measurement Services office administers tests; scores exams, surveys, and research instruments for University faculty; and operates the Minnesota Statewide Testing Program for Minnesota elementary and secondary schools. The Testing Center administers admissions, placement, and national tests.

## Student Organizations

**Human Ecology Student Board**—The major objectives of the Human Ecology Student Board (HESB) are to initiate, promote, and coordinate activities of human ecology 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 among the student body, faculty, and administration through their representation on college committees and other activities.

HESB consists of five elected officers plus representatives from the following groups: CHE departments, student organizations, and honor societies as well as the St. Paul Board of Colleges and Board of Governors. All students in the college are

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eligible to file for a position as an officer or as a representative of one of the curricular areas: design, housing, and apparel; family social science; food science and nutrition; and human ecology (interdepartmental). Elections are held before spring quarter. You can keep informed about the board's activities and its current membership by visiting the CHE Student Organization office, 187 McNeal Hall or by inquiring at the college office, 32 McNeal Hall. Meetings are open to all students in the college.

**Student Participation on College Committees**—Every standing committee and every program committee in the college has two or more student members on its roster. Student members of college committees automatically become nonvoting members of the HESB.

**Other Human Ecology Student Organizations**—Many of the undergraduate programs sponsor student organizations. Honor societies periodically invite selected students to join. Membership and participation in student organizations can add a valuable dimension to your academic program and contribute a great deal to your professional development. Faculty adviser and officer names for the following organizations are available at the front desk, 32 McNeal Hall.

### **Student and Professional Organizations**

- American Home Economics Association
- American Society of Interior Designers
- Clothing Design Club
- Design Communication Club
- Family Social Science Roundtable
- Food Science and Nutrition Club
- Housing Organization for University Students
- Human Ecology Student Board
- Illuminating Engineering Society
- Institute of Business Designers
- Minnesota Collegiate Retail Association
- Student Organization of Nutrition and Dietetics

### **Honor Societies**

- Kappa Omicron Nu
- Phi Upsilon Omicron

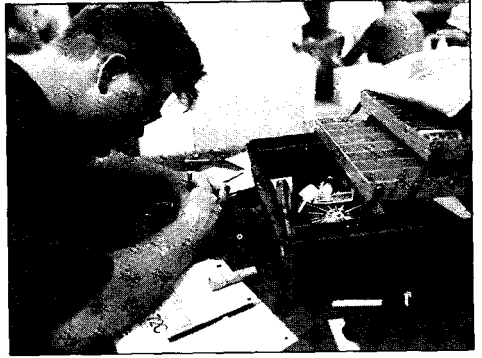
**St. Paul Campus Board of Colleges**—The St. Paul Campus Board of Colleges directs and coordinates student activities and encourages student leadership throughout the St. Paul campus. Its membership is drawn from all major areas of the colleges of Agriculture, Biological Sciences, Human Ecology, Natural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

The board cooperates with the Minnesota Student Association and the Assembly 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 CHE, you may file for election to the board. Inquire at the Student Affairs office, 190 Coffey Hall (612/625-9225).

### **St. Paul 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 St. Paul Student Center and establishes its budget. For information about the Student Center, its operation, and opportunities to serve on its various planning and programming committees, inquire at the information desk, 42 St. Paul Student Center.





Programs

# Programs

## Freshman Liberal Education Requirements

(effective fall 1994 and later for freshmen students enrolling with 38 or fewer credits)

A liberal education introduces you to the modes of inquiry and subject matter of the major branches of knowledge, including the factual information and theoretical or artistic constructs that form their foundations; the "ways of knowing"—the kinds of questions asked and how insight, knowledge, and data are acquired and used; the changes over time of their central ideas or expressive forms; and the interrelationships among them and with human society in general. To these ends, study by all undergraduate students on the Twin Cities campus is guided by a common framework.

### The Diversified Core Curriculum

**Physical and Biological Sciences.** Comprehension of physical and biological principles; understanding of and ability to use the methods of scientific inquiry—the ways in which scientists investigate physical and biological phenomena; and appreciation of the importance of science and the value of a scientific perspective.

*Requirement:* A minimum of three courses totaling at least 12 credits, including one course with a laboratory or field experience in the physical sciences and one course with a laboratory or field experience in the biological sciences.

**History and Social Sciences.** Knowledge of how historians and social scientists describe and analyze human experiences and behavior; study of the interrelationships among individuals, institutions, structures, events, and ideas; understanding of the roles individuals play in their historical, cultural, social, economic, and political worlds.

*Requirement:* A minimum of three courses totaling at least 12 credits, including one course with historical perspective.

**Arts and Humanities.** Understanding of approaches to the human condition through works of art, literature, and philosophy; knowledge of how artists create and humanistic scholars think; ability to make aesthetic judgments.

*Requirement:* A minimum of three courses totaling at least 12 credits including courses in two of the following: literature, philosophical perspective, and visual or performing arts.

**Mathematical Thinking.** Acquisition of mathematical modes of thinking; ability to evaluate arguments, detect fallacious reasoning, and evaluate complex reasoning chains; appreciation of the breadth of applications of mathematics and its foundations.

*Requirement:* A minimum of one course totaling at least four credits.

### The Designated Themes of Liberal Education

The designated themes of liberal education offer a dimension to liberal learning that complements the diversified core curriculum. Each of the themes focuses on an issue of compelling importance to the nation and the world, the understanding of which is informed by many disciplines and interdisciplinary fields of knowledge.

*Requirement:* A minimum of six courses (or five courses if one includes an approved practicum), including one course in each of the following:

**Cultural Diversity.** Understanding of the roles gender, ethnicity, and race play in structuring the human experience in and developing the social and cultural fabric of the United States.

**International Perspectives.** Comprehension of the ways in which you are part of a rapidly changing global environment dominated by the internationalization of most human endeavors.

**Environment.** Knowledge of the interaction and interdependence of the biophysical systems of the natural environment and human social and cultural systems.

**Citizenship and Public Ethics.** Reflection on and determination of a clearer sense of your present and future civic relationships and your obligations to the community.

### Writing Skills

The ability to communicate effectively is a hallmark of a liberally educated individual and a key to a successful and satisfying life. To encourage refining of writing skills, the liberal education curriculum includes both writing courses and writing across the curriculum.

*Requirement:* Freshmen entering academic year 1994-95—Please refer to individual academic programs for current writing requirement. Freshmen entering academic year 1995-96—A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

You may satisfy the liberal education requirements with a number of courses and credits different from those of other students because some courses serve multiple goals in the curriculum; e.g., some courses will satisfy a diversified core requirement and a designated theme requirement, and other courses will satisfy the requirements for each of two themes. Thus, you may satisfy the designated theme requirements with a smaller number of courses than is stated in the requirement. Each quarter, the *Class Schedule* will publish the requirements and list all courses that satisfy them. In addition, the *Class Schedule* will list which of these courses are offered that quarter and which are tentatively scheduled for the subsequent quarters during the academic year.

## Transfer Student Liberal Education Distribution Requirements

CHE programs 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. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. *Students beginning their study at the University of Minnesota, Twin Cities academic years 1994-95 and 1995-96 as transfer students follow the liberal education requirements outlined below.*

New liberal education requirements now in effect for entering freshmen do not become effective for transfer students until fall quarter 1996. For questions regarding these requirements, contact Student Services, 32 McNeal Hall (612/624-1725).

These college distribution requirements meet or exceed the University requirements. They are firmly fixed, and *you should not expect to petition out of even one credit in any category.*

If you can demonstrate high ability in certain subject areas, proficiency tests are offered by many University departments. You may be excused from some course requirements. *However, you must still meet the minimum credit requirement in each category.*

Because of the many changes that occur in course numbers, titles, and content, a complete list of courses that fulfill each of the four categories below is difficult to maintain. For approval of courses not listed below, consult the college office, 32 McNeal Hall (612/624-1725).

### A. Language, Logic, Mathematics, and the Study of Argument (18 credits minimum)

Specific requirements must be taken A-F; electives may be taken S-N)

Listed below are the minimum requirements for

College of Human Ecology transfer students. Consult each major program listing for additional course requirements:

*Required courses for all majors* (refer to your program listing and adviser for more information):

Freshman Composition I: Rhet 1101 or Comp 1011 or GC 1421/1422

\*Freshman Composition II: Rhet 1151/1104 or Comp 1027

Lower Division Speech: Rhet 1222 or Spch 1101 or GC 1461

Upper Division Writing: Rhet 3562 or Comp 3012, 3013, 3014, 3015, 3027, 3031, 3032, 3033, 3051 or GC 3425

\* *Rhet 1151 is not required by food science program.*

Additional suggested coursework that can be applied toward meeting elective credit in this area is listed below:

1. *English and Foreign Language Communication Skills*  
Rhet 1220, 1251, 3101, 3254, 3266, 5257, 5258, 5551  
Spch 1102, 1313, 3401, 3605, 5451  
Foreign Languages—all language courses

2. *Linguistics, Logic, Philosophic Studies*

Engl 3851, 3852  
GC 1456  
Ling 1001, 3001  
Phil 1001, 1005, 3201, 3231  
Pol 3085

3. *Mathematics, Computer Science, and Statistics*

Ast 1040  
CSci—all courses  
EPsy 3260  
Geog 1501, 3531  
Math—all courses  
Psy 3801  
Soc 3801, 3802  
Stat—all courses

### B. The Physical and Biological Universe (9 credits minimum)

1. *The Physical Universe*

Ast 1011, 1015, 1019, 1021H, 1025H, 1031, 1032  
BioC 1401, 3001, 3031  
Chem 1001, 1002, 1003, 1051, 1052, 3100, 3101, 3301  
GC 1111, 1112, 1160, 1161, 1162, 1163, 1166, 1167, 1171  
Geo 1001, 1002, 1005, 1011, 1012, 1019, 1021, 1601  
Geog 1401, 1402, 1425, 3431  
NSci 1501  
Phys 1001, 1005, 1041, 1042, 1061, 1065, 1071, 1075, 1104, 1105, 1106, 1107, 1108-1109, 1251, 1252, 1253, 1911, 1912  
Soil 1020

2. *The Biological Universe*

AnPl 3010  
AnSc 3510  
Anth 3001, 3002  
Biol—all courses  
Bot—all courses  
EEB—all courses  
Ent 1005, 3005, 3200

# Programs

FScN 1020, 1612  
GC 1131, 1132, 1134, 1137  
GCB 3002, 3008, 3022  
Hort 1036, 3003  
MicB 3103  
NRes 3020, 3060  
PBio 1009, 1012  
Phsl 1001, 1002, 3051  
Soil 1020  
WoSt 3202

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

1. *Analysis of Human Behavior and Institutions*  
Afro 1011, 1025, 1334, 1441, 3025, 3061, 3072, 3091, 3324, 3334, 3543, 5072, 5352  
AgEc 1101, 1102, 3070, 5720  
AmIn 1771, 3211, 5341, 5411, 5422  
AmSt 1001, 1002, 1003, 3112, 3113, 3114  
Anth 1102, 3116, 3131, 3201, 3211, 3212, 3222, 3223, 3241, 3261, 3293, 3371, 3501, 3511, 3512, 3521, 5112, 5115, 5118, 5121, 5131, 5141, 5151, 5152, 5153, 5154, 5161, 5258, 5325, 5335, 5411  
Arab 3011  
CDis 3101  
Chic 3615, 3617, 3711, 3712  
Clas 1042, 1201, 3071, 3072, 3073  
CICv 3201  
CPsy 1301, 3309, 3331  
CSCL 1303, 3176, 3196, 3321, 3331  
EAS 1032, 1461, 1462, 1463, 3315, 3481, 3868, 5481  
Econ 1101, 1102, 1104, 1105, all courses in  
Economic Development, Comparative Systems,  
and Area Studies  
Fren 3511, 3512, 3513, 3590  
FScN 3472  
FSoS 1001, 1025  
GC 1211, 1232, 1233, 1235, 1252, 1275, 1281, 1282, 1283, 1284, 1285, 1291, 1294, 1851  
Geog 1301, 3101, 3121, 3131, 3141, 3161, 3181, 3211, 3212, 3213, 3215, 3221, 3321, 3331, 3341, 3343, 3344, 3345, 3371, 3373, 3375, 3378, 3381  
Ger 3501, 3502, 3511, 3512, 3513  
IntR—all courses except 5900, 5910, 5920, 5930  
Ital 3590  
Jour 3745, 5601, 5721  
JwSt 1034, 3034, 3126, 3521, 3532  
LAS 3131, courses under social sciences section  
Ling 1001, 1005, 3111  
MELC 3036, 3521, 3555, 3601  
Phil 3234, 3304  
Pol 1001, 1025, 1026, 1027, 1041, 1054, 1061, 3306, 3307, 3308, 3309, 3321, 3331, 3659, 3661  
Psy 1001, 1004, 1005, 3101, 3201  
RelA 1031, 1034, 1035, 3031, 3034, 3037, 3071, 3072, 3073  
RelS—all courses except 5890, 5960  
Rhet 1303, 1310, 3382  
Scan 1504, 3457  
Soc—all courses except methodology and topics courses  
Spch 5611, 5616, 5617, 5618  
WoSt 1001, 1002, 1101, 1102, 3102, 3203, 3204, 3205, 3300, 3305, 3404, 3602, 5201

## 2. *Development of Civilization: Historical and Philosophic Studies*

- Afro 1011, 1021, 1441, 3001, 3002, 3011, 3013, 3061, 3421, 3432, 3864, 3865, 3954, 5002, 5121, 5597  
AgEc 3040  
AgEd 1010  
AmIn 3026, 3036, 3111, 3112, 3121, 3211  
AmSt—all courses  
ANE 3501, 3502, 3505  
Anth 1101, 1101H, 3003  
CAS 3531, 3611  
Chic 3105, 3106, 3107, 3212, 3213, 3427, 3428, 3441, 3442  
Chn 1201, 1202  
Clas 1001, 1002, 1003, 1004, 1005, 1006, 1023, 1024, 1025, 1042, 1043, 1061, 3023, 3024, 3025, 3071, 3073, 3175, 3252  
CICv 3201  
CSCL 1032, 3254, 3421, 3422, 3458, 3472  
EAS 1063, 1461, 1462, 1463, 3464, 3465, 3467, 3468, 3471, 3472, 3474, 3481  
EdPA 3120  
Fren 3599  
GC 1221, 1230, 1231, 1232, 1251, 1351, 1355, 1357, 1814  
Geog 3373  
Hist—all courses  
HMed 3001, 3002, 3003, 3040, 3401, 3402, 3403  
HSci—all courses except 5970, 5990  
Hum—all courses except 3910, 3970, 5910, 5970, 5990  
JwSt 3521, 3607  
LAS 3131, 3401, 3402, 3403, 3500, 3501, 3502, 3610, 5524, any courses under the history section  
MELC 3505, 3507, 3508, 3511, 3512, 3541, 3542, 3543  
MidE 3541, 3542, 3543  
Phil 1002, 1003, 1004, 1006, 3001, 3002, 3003, 3004, 3005, 3234, 3302, 3304, 3305, 3307, 3308  
RelA 3501, 3502, 3505, 3541  
RelS 3501, 3502, 3505, 3508, 3541  
Rhet—humanities courses  
Russ 3511, 3512  
SALC 3501, 3502, 3611, 3635  
Scan 1504, 3271, 3272, 3273  
SOAS 3501  
Soc 3477, 3954  
Span 1501, 1502, 1503, 3501, 3502, 3512  
Spch 5602, 5607, 5611, 5616, 5617, 5618, 5621, 5622  
WoSt 3103, 3307, 3402, 3403, 3404, 5101, 5401, 5402
- ## D. Literary and Artistic Expression (9 credits minimum)
- You must complete a minimum of 9 credits in the humanities, arts (non-studio), literature, music, and/or theatre arts (non-technical).
- Afro 1301, 3105, 3108, 3301, 3514, 3591, 3592, 3601, 3654, 5181, 5182, 5201, 5301, 5551, 5593, 5595, 5596, 5597  
AmIn 3116, 3242, 5251  
AmSt 3111  
ANE 1001, 1002, 1003, 3001, 3002, 3003, 3251  
Anth 3111  
Arab 3213, 3301, 3302, 3303

Arch 1001, 1021, 1022, 1301, 1401, 3411, 3412, 5051, 5052, 5053, 5054, 5055, 5056, 5061, 5064  
 ArtH—all courses except 5895, 5950, 5960, 5970, 5990, 5991  
 ArtS 1401  
 Chic 3212, 3213, 3507, 3508, 3510, 3511  
 Chn 3161, 3162, 3163, 3165, 3266  
 Clas 1001, 1002, 1003, 1004, 1005, 1006, 1023, 1024, 1025, 1042, 3001, 3002, 3003, 3008, 3023, 3024, 3025, 3035, 3065, 3072, 3081, 3082, 3083, 3142, 3145, 3152, 3162  
 CICv 3510, 3711  
 CLit—all courses  
 CSCL 1001, 1301, 1921, 3132, 3172, 3174, 3175, 3332, 3931  
 DHA 1101, 1300, 3117, 5105, 5107, 5109, 5112, 5114, 5115, 5118  
 EAS 3013, 3020, 3162, 3163, 3165, 3808, 3941  
 Engl—all courses except 3851, 3852, 3910, 3920, 3931, 3932, 3940, 3950, 3963, 3970, 3980, 5815, 5821, 5831, 5843, 5851, 5860, 5871, 5910, 5920, 5940, 5950  
 EngW 1101  
 Foreign Languages—literature courses only  
 Fren 3101, 3103, 3207, 3229, 3279  
 GC 1311, 1312, 1331, 1365, 1366, 1371, 1374, 1375, 1812, 1816, 1836  
 Ger 3104, 3105  
 Hebr 3304, 3307  
 Hum—all courses except 39xx, 59xx  
 Ital 3201, 3209, 3219, 3289, 3301, 3303, 3305, 3501, 3502  
 Jpn 3161, 3163, 3164, 3165  
 JwSt 3115, 3315, 3401, 3402, 3403  
 LA 1021, 1022  
 LAS—all humanities courses  
 MELC 3213, 3601, 3602  
 MidE 3213, 3601  
 Mus 1001, 1021, 1602, 1804, 3021, 3027, 3028, 3029, 3604, 3605, 3606, 3607, 3708, 3709, 3808  
 Phil 3502  
 RelA 3115, 3201, 3202, 3203, 3251  
 RelS 3115, 3201, 3202, 3203, 3213, 3251  
 Rhet—humanities courses: 1301, 1302, 1303, 1310, 1311, 1376, 1380, 3370, 3375, 3380, 3381, 3390, 3395  
 Russ 3421, 3422  
 SALC 3456  
 Scan 3503, 3505, 3601-3654, 5502, 5511, 5613-5645  
 SOAS 3204, 5202  
 Span 3104, 3211, 3212, 3213, 3614  
 Th 1101, 1102, 1405, 1805, 3171, 3172, 3173, 5130, 5171, 5172, 5173, 5177, 5178, 5181, 5182, 5186  
 WoSt 3303, 3304, 3305, 3306, 3307, 3308, 3309, 5304, 5305

Because of the many 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 approval of courses not on this list, contact the college office, 32 McNeal Hall (612/624-1725).

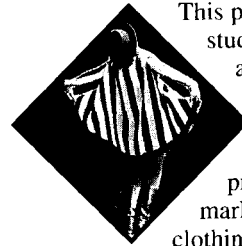
## Apparel Sciences and Design

See Clothing Design (page 27) or Retail Merchandising (page 52).

## Clothing Design

(formerly Apparel Sciences and Design)

*Department of Design, Housing, and Apparel*  
 240 McNeal Hall  
 1985 Buford Avenue  
 St. Paul, MN 55108  
 612/624-9700



This program provides students with information and experiences that allows them to understand design problems, production, and marketing of textile and clothing products. Students

in the program gain a general understanding of the product, business systems, and the consumer. Program coursework concentrates on developing professional competence in creative design processes.

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

Students entering this program must have clothing construction/assembly competence and a working knowledge of microcomputers and software. Students are encouraged to use the liberal education categories to explore multicultural issues and themes and to strengthen the knowledge base that will support and enhance their major coursework.

## Pre-Clothing Design Admission Requirements

Freshmen and transfer students are initially admitted as pre-clothing design majors.

### Freshmen

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra or equivalent.
- AAR score of 110 or above.

### Transfer Students

- Completion of high school preparation requirements if post-1987 high school graduate.
- Completion of high school intermediate algebra or equivalent.
- Overall GPA of at least 2.50.

## Clothing Design Requirements for Full Major Status

After being admitted to CHE, students must meet the following criteria to achieve full major status in the clothing design program:

- Demonstration of competence in basic clothing construction skills through high school or technical school courses.
- Completion of DHA 1231, 1261, 1300, 1323, 1325, 1328 with a GPA of at least 2.50.
- Positive assessment of design work through portfolio review.

## Graduation Requirements

- Completion of all program and college requirements.
- Overall GPA of at least 2.50.
- Completion of 185 credits.



## Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of clothing majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

## Entering freshmen academic year 1994-95

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following.

### *Writing Skills Requirement:*

- Rhet 1101 (4)  
or Comp 1011 or equivalent
- Rhet 1151/1104 (4,1)  
or Comp 1027 or equivalent
- Rhet 3562 (4)  
or 3xxx Comp course or equivalent

### *Speech Communication Requirement:*

- Rhet 1222 (4)  
or Spch 1101 or equivalent public speaking course

**Entering freshmen academic year 1995-96**

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements, listed on page 24 of this bulletin, entering freshmen must complete the following.

**Writing Skills Requirement:**

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

**Speech Communication Requirement:**

Rhet 1222 (4)  
or Spch 1101 or equivalent public speaking course

Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

**Entering transfer students academic years 1994-95 and 1995-96**

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

**Professional Courses in the Major****Preparatory Courses\***

- AgEc 1101 or Econ 1101—Principles of Microeconomics (4)
- AgEc 1102 or Econ 1102—Principles of Macroeconomics (4)
- Phys 1001—The Physical World (4)
- One art history course

\*Preparatory courses may meet liberal education requirements. Consult with your adviser.

**Professional Core Courses**

- DHA 1101—Introduction to the Designed Environment (3)
- DHA 1231—Clothing Design Studio I (4)
- DHA 1261—Clothing Design Studio II (4)
- DHA 1300—Introduction to Design (3)
- DHA 1323—Design Process: Drawing I (4)

- DHA 1325—Design Process: Two-Dimensional Design I (4)
- DHA 1328—Design Process: Color I (4)
- DHA 3117—History of Costume: Origins Through 18th Century (3)
- DHA 3211—Pattern Development I (4)
- DHA 3212—Cultural Perspectives in Dress (4)
- DHA 3215—Apparel Analysis I (4)
- DHA 3216—Textile Analysis (5)
- DHA 3217—Aesthetics of Clothing (4)
- DHA 3218—Pattern Development II (4)
- DHA 3232—Clothing Design Studio III (4)
- DHA 3327—Design Process: Three-Dimensional Design (4)
- DHA 3332—Fiber Structure: Weaving (4)
- DHA 5118—History of Costume: 19th and 20th Centuries (4)
- DHA 5211—Issues and Trends in Textiles and Apparel (3)
- DHA 5216—Textile and Apparel Consumer (4)
- DHA 5218—Pattern Development III (4)
- DHA 5231—Clothing Design Studio IV (4)
- DHA 5232—Clothing Design Studio V (4)
- DHA 5234—Clothing Design for Special Needs (4)
- DHA 5254—Performance Evaluation: Fabrics and Garments (5)
- DHA 5280—Directed Study (1-4 cr, max 8 cr)

Clothing design majors have an opportunity to participate in student-selected field experiences. See your adviser for more information.

**Supporting Emphasis**

A minimum of 18 credits of related courses selected with approval of your adviser.

**Electives**

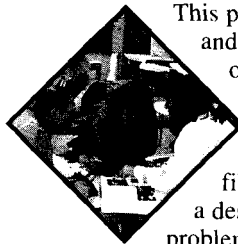
General electives to complete 185 credits required for graduation.

**Costume Design**

See Clothing Design.

**Design Communication**

*Department of Design, Housing, and Apparel*  
240 McNeal Hall  
1985 Buford Avenue  
St. Paul, MN 55108  
612/624-9700



This program in theoretical and applied dimensions of design has concentrations in graphic communication or fiber arts. It is based on a design foundation with problem solving in visual

presentation, color, two- and three-dimensional design, and history of design and is supported by liberal education and

# Programs

collateral studies. Students have the opportunity to become articulate in writing and speaking about design and to develop computer literacy.

Graduates may find careers in graphic design and fiber arts in business and industry, design management, museums, and exhibition design. An internship is required. The program also prepares students for graduate studies in design process and research in design foundations and education, decorative arts, history of design, and museology. Graduate programs at the M.A. and Ph.D. level are individually tailored. See the *Graduate School Bulletin*.

## Pre-Design Communication Admission Requirements

Freshmen and transfer students are initially admitted as pre-design communication major.

### Freshmen

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra or equivalent.
- AAR score of 110 or above.

### Transfer Students

- Completion of high school intermediate algebra or equivalent.
- Transfer students who graduated from high school after 1987 must complete the high school preparation requirements.
- Overall GPA of at least 2.50.

## Design Communication Requirements for Full Major Status

After being admitted to CHE, pre-design communication students must meet the following criteria to achieve full major status in the design communication program.

- Completion of DHA 1300, 1323, 1325, 1328 with a GPA of 3.00.
- Overall GPA of at least 2.50.
- Pass portfolio review.

Contact your academic adviser for more information.

### Transfer Students

Transfer students may apply for portfolio review the same quarter they are admitted to the college if all other design communication

admission requirements are met. See student services staff, 32 McNeal Hall, for more information.

## Graduation Requirements

- Completion of all program and college graduation requirements.
- Overall GPA of at least 2.50.

## Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of design communication majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

## Entering freshmen academic year 1994-95

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following.

### Writing Skills Requirement:

Rhet 1101 (4)

or Comp 1011 or equivalent

Rhet 1151/1104 (4,1)

or Comp 1027 or equivalent



Rhet 3562 (4)  
or 3xxx Comp course or equivalent

**Speech Communication Requirement:**

Rhet 1222 (4)  
or Spch 1101 or equivalent public speaking course

**Entering freshmen academic year 1995-96**

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements, listed on page 24 of this bulletin, entering freshmen must complete the following:

**Writing Skills Requirement:**

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

**Speech Communication Requirement:**

Rhet 1222 (4)  
or Spch 1101 or equivalent public speaking course

Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

**Entering transfer students academic years 1994-95 and 1995-96**

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

**Program Requirements**

**Professional Courses in the Major**

**Preparatory Core\***

- Art History, one introductory course
- History, one survey course
- Literature, one introductory course
- Psychology, one introductory course

\* Students should consult their academic adviser for the courses that will meet both the preparatory core and liberal education requirements.

**Program Core**

*Basic design requirements* (must be taken before coursework in area of concentration)

- DHA 1101—Introduction to the Designed Environment (3)
- DHA 1300—Introduction to Design (3)
- DHA 1306—Spatial Logic for Designs (4) (CEE only)
- DHA 1323—Design Process: Drawing I (4)
- DHA 1325—Design Process: Two-Dimensional Design I (4)
- DHA 1328—Design Process: Color I (4)
- DHA 1331—Surface Fabric Design I (4)
- DHA 1334—Introduction to Computer Applications to Design (2)
- DHA 3323—Design Process: Drawing II (4)
- DHA 3325—Design Process: Two-Dimensional Design II (4)
- DHA 3327—Design Process: Three-Dimensional Design (4)
- DHA 3328—Design Process: Color II (4)
- DHA 3334—Computer Applications to Design Problems I (4) (CEE only)
- DHA 5334—Computer Applications to Design Problems II (4) (CEE only)
- Rhet 3101—Functional Photography (4)  
or equivalent course

Minimum of 4 credits in business or marketing

*Design history courses* (12 credits from the following)

- DHA 3117—History of Costume: Origins Through 18th Century (3)
- DHA 5105—History of Visual Communication (4)
- DHA 5107—History of Decorative Arts: Textiles (3) (*Required for students taking fiber arts concentration*)
- DHA 5109—History of Decorative Arts: Ceramics, Metals, Glass (3)
- DHA 5112—History of European Furniture and Interiors (3)
- DHA 5114—History of American Furniture and Interiors (3)
- DHA 5115—20th-Century Interiors and Furnishings (3)
- DHA 5118—History of Costume: 19th and 20th Centuries (4)  
*and/or* courses taught in Department of Art History (see adviser for list)  
*and/or* history courses taught in College of Architecture and Landscape Architecture (see adviser for list)

**Area of Concentration**

Minimum of 40 credits in one area of concentration, either fiber arts or graphic communication.

**Fiber Arts Concentration**—must complete a minimum of 40 cr from the following:

- DHA 3331—Surface Fabric Design II (4)
- DHA 3332—Fiber Structure: Weaving (4)
- DHA 3337—Fiber Structure Design I (4)
- DHA 5107—History of Decorative Arts: Textiles (3)
- DHA 5323—Design Process: Drawing III (4)
- DHA 5325—Design Process: Two-Dimensional Design III (4)
- DHA 5328—Color and Design (4)

## Programs

DHA 5331—Surface Fabric Design III (4)  
DHA 5332—Fiber Structure: Weaving II (4)  
DHA 5337—Fiber Structure Design: Quilting (4)  
4-12 credits from related area (e.g., clothing design, paper making)

**Graphic Communication Concentration**—must complete a minimum of 40 cr from the following:

DHA 1301—Introduction to Visual Communication/ Graphic Design (4)  
DHA 3301—Production for the Graphic Designer (4)  
DHA 3350—Typographic Design (4)  
DHA 3351—Graphic Design I (4)  
DHA 3352—Graphic Design II (4)  
DHA 3353—Graphic Design III (4)  
DHA 3371—Professional Issues in Design Communication (2)  
DHA 3380—Design Portfolio (2)  
DHA 5105—History of Visual Communication (4)  
DHA 5170—Special Topics: Graphic Design Practicum (1-4)  
DHA 5170—Special Topics: Typography II (1-4)  
DHA 5303—Field Experience in Design Communication (1-4)

### **Collateral Area**

Minimum of 18 credits from an area selected with approval of your adviser (must be taken A-F); at least 12 credits must be 3xxx or above. Suggested areas include:

American Studies  
Anthropology  
Architecture  
Art Education  
Art History  
Business  
Computer Science  
Industrial Education  
Journalism and Mass Communication  
Psychology  
Sociology  
Speech Communication  
Studio Art  
Theatre Arts

Other collateral areas may be developed.

For courses relevant to collateral areas, see adviser.

### **Free Electives**

Electives to make a total of 185 credits required for graduation

## Family Education

(formerly Home Economics Education)

*Family Education Program*  
325 Vocational and Technical Educational Building  
1954 Buford Avenue  
St. Paul, MN 55108  
612/624-3010

This program offers

- a specialization in the Department of Vocational and Technical Education doctoral degrees (See *Graduate School Bulletin*).



- a master of arts degree (See *Graduate School Bulletin*).
- a master of education degree with a focus on family education and human ecology.
- a master of education degree that leads to a license to teach family studies in a secondary school.
- courses and advising to qualify students for additional Minnesota educator licenses.
- a family education minor that complements majors in CHE and the College of Liberal Arts.

### **Family Education/Secondary School Teacher Preparation Program**

Successful completion of this program leads to a license to teach junior or senior high school in Minnesota, as well as a master of education degree. The full-time program takes about 11 months (depending on fulfilling prerequisites), beginning Summer Session II and ending the following spring quarter. The application deadline is April 1. To inquire about admission after the deadline, call (612) 624-3010.

Criteria for admission include:

- A completed baccalaureate degree in an area related to family studies.
- A minimum GPA of 2.80 in undergraduate coursework.
- Completion of the Pre-Professional Skills Test.
- Completion of prerequisite coursework specified by the Family Education Program.

**Course Requirements**

8-12 credits in family education core courses  
 20 credits of clinical experience with accompanying seminars  
 15-20 credits in foundations of education  
 Students must participate in secondary school activities in late August and early September.

**Family Education Minor**

This minor is available to undergraduates in CHE and College of Liberal Arts, Inter-College Program, and University College. This program enables students to develop beginning educator competencies to complement and enhance their studies in their majors. Students develop the ability to plan, deliver, and evaluate family education programs in work and community settings. Courses taken in this minor may be applied toward a parent educator license. Applicants are encouraged to seek prerequisite advising.

**Master of Education**

There are two master of education (M.Ed.) programs in family education. One leads to a license to teach secondary school family studies courses. The other leads to professional preparation as an educator who works with individuals and families in a variety of settings. For information, see the Family Education section of the *College of Education Bulletin*.

**Minnesota Educator Licenses**

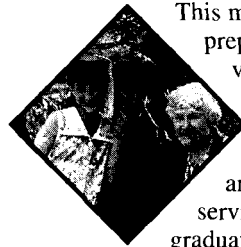
Licenses for which students can qualify while studying for a degree, or by taking additional courses related to family education, include

- secondary school license for teaching family studies in junior and senior high school.
- family education endorsement for elementary and secondary educators who hold a license and want to teach family studies as a component of their program.
- adult vocational parent education license or family education/parent educator license for teaching adults about parenting.

Detailed information about courses qualifying students for these licenses may be obtained from the Family Education Program, 325 Vocational and Technical Education Building, St. Paul, MN 55108 (612/624-3010).

**Family Social Science**

*Department of Family Social Science  
 290 McNeal Hall  
 1985 Buford Avenue  
 St. Paul, MN 55108  
 612/625-1900*



This multidisciplinary major prepares students for a variety of careers working with individuals, families, and policies and systems in human services. Qualified graduates of the program

may continue their education through graduate study in family social science, child and human development, social work, and other related disciplines.

The program begins with a strong foundation of liberal education courses and a multidisciplinary series of courses in the social and behavioral sciences and progresses to the major core of upper division family social science courses. Students choose one of the following applied/advanced areas of study.

*Family economics and policy area* focuses on courses that review the impact of economics and public policy on families.

*Family gerontology area* focuses on the influences of aging in society, including government policies, health care, and housing.

## Programs

*Alcohol and drug studies area* examines issues of alcohol and drug abuse with an option to obtain an Alcohol and Drug Counseling Education Program certificate.

*Adviser/student-designed family area* allows students to design a family-oriented area of study around special interests in consultation with their faculty adviser.

*International studies minor* may be used as an area of applied/advanced study. The minor allows students to integrate a quarter of study abroad and coursework pertaining to the language and culture of the chosen country with their major field.

### Admission Requirements

The program admits freshmen and transfer students. The major is flexible enough to accommodate traditional students and those who are changing majors, transferring from community or other colleges, and working adults who must take some of their coursework at night.

#### Freshmen

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra or equivalent.
- AAR score of 110 or above.

#### Transfer Students

- Completion of high school preparation requirements if post-1987 high school graduate.
- Completion of high school intermediate algebra or equivalent.
- Overall GPA of at least 2.50.

### Graduation Requirements

- Completion of all program and college requirements.
- A minimum 2.00 cumulative GPA with no grades lower than C (2.00) in any FSoS-designated course.
- A total of 185 credits.

### Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which

they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of family social science majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

### Entering freshmen academic year 1994-95

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following.

#### *Writing Skills Requirement:*

Rhet 1101 (4)  
or Comp 1011 or equivalent  
Rhet 1151/1104 (4,1)  
or Comp 1027 or equivalent  
Rhet 3562 (4)  
or 3xxx Comp course or equivalent

#### *Speech Communication Requirement:*

Rhet 1222 (4)  
or Spch 1101 or equivalent public speaking course

### Entering freshmen academic year 1995-96

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements listed on page 24 of this bulletin, entering freshmen must complete the following:

**Writing Skills Requirement:**

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

**Speech Communication Requirement:**

Rhet 1222 (4)  
or Spch 1101 or equivalent public speaking course

Please work closely with your academic adviser in choosing your courses. You may use required courses in your major program to meet your liberal education requirements.

**Entering transfer students academic years 1994-95 and 1995-96**

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

**Program Requirements**

**Preparatory Requirements in Social and Behavioral Sciences**

Courses taken to meet these requirements may also fulfill liberal education requirements. Consult your academic adviser.

*One course in each of the following areas:*

- Sociology
- Psychology
- Economics
- Child psychology or human development
- Statistics

*Two courses from the following areas/courses:*

- Political science
- Cultural anthropology
- FSoS 1001—Introduction to Family Relationships (4)
- FSoS 1025—Introduction to Parenthood (4)
- SW 1001—Introduction to Social Welfare and Community Services (5)

**Family Social Science Major Core Studies (68 credits)**

The required core provides basic substantive knowledge about diverse family systems; intervention skills at the individual, group, community, and policy levels; and research skills. The 3xxx core courses should be completed before the 5xxx core and applied/advanced courses.

**Entry-Level Core Requirements (19 credits)**

- FSoS 3231—Planning for Education and Career (2)
- FSoS 3260—Family Resource Management (4)
- FSoS 3600—Family Issues Across the Life Span (5)
- SW 3201—Interventions with Individuals and Groups (4)

SW 3202—Interventions in Community and Social Policy (4)

**Advanced Core Requirements (49 credits)**

**Required**

- FSoS 5200—Family Systems (5)
- FSoS 5205—Introduction to Family Research Methods (4)
- FSoS 5500—Racial and Ethnic Diversity in Families (4)

Select at least one course from each of the following areas to total a minimum of 36 credits:

**Family Structure/Process**

- FSoS 5001—Human Sexual Behavior (5)
- FSoS 5025—Parenting (4)
- FSoS 5202—Family Psychology (4)
- FSoS 5260—Dynamics of Family Decision Making (4)
- FSoS 5240—Special Topics (2-6) (if topic is appropriate to this area)

**Family Economics/Policy**

- FSoS 5217—Consumer Economics and Policy (4)
- FSoS 5218—Family Financial Management (4)
- FSoS 5220—Family Economics (4)
- FSoS 5241—Legal and Economic Controversies in Family Life (4)
- FSoS 5255—Approaches to Family Policy (4)
- FSoS 5256—Family Policy: An International Perspective (4)
- FSoS 5240—Special Topics (2-6) (if topic is appropriate to this area)

**Family/Culture**

- FSoS 5210—Family in World Perspective (4)
- FSoS 5242—Death, Other Losses, and the Family (3)
- FSoS 5251—Aging Families (4)
- FSoS 5252—Aging, Family, and Society (4)
- FSoS 5253—Humanities, Aging, and Family Living (4)
- FSoS 5240—Special Topics (2-6) (if topic is appropriate to this area)

**Applied/Advanced Areas of Study**

Select one of the following five areas. Each course may be used only once to satisfy program requirements.

**Family Economics and Policy Area (28-29 credits)**

**Required Courses (21 credits)**

- FSoS 5218—Family Financial Management (4)
- FSoS 5220—Family Economics (4)
- FSoS 5206—Undergraduate Research Internship (5)  
or FSoS 5249—Fieldwork—Directed Community Work Experience (5)
- FSoS 5255—Approaches to Family Policy (4)
- FSoS 5260—Dynamics of Family Decision Making (4)

Select two:

- AgEc 5580—Human Capital and Household Economics (3)
- FSoS 5210—Family in World Perspective (4)
- FSoS 5217—Consumer Economics and Policy (4)
- FSoS 5241—Legal and Economic Controversies in Family Life (4)
- FSoS 5256—Family Policy: An International Perspective (4)

**Family Gerontology Area (28-29 credits)**

**Required Courses (17 credits)**

- DHA 5481—Designed Environments for Aging (4)
- FSoS 5206—Undergraduate Research Internship (5)  
or FSoS 5249—Fieldwork—Directed Community Work Experience (5)

## Programs

- FSoS 5251—Aging Families (4)  
SW 5024—Multidisciplinary Perspectives on Aging (4)  
Select three:  
DHA 5467—Housing and the Social Environment (4)  
DHA 5468—Housing Problems of the Family (5)  
FSoS 5242—Death, Other Losses, and the Family (3)  
FSoS 5252—Aging, Family, and Society (4)  
FSoS 5253—Humanities, Aging, and Family Living (4)  
FSoS 5255—Approaches to Family Policy (4)  
WoSt 5201—The Older Woman (4)

### Alcohol and Drug Studies Area (28-29 credits)

Students may elect to complete the 52-credit Alcohol and Drug Counseling Education Program certificate (ADCEP). Consult your adviser and the ADCEP director. All courses in ADCEP are offered in the evening through Continuing Education and Extension.

#### Required Courses (21 credits)

- FSoS 3026—Assessment of Alcohol and Drug Use Problems (4)  
FSoS 3027—Current Issues and Pharmacology of Alcohol and Drug Abuse (4)  
FSoS 3028—Treatment of Alcohol and Drug Abuse Problems (4)  
FSoS 3032—Chemical Abuse and Families: An Overview (4)  
FSoS 5206—Undergraduate Research Internship (5)  
or FSoS 5249—Fieldwork—Directed Community Work Experience (5)

Select two:

- FSoS 3029—Counseling Skills Practicum I (4)  
FSoS 3030—Counseling Skills Practicum II (4)  
FSoS 3037—Group Therapy: Theory and Practice (3)

### Adviser/Student-Designed Family Area (29 credits)

Students can design a family-oriented application area in consultation with their adviser. The area may be focused on a *population* such as children, adolescents, women, gays and lesbians, or refugees; an *issue* such as health, sexuality, human rights, the military, war, or violence; *complementary discipline* such as social psychology, public health, education, sociology, or social work; or a *skills* area such as family research, advocacy, or policy development.

Students who are considering graduate school are strongly encouraged to design a research-oriented skills application area with higher level mathematics, statistics, and research experiences in consultation with their adviser. It is also possible to select courses from two or more of the other four family social science applied areas to combine, for example, family gerontology and economics, family addictions and public policy. *A written proposal for the adviser/student-designed family area must be preapproved by the academic adviser.*

#### Required Courses

- FSoS 5206—Undergraduate Research Internship(5)  
or FSoS 5249—Fieldwork—Directed Community Work Experience (5)  
A minimum of three approved family social science courses (or other adviser-approved courses) organized around the population, issue, complementary discipline, or skills area.  
Additional courses from appropriate disciplines to satisfy credit minimum.

### International Studies Area (31-46 credits)

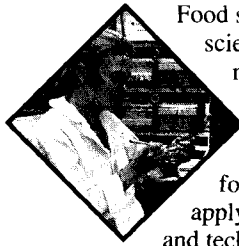
Students may elect to complete this minor as an applied/advanced area of study. Students must be formally admitted to the minor, which enables them to integrate an international internship or research project on families into their major program. Careful planning permits students to combine core courses from the major with the minor requirements.

#### Requirements

- Intercultural communication: pre- and postdeparture
- Predeparture course linking the human-ecological framework with the student's international interests.
- Minimum of 10 weeks (1 quarter) of study, internship, or research in chosen country.
- 23 credits of foreign language study.
- 15 3xxx or 5xxx credits focusing on chosen country/region or issue of interest in a specific country/region. For example, the following courses are not required for the minor but they may be selected to fulfill the minor and major core requirements simultaneously:  
FSoS 5206—Undergraduate Research Internship(5)  
or FSoS 5249—Fieldwork—Directed Community Work Experience (5)  
FSoS 5210—Family in World Perspective (4)  
FSoS 5252—Aging, Family, and Society (4)  
FSoS 5255—Family Policy: International Perspective (4)

## Food Science

Department of Food Science and Nutrition  
225 Food Science and Nutrition  
1334 Eckles Avenue  
St. Paul, MN 55108  
612/624-1290



Food science applies scientific principles to the manufacture, distribution, marketing, and consumer aspects of food. Food scientists apply the basic principles and techniques of many

disciplines including chemistry, physics, economics, microbiology, nutrition, management, and marketing to food processing and preservation, new product development, and food marketing. Food scientists are concerned with the theoretical and practical aspects of the food chain from the production of raw materials to the use of food products by consumers.

The program is open to students registered in either the College of Agriculture or CHE. Faculty advisers are from the Department of Food Science and Nutrition, which is jointly administered by the two colleges.

Many graduates of the program seek employment after earning the bachelor of science degree, while others continue on to graduate study. Career areas include production management, product and process research and development, public health and regulatory agency service, education, marketing, management, technical sales and promotion, and quality control supervision.

### Admission Requirements

#### Freshmen

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra or equivalent.
- AAR score of 110 or above.

#### Transfer Students

- Completion of high school preparation requirements if post-1987 high school graduate.
- Completion of high school intermediate algebra or equivalent.
- Overall GPA of at least 2.50.

### Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of food science majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

### Entering freshmen academic year 1994-95

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following:

#### *Writing Skills Requirement:*

The writing skills requirement is satisfied by required major courses for food science majors.

#### *Speech Communication Requirement:*

The speech communication requirement is satisfied by required major coursework for food science majors.

### Entering freshmen academic year 1995-96

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements, listed on page 24 of this bulletin, entering freshmen must complete the following:

#### *Writing Skills Requirement:*

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

#### *Speech Communication Requirement:*

The speech communication requirement is satisfied by required major coursework for food science majors.

Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

### Entering transfer students academic years 1994-95 and 1995-96

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses.

*Note:* Food science majors must complete an additional course in category C2 (see page 25).

# Programs

## Program Requirements

### Required Supporting Courses in Communication, Math, and Sciences (71-77 credits)

- AgEc 1101—Principles of Microeconomics (4)  
or Econ 1101—Principles of Microeconomics (4)  
Biol 1009—General Biology (5)  
BioC 3021—Biochemistry (4)  
Chem 1051, 1052—General Principles of Chemistry (4,4)  
Chem 3301, 3305—Elementary Organic Chemistry I and Laboratory (4,2)  
Chem 3302, 3306—Elementary Organic Chemistry II and Laboratory (4,2)  
Math 1251, 1252—Differential and Integral Calculus (4,4)  
or Math 1142—Short Calculus (5)  
MicB 5105—Biology of Microorganisms (5)  
or VPB 3103—General Microbiology (5)  
Phys 1041—Introductory Physics and Laboratory (5)  
Phys 1042—Introductory Physics and Laboratory (5)  
Rhet 1101—Writing to Inform and Persuade (4)  
Rhet 1104—Library Research Methods (1)  
Rhet 1222—Public Speaking (4)  
Rhet 3562—Writing in Your Profession (4)  
Stat 3011, 3012—Statistical Analysis (4,4)  
or Stat 5021—Statistical Analysis (5)

### Required Professional Courses (63 credits)

- FScN 1102—Technology of Food Processing (4)  
FScN 1612—Principles of Nutrition (4)  
FScN 3102—Introduction to Food Science (4)  
FScN 3112—Food Analysis (4)  
FScN 3135—Food Processing I (4)  
FScN 3136—Food Processing II (4)  
FScN 5100—General Seminar (1)  
FScN 5110—Food Chemistry (4)  
FScN 5120—Food Microbiology (5)  
FScN 5122—Control Systems in Food Microbiology (2)  
FScN 5123—Food Fermentation and Biotechnology (3)  
FScN 5135—Food Engineering Unit Operations (5)  
FScN 5312—Instrumental Analysis of Foods (3)

In addition to these required courses, a minimum of 16 credits must be chosen from the following courses. A maximum of 4 credits in FScN 5000/5111 may be used to meet the 16-credit requirement.

- FScN 3400—Food Communication Techniques (3)  
FScN 3472—Food Selection Principles (4)  
FScN 5000—Professional Experience Program (4)  
FScN 5111—Independent Study in Food Science and Nutrition (1-5)  
FScN 5314—Physicochemistry of Foods (4)  
FScN 5360—Sensory Evaluation of Food Quality (4)  
FScN 5380—Food Packaging (3)  
FScN 5390—Introduction to Food Law (4)  
FScN 5474—Food Marketing Economics (4)  
FScN 5512—Meat Technology (4)  
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 5550—Grains: Introduction to Cereal Chemistry and Technology (4)

FScN 5555—Freezing and Dehydration of Foods (5)

- FScN 5562—Flavor Technology (4)  
FScN 5620—Nutrition and Metabolism (5)  
FScN 5643—World Food Problems (3)

### Optional Area of Emphasis

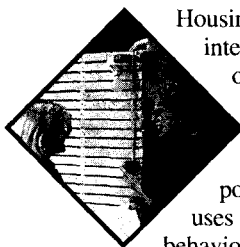
An area of emphasis that meets the student's educational and career goals may be designed in consultation with his/her adviser. The area of emphasis plan must include 20 credits and be submitted to the undergraduate studies committee for approval. Two special areas of emphasis, biochemistry and engineering/chemical engineering, are available. In addition, some suggested areas are chemistry, microbiology, statistics, management, economics, nutrition, international affairs, and communications.

### Electives

Electives to complete 186 credits required for graduation with the bachelor of science degree.

## Housing

*Department of Design, Housing, and Apparel  
240 McNeal Hall  
1985 Buford Avenue  
St. Paul, MN 55108  
612/624-9700*



Housing is an interdisciplinary program of integrated study that prepares students for a wide variety of housing-related positions. The program uses the social and behavioral sciences, design,

and technology to provide background in the housing-related interactions within households, between households and society, and with the natural and built environments. The background provided derives from two orientations, the individual or household level and the societal level, focusing on the interplay between them.

After acquiring a general background of coursework in housing, students may specialize in one of four broad areas: community development and policy, design and technology, management and finance, or special populations. In addition, a student may propose an area of concentration tailored to individual background and interest after consulting with an adviser and receiving program committee approval.



Students in the housing program complete an internship that typically involves one quarter of work experience (a minimum of 400 hours) in a situation related to the student's area of specialization. Graduates of the program work in a variety of positions that grow out of their area of concentration and internship experience. The program provides background for graduate studies for college teaching, research, planning, and administration. Note that the program requires a basic knowledge of drafting that can be acquired in a variety of ways including high school, vocational, or technical coursework.

**Community Development and Policy**—Students take additional coursework in such areas as public affairs, planning, geography, and political science. The concentration prepares students for work with agencies and organizations involved in policy making, planning, and development related to housing. These include housing and redevelopment authorities, city planning departments, and non-profit organizations.

**Design and Technology**—Students take additional coursework in design, technology, and environmental studies. This background prepares students for work in construction and development firms; in accessibility, rehabilitation, energy, and housing inspection programs; and in redesign and historic preservation.

**Management and Finance**—Students take additional coursework in such areas as economics and business. This specialization prepares students for work in public and private housing management, state finance agencies, commercial banks, and mortgage and title companies.

**Special Populations**—Students take courses in sociology, social work, gerontology, women's studies, Afro-American studies, Native American studies, and Latin American studies. This specialization prepares students to work in housing-related programs involving human relations;

advocacy; affirmative action; and housing for the elderly, disabled, and low-income families of various types.

### Admission Requirements

#### Freshmen

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra or equivalent.
- AAR score of 110 or above.

#### Transfer Students

- Completion of high school preparation requirements if post-1987 high school graduate.
- Completion of high school intermediate algebra or equivalent.
- Overall GPA of at least 2.00.

### Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of housing majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

### Entering freshmen academic year 1994-95

*Note:* The university admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following:

*Writing Skills Requirement:*

- Rhet 1101 (4)  
or Comp 1011 or equivalent
- Rhet 1151/1104 (4,1)  
or Comp 1027 or equivalent
- Rhet 3562 (4)  
or 3xxx Comp course or equivalent

*Speech Communication Requirement:*

- Rhet 1222 (4)  
or Spch 1101 or equivalent public speaking course

**Entering freshmen academic year 1995-96**

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements listed on page 24 of this bulletin, entering freshmen must complete the following.

*Writing Skills Requirement:*

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

*Speech Communication Requirement:*

- Rhet 1222 (4)  
or Spch 1101 or equivalent public speaking course

Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

**Entering transfer students academic years 1994-95 and 1995-96**

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

**Program Requirements**

**Professional Courses in the Major** (must be taken A-F)

**Preparatory Core\***

- AgEc 1101-1102—Principles of Microeconomics, Macroeconomics (4,4)  
or Econ 1101-1102—Principles of Microeconomics, Macroeconomics (4,4)
  - Phys 1001—The Physical World (4)
  - Psy 1001—Introduction to Psychology (5)
  - Soc 1001—Introduction to Sociology (4)
- \*Preparatory courses may meet liberal education requirements. Consult your adviser.

**Program Core**

- A minimum grade of C is required.
- DHA 1101—Introduction to the Designed Environment (3)
- DHA 1400—Introduction to Housing (4)
- DHA 1401—Residential Technology (4)
- DHA 1621—Intermediate Drafting (4) or drafting proficiency
- DHA 3463—Housing and Community (4)
- DHA 3470—Professional Seminar in Housing (1)
- DHA 3632—Interior Building Technology (4)  
or Arch 3061, 3062—Building Systems (4, 4)
- DHA 5461—Housing Management (5)
- DHA 5463—Housing Policy (3)
- DHA 5467—Housing and the Social Environment (4)
- DHA 5468—Housing Problems of the Family (5)
- FSoS 3260—Family Resource Management (4)
- FSoS 5200—Family Systems (5)

One of the following finance courses:

- AgEc 3101 (Econ 3101)—Microeconomic Theory (4)
- AgEc 3640—Public Finance: Concepts and Practices (4)
- BFin 3000—Finance Fundamentals (4)
- Econ 3701—Money and Banking (4)
- Econ 3801—Elements of Public Finance (4)

One of the following family courses:

- DHA 5482—The Family and Energy Issues (3)
- FSoS 5202—Family Psychology (5)
- FSoS 5218—Family Financial Management (4)
- FSoS 5220—Family Economics (4)
- FSoS 5241—Legal and Economic Controversies in Family Life (4)
- FSoS 5251—Aging Families (4)
- FSoS 5260—Dynamics of Family Decision Making (4)

One of the following policy courses:

- Econ 5623—Housing Markets and Public Policy: United States (4)
- FSoS 5255—Approaches to Family Policy (4)
- PA 5401—Social Policy (3)
- PA 5432—Poverty and Policy (3)
- PA 5711—Energy Policy (3)
- PA 5721—Environmental Policy (3)
- SW 5111—Contemporary Policy and Programs in Social Welfare (4)

One of the following rural-focused courses:

- DHA 5465—Housing in World Perspectives I (4)
- Geog 3131—Middle America (4)
- Geog 5393—Look of the Land (4)
- Soc 1651—Rural Sociology (4)

One of the following planning courses:

- Arch 5137—Planning: Urban Function and Structure (4)
- Geog 5371—North American Cities (4)
- Geog 5605—Geographical Perspectives on Urban Planning I (4)
- PA 5200—Introduction to Planning (3)
- PA 5601—Land Use Planning (4)

One of the following statistics options:

- EPsy 3260—Basic and Applied Statistics (4)
- EPsy 5260—Introductory Statistical Methods (4)
- Psy 3801—Introduction to Statistical Methods (4)
- Soc 3801-3802-3803—Sociological Methods I-II-III (5,5,5)
- Stat 1001—Introduction to Ideas of Statistics (4)
- Stat 3011-3012—Statistical Analysis (4,4)
- Stat 5021—Statistical Analysis (5)

One of the following computer courses:

- CScj 1001—Introduction to Computers for Non-Computer Science Majors (4)
- DHA 3623—Computer-Aided Design, Drafting Systems I (4)
- GC 1571—Introduction to Microcomputer Applications (5)
- IDS 1010—Fundamentals of Information Development and Use (4)
- IDS 1070—Orientation to Computer Software and Programming (1) (CEE only)

#### Area of Concentration

A minimum of 30 credits in one of the following areas:  
Community Development and Policy  
Design and Technology  
Management and Finance  
Special Populations

Students who wish to develop skills in educational programming are encouraged to supplement their program with the family education minor, offered by the Family Education Program, listed on page 32 in this bulletin.

#### Suggested Courses for Area of Concentration

This is not an inclusive list. Check the current *Class Schedule* and meet with your adviser to determine if other courses may be appropriate to fulfill the minimum credit requirement of 30 credits in one area of concentration. Any housing course may be used in any concentration. Any course not selected to fulfill a professional requirement may be appropriate for use in an area of concentration. Concentration courses must be primarily upper division courses. Courses must be taken A-F.

#### Community Development and Policy

- AgEc 5600—Land Economics (3-4)
- AgEc 5620—Regional Economics Analysis (3)
- AgEc 5630—Regional Development Systems (3-4)
- Anth 5153—Urban Anthropology (4)
- Arch 5125—Real Estate Development (4)
- Arch 5137—Planning: Urban Function and Structure (4)
- Arch 5138—Planning: Theory and Methodology (4)
- CE 5703—Project Management (4)
- DHA 5483—Housing and Race (4)
- DHA 5485—Homelessness (5)
- Econ 3801—Elements of Public Finance (4)
- Econ 5301—Economic Development (4)
- Econ 5621—Urban Economics (4)

- Econ 5623—Housing Markets and Public Policy (4)
- Geog 3344—Land Use and Federal Government (4)
- Geog 3371—Introduction to Urban Geography (4)
- Geog 3373—Changing Form of the City (4)
- Geog 5371—North American Cities (4)
- Geog 5372—Metropolitan Analysis I: Population and Housing (4) (Geog 5371 prereq)
- Geog 5373—Metropolitan Analysis II: Urban Economic Geography (4)
- Geog 5375—American Metropolitan Evolution (4)
- Geog 5393—Look of the Land (4)
- Geog 5601—Introduction to Land Use Planning (4) (also PA 5601)
- PA 5200—Introduction to Planning (3)
- PA 5202—Economic Development I (3)
- PA 5511—Community-Based Community and Economic Development (3)
- PA 5621—Private Sector Development (3)
- PA 5622—Managing Urban Growth and Change (3)
- Pol 1001—American Government and Politics (4)
- Pol 3331—Minnesota Government and Politics (4)
- Pol 5327—Local Government and Politics (4)
- Rhet 5573—Grant Proposal (3)
- Soc 3601—Urban Community (4)
- Soc 5601—Urban Sociology (4)
- UrbS 3104—Introduction to Urban Studies (4)
- UrbS 3301—American Cities: Settings for Cultural Pluralism (4)

#### Design and Technology

All students in this area of concentration must take the following courses as part of the 30 credits required:

- DHA 1300—Introduction to Design (3)
- DHA 1323—Design Process: Drawing I (4)
- DHA 1328—Design Process: Color (4)
- DHA 1641—Interior Design Studio I (4)
- DHA 1642—Interior Design Studio II (4)

Select from the following to complete 30 credits (these must be primarily upper division courses):

- Anth 5117—Anthropology of Resource Management (4)
- Arch 3411—History of Architecture Before 1750 (4)
- Arch 3412—History of Architecture After 1750 (4)
- Arch 3061—Building Systems (4)
- Arch 3062—Building Systems (4)
- Arch 5055—Eighteenth Century Architecture and the Enlightenment (4)
- Arch 5056—Modern Architecture (4)
- Arch 5137—Planning: Urban Function and Structure (4)
- Arch 5138—Planning: Theory and Methodology (4)
- Arch 5141—Historic Preservation Process (4)
- Arch 5142—Historic Building Conservation (4)
- Arch 5143—Historic Building Research and Documentation (4)
- Arch 5951—Architecture and Behavior (3)
- Arch 5956—The Meanings and Messages of Place: City, Town, and Countryside (4)
- ArH 5546—American Architecture from 1860-1914 (5)
- ArH 5547—Modern American and European Architecture, 1914 to present (5)
- BGS 3003—Business and the Natural Environment (4)
- CE 5703—Project Management (4)
- DHA 3633—Lighting for Environmental Spaces (3)

- DHA 3631—Interior Design Resources and Materials (3)
- DHA 5112—History of European Furniture and Interiors (3)
- DHA 5114—History of American Furniture and Interiors (3)
- DHA 5115—Twentieth Century Interiors and Furnishings (3)
- DHA 5481—Designed Environments for Aging (4)
- DHA 5482—The Family and Energy Issues (3)
- Geog 5371—North American Cities (4)
- Geog 5372—Metropolitan Analysis I: Population and Housing (4)
- Geog 5373—Metropolitan Analysis II: Urban Economics Geography (4)
- Geog 5375—American Metropolitan Evolution (4)
- Ind 3010—Construction (3)
- PA 5711—Energy Policy I (3)
- PA 5712—Energy Policy II (3)
- PA 5721—Environmental Policy (3)
- Pol 1001—American Government and Politics (5)
- Pol 5327—Local Government and Politics (4)
- Rhet 5573—Grant Proposal (3)

### ***Housing Management and Finance***

- Acct 1050—Introduction to Financial Reporting (5)
- AgEc 3001—Applied Microeconomics: Consumers and Markets (4)
- Arch 5125—Real Estate Development (4)
- BFin 3000—Finance Fundamentals (4)
- BFin 3500—Real Estate Investment Analysis (4)
- BLaw 3058—Introduction to Law, the Law of Contracts and Agency (4)
- DHA 5481—Designed Environments for Aging (4)
- DHA 5482—The Family and Energy Issues (3)
- DHA 5483—Housing Discrimination (4)
- DHA 5485—Homelessness (5)
- Econ 3101—Microeconomics Theory (4)
- Econ 3701—Money and Banking (4)
- Econ 3801—Elements of Public Finance (4)
- Econ 5623—Housing Markets and Public Policy (4)
- FSoS 3500—Consumer Economics and Policy (4)
- Geog 5371—North American Cities (4)
- Geog 5372—Metropolitan Analysis I: Population and Housing (4)
- Geog 5373—Metropolitan Analysis II: Urban Economics Geography (4)
- Geog 5375—American Metropolitan Evolution (4)
- Mgmt 3001—Fundamentals of Management (4)
- Mgmt 3002—Psychology in Management (4)
- Mktg 3000—Principles of Marketing (4)
- Mktg 3040—Buyer Behavior (4)
- PA 5601—Land Use Planning (4)
- PA 5621—Private Sector Development (3)
- PA 5691—Topics in Real Estate Development (3)
- Rhet 5258—Interviewing: Dynamics of Face-to-Face Communication (4)
- Rhet 5573—Grant Proposal (3)

### ***Special Populations***

An area of concentration in Special Populations may be fulfilled in two ways. Option 1 is completed by meeting the requirements of an appropriate minor along with additional credits in supporting courses. Option 2 is met through a general concentration that focuses on a number of special populations or on a special

population for which there is no specific undergraduate minor offered at the University.

Under Option 1 a concentration can be done in such minors as African studies, Afro-American studies, Chicano studies, East Asian studies, human ecology international studies, Latin American studies, Russian and East European studies, Scandinavian studies, South and Southwest Asian studies, West European studies, and women's studies. Contact the department offering the minor for admission procedures and credit requirements.

If you choose Option 1 and the minor you select requires fewer than 30 credits, you must complete additional supporting coursework to total a minimum of 30 credits. Supporting coursework could include social work, communication, anthropology, economics, education, geography, language, mathematics, political science, sociology, statistics, or others.

Under the Option 2, a concentration can be based on 20 credits of coursework in courses focused on a specific special population for which there is no minor offered with ten additional credits in supporting work; or 20 credits of course work focused on two more different special populations plus the additional ten credits in supporting work. These special populations include the elderly, low-income households, disabled or handicapped individuals, minority families. Native Americans, or single-parent families.

### ***Courses for Concentration in Special Populations***

#### *Low-Income, Minority, and Single-Parent Families*

- DHA 5483—Housing Discrimination (4)
- DHA 5485—Homelessness (5)
- Econ 3103—Welfare Economics (4)
- Econ 5621—Urban Economics (4)
- FSoS 3001—Communications Skills and Interviewing Techniques: An Introduction (3)
- FSoS 5500—Racial and Ethnic Diversity in Families (4)
- FSoS 5028—Treatment of Alcohol and Drug Use Problems (4)
- PA 5401—Social Policy (3)
- PA 5432—Poverty and Policy (3)
- Pol 1001—American Government and Politics (5)
- PubH 3003—Fundamentals of Alcohol and Drug Abuse (2)
- PubH 5616—Rights of Children and Youth: Abuse and Neglect (4)
- Rhet 5258—Interviewing: Dynamics of Face-to-Face Communication (4)
- Rhet 5573—Grant Proposal (3)
- Soc 3954—Sociological Perspectives on Race, Class, and Gender (4)
- Soc 3405—Inequality: Introduction to Stratification (4)
- Soc 3601—Urban Community (4)
- Soc 5405—Social Stratification and Mobility (4)
- SW 1001—Introduction to Social Welfare and Community Services (5)
- SW 3201—Interventions with Individuals and Groups (4)
- SW 3202—Interventions in Community and Social Policy (4)
- SW 5024—Multidisciplinary Perspectives on Aging (4)
- SW 5111—Contemporary Policy and Programs in Social Welfare (4)

**Aging**

- DHA 5481—Designed Environments for Aging (4)  
 DHA 5483—Housing Discrimination (4)  
 DHA 5485—Homelessness (5)  
 FSos 5251—Aging Families (4)  
 FSos 5252—Aging, Family and Society (4)  
 FSos 5253—Humanities, Aging and Family Living (4)  
 Kin 5385—Exercise for Special Populations (3)  
 PA 5433—Social Welfare Reform and Income Support Policy (3)  
 Phar 5007—Biology of Aging (2)  
 Psy 5138—Psychology of Aging (4)  
 PubH 5736—The Elderly: A High-Risk Population (3)  
 PubH 5932—Nutrition: Adults and Elderly (3)  
 Rec 5240—Recreation and Aging (4)  
 Rhet 5258—Interviewing: Dynamics of Face-to-Face Communication (4)  
 Rhet 5573—Grant Proposal (3)  
 Soc 3937—Social Gerontology: Elders in American Society (4)  
 Soc 5938—Aging and the Life Course (4)  
 Soc 5956—Sociology of Death (4)  
 SW 5024—Multidisciplinary Perspectives on Aging (4)  
 WoSt 5201—The Older Woman: A Feminist Perspective (4)

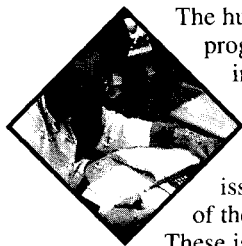
For other courses, see *Courses on Aging*, available from your academic adviser.

**Internship**

- DHA 5403—Internship in Housing (3 cr)  
 (after completion of one-half of professional sequence and DHA 3470—Professional Seminar in Housing)

**Free Electives**

Electives to make a total of 185 credits required for graduation

**Human Ecology**

The human ecology program meets student interest in the diverse and critical issues that people face in their everyday lives, issues at the forefront of the evolution of society.

These issues include family structure; sexuality; housing; homelessness; food; nutrition, and health; gender roles; designed environments; consumer affairs; science, technology, and society; race and cultural diversity; and international studies. These issues are addressed within three areas of concentration in human ecology: human development, the human environment, and social change.

This program also enhances students' personal and professional development and

citizenship by focusing on the skills of critical thinking, active listening, written and verbal communication, and citizen action. An integrated, in-depth exploration of a human ecological area of concentration results in application of these skills within an issue.

**Admission Requirements****Freshmen**

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra.
- AAR score of 110 or above.

**Transfer Students**

- Completion of high school preparation requirements if post-1987 high school graduate.
- Completion of high school intermediate algebra or equivalent.
- Overall GPA of at least 2.00.

**Liberal Education Requirements**

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of human ecology majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

**Entering freshmen academic year 1994-95**

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following:

### *Writing Skills Requirement:*

The writing skills requirement is satisfied by required major coursework for human ecology majors.

### *Speech Communication Requirement:*

The speech communication requirement is satisfied by required major coursework for human ecology majors.

### **Entering freshmen academic year 1995-96**

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements, listed on page 24 of this bulletin, entering freshmen must complete the following.

### *Writing Skills Requirement:*

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

### *Speech Communication Requirement:*

The speech communication requirement is satisfied by required coursework for human ecology majors.

Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

### **Entering transfer students academic years 1994-95 and 1995-96**

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses. You may use required courses in your major program to meet your liberal education requirements.

## **Program Requirements**

### **Foundation Courses** (minimum of 79 credits)

#### *Communication/Writing*

- Rhet 1101—Writing to Inform and Persuade (4)
- Rhet 1104—Library Research Methods (1)
- Rhet 1151—Writing in Your Major (4)
- Rhet 1222—Public Speaking (4)
- Rhet 3266—Communication, Discussion, and Small Group Decision Making (4 cr)
- Rhet 3562—Writing in Your Profession (4 cr)
- Rhet 3565—Writing for Publication (4 cr)

#### *Human Ecology*

- DHA 1101—Introduction to the Designed Environment (3)
- DHA 1300—Introduction to Design (3)
- FScN 1612—Principles of Nutrition (4)
- FSoS 3600—Family Issues Across the Life Span (4)
- SW 1001—Introduction to Social Welfare and Community Services (5)
- FSoS 5500—Racial and Ethnic Diversity in Families (4)

#### *Social Science*

- Psy 1001—Introduction to Psychology (5)
- Soc 1001—Introduction to Sociology (4)
- 1 political science course (3xxx or above)
- 1 anthropology course (3xxx or above)

One of the following statistics options:

- Stat 1001—Introduction to Ideas of Statistics (4)
- Stat 3011 and 3012—Statistical Analysis (4,4)
- Stat 5021—Statistical Analysis (5)

One of the following research methods courses:

- FSoS 5205—Introduction to Family Research (4)
- Psy 5206—Research Methods in Social Psychology (4)
- Soc 3803—Sociological Methods III: Research Methods (5)
- Pol 3085—Introduction to Political Research (4) or approved equivalent course (consult your adviser)

*Integrative Seminar* (Six-quarter seminar beginning in fall of junior year)

- HE 3201—Seminar: Human Ecology (2) (fall quarter, junior year)
- HE 3202—Seminar: Research and Reflective Practice (1) (winter and spring quarters, junior year)
- HE 5201—Seminar: Research and Action for Social Change (1) (fall, winter, and spring quarters, senior year)

#### *Recommended but not required:*

- HE 1191—Career Planning Strategies (2)

### **Areas of Concentration** (45 credits minimum)

**Human Development**—Study of individuals across the life span in the context of families and communities. Students are encouraged to focus on a stage of the life cycle (e.g., aging, adolescence, infancy).

#### *Required Courses* (34 credits)

- DHA 1400—Introduction to Housing (4)
- DHA 3212—Cultural Diversity in Dress (4)
- FScN 3610—Community Nutrition (3)
- FSoS 3260—Family Resource Management (4)
- FSoS 5200—Family Systems (5)
- SW 5024—Multiple Perspectives on Aging (4)
- YoSt 3100—Introduction to Youth Work (3)



One of the following:

- CPsy 1301—Introductory Child Psychology (4)
- CPsy 5301—Advanced Child Development (4)

One of the following:

- PubH 5902—Maternal and Infant Nutrition (3)
- PubH 5932—Nutrition: Adults and Elderly (3)
- PubH 5933—Child and Adolescent Nutrition (3)

**Additional Courses** (11 credits minimum)

This is a suggested list only. Students are encouraged to explore the full range of University offerings in consultation with an adviser.

- CPsy 5302—Infancy (4)
- CPsy 5303—Adolescent Psychology (4)
- DHA 3463—Housing and Community (4)
- DHA 5212—Clothing and Human Behavior (4)
- DHA 5467—Housing and the Social Environment (4)
- FSoS 5001—Human Sexual Behavior (5)

- FSoS 5210—Family in World Perspective (4)
- FSoS 5218—Family Financial Management (4)
- FSoS 5251—Aging Families (4)
- FSoS 5252—Aging, Family, and Society (4)
- PubH 5380—Applied Human Nutrition (4)
- PubH 5606—Health of Infants and Young Children (3)
- PubH 5607—Adolescent Health: Issues and Challenges (3)
- PubH 5736—The Elderly: A High-Risk Population (3)
- PubH 5934—Administrative Skill Building (3)
- YoSt 5200—Youth Policy: Enhancing Healthy Development in Everyday Life (3)

**The Human Environment**—emphasizes the dynamic relationships between humans and their natural environment and humans and their near environment (food, clothing, and shelter.) Students explore quality of life issues such as housing alternatives, food choices, textile and apparel options, and natural and economic resources.

**Required Courses** (33 credits)

- DHA 1400—Introduction to Housing (4)
- DHA 1401—Residential Technology (4)
- DHA 3216—Textile Analysis (5)
- DHA 5216—The Textile and Apparel Consumer (4)
- EEB 3001—Introduction to Ecology (4)
- Econ 1101—Principles of Microeconomics (4)
- FScN 1020—Introduction to Microbiology (4)
- FScN 3472—Food Selection Principles (4)

**Additional Courses** (12 credits minimum)

This is a suggested list only. Students are encouraged to explore the full range of University offerings in consultation with an adviser.

- AgEc 3001—Applied Microeconomics: Consumers and Markets (4)
- AgEc 5580—Human Capital and Household Economics (3)
- DHA 5211—Issues and Trends in Textiles and Apparel (3)
- DHA 5482—The Family and Energy Issues (3)
- FScN 1102—Technology of Food Processing (4)
- FScN 5474—Food Marketing Economics (4)
- FScN 5643—World Food Problems (3)
- HSci 3331—Technology and American Culture (4)
- HSci 3332—Science and American Culture (4)
- LA 1024—Landscape Theory (4)
- LA 1401—The Designed Environment (4)

**Social Change**—Fosters understanding of how to empower persons to change the social, natural, and constructed environments to enhance the quality of everyday life. This concentration is given specificity by the student's choice of human ecology issues.

**Required Courses** (28 credits)

*Complex Organizations in Everyday Life*

- Soc 3411—Understanding Formal Organizations (4)

*Citizen Empowerment*

- Phil 3307—Social Justice and Community Service: Basic Political Values (4)
- Phil 3308—Social Justice and Community Service: Power and Democracy (4)
- Soc 1003—Social Problems (4)

*Everyday Life*

- FSoS 3260—Family Resource Management (4)
- GC 1355—Philosophy: Problems of Ethics (4)
- Soc 3214—Understanding Everyday Life (4)

## Programs

### **Additional Courses** (17 credits minimum)

This is a suggested list only. Students are encouraged to explore the full range of University offerings in consultation with an adviser. *Note:* Most courses are analytic and do not teach practice, i.e., how to help empower or bring about change.

#### *Empowerment*

- CACL 1303—Knowledge, Persuasion, and Power (4)
- FSoS 5260—Dynamics of Family Decision Making (4)
- HEED 5001—Political Pedagogy (3)
- Spch 5414—Authority and Power in Task-Oriented Communication (4)
- SW 3202—Interventions in Community and Social Policy (4)
- WoSt 3102—Feminist Thought and Theory (4)
- WoSt 5203—Women, Feminism, and Power (4)

#### *Change*

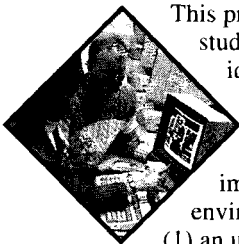
- CACL 5178—Political Discourse of Social Change (4)
- FScN 5643—World Food Problems (3)
- FSoS 5241—Legal and Economic Controversies in Family Life (4)
- FSoS 5255—Approaches to Family Policy (4)
- FSoS 5500—Racial and Ethnic Diversity in Families (4)
- PA 5001—Politics, Planning, and Decision Making (4)
- PA 5112—Organizational Design and Change (3)
- PA 5401—Social Policy (3)
- PA 5521—Development and Change (3)
- Soc 5301—Social Movements in a Changing Society (4)
- Spch 3411—Small Group Communication Theory (4)
- SW 5027—Peace and Justice as Societal Values (3)
- YoSt 5200—Youth Policy (3)
- YoSt 5232—Work with Youth—Group (3)

#### **Electives**

Electives to complete 185 credits required for graduation (may be taken S-N).

## Interior Design

*Department of Design, Housing, and Apparel*  
240 McNeal Hall  
1985 Buford Avenue  
St. Paul, MN 55108  
612/624-9700



This program develops a student's 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 functional and aesthetic needs, (5) an understanding of historical styles and contemporary theories, (6) technical

knowledge and communication skills, and (7) an awareness of business and professional ethics. The program is accredited by the Foundation for Interior Design Education Research (FIDER).

Upon graduation, students may work in residential or nonresidential design. Potential employers include interior design firms, architectural firms, health care institutions, or corporations.

If students temporarily drop out of the program for three or more consecutive quarters (excluding summer sessions), they must follow the program that is in existence at the time of their reenrollment.

### **Pre-Interior Design Admission Requirements**

Freshmen and transfer students are initially admitted as pre-interior design majors. A basic knowledge of drafting is required before enrolling in DHA 1621—Intermediate Drafting. See your academic adviser for more information.

#### **Freshmen**

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra or equivalent.
- AAR score of 110 or above.

#### **Transfer Students**

- Completion of high school preparation requirements if post-1987 high school graduate.
- Completion of high school intermediate algebra or equivalent.
- Overall GPA of at least 2.60.

### **Interior Design Requirements for Full Major Status**

A limited number of pre-interior design students who have met the specified requirements are admitted to the interior design program.

*After being admitted to CHE, pre-interior design students must meet the following criteria to achieve full major status in the interior design program:*

- Completion of 90 credits, including all 1000-level required courses
- Overall GPA of at least 2.60
- Overall GPA of at least 3.00 in these design courses: DHA 1300, 1323, 1328, 1621, 1641, and 1642



- Positive assessment of design work through portfolio review
- Contact your academic adviser for more information.

### Graduation Requirements

- Completion of all program and college requirements.
- 400-hour internship.
- Overall GPA of at least 2.60.
- Minimum grade of C in all interior design studio courses.

### Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of interior design majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

#### Entering freshmen academic year 1994-95

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following:

#### *Writing Skills Requirement:*

Three composition courses (freshman, intermediate, and advanced)

#### *Speech Communication Requirement:*

One public speaking course

#### **Entering freshmen academic year 1995-96**

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements listed on page 24 of this bulletin, entering freshmen must complete the following:

#### **Writing Skills Requirement:**

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

#### *Speech Communication Requirement:*

One public speaking course

Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

#### **Entering transfer students academic years 1994-95 and 1995-96**

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses. You may use required courses in your major program to meet your liberal education requirements.

### Program Requirements

All courses listed in this curriculum by department designator and number (e.g., DHA 1101) must be taken A-F. This also applies to course equivalents for listed courses.

#### **Professional Requirements in the Major**

##### *Preparatory Courses\**

Arch 3411—History of Architecture to 1750 (4)  
Arch 3412—History of Architecture Since 1750 (4)  
or equivalent courses

## Programs

Economics, two courses (*Note:* Mktg 3000 requires Econ 1101 and 1102 or equivalents as prerequisites)

History, one course in European or world history  
Physics, one course

Psychology, one introductory course

\*Preparatory courses may meet liberal education requirements. Consult your adviser.

### Professional Courses

DHA 1101—Introduction to the Designed Environment (3)

DHA 1300—Introduction to Design (3)

DHA 1323—Design Process: Drawing I (4)

DHA 1328—Design Process: Color I (4)

DHA 1401—Residential Technology (4)

DHA 1621—Intermediate Drafting (4)

DHA 1641—Interior Design Studio I (4)

DHA 1642—Interior Design Studio II (4)

DHA 3216—Textile Analysis (5)

DHA 3327—Design Process: Three-Dimensional Design (4)

DHA 3611—Interior Design Professional Practice (3)

DHA 3622—Interior Design Presentation and Detailing (4)

DHA 3623—Computer-Aided Design, Drafting System I (4)

DHA 3631—Interior Design Resources and Materials (3)

DHA 3632—Interior Building Technology (4)

DHA 3633—Lighting Design for Environmental Spaces (3)

DHA 3643—Interior Design Studio III (4)

DHA 5107—History of Decorative Arts: Textiles (3)

or DHA 5109—History of Decorative Arts: Ceramics, Metal, and Glass (3)

DHA 5112—History of European Furniture and Interiors (3)

DHA 5114—History of American Furniture and Interiors (3)

DHA 5115—20th-Century Interiors and Furnishings (3)

DHA 5612—Interior Design Research (2)

DHA 5645—Interior Design Studio V (4)

DHA 5646—Interior Design Studio VI (4)

DHA 5647—Interior Design Thesis (6)

Select one of the following:

DHA 3624—Computer-Aided Design, Drafting System II

DHA 5468—Housing Problems of the Family (5)

DHA 5481—Designed Environments for Aging (4)

DHA 5482—Family and Energy Issues (3)

DHA 5634—Interior Design Codes and Environmental Issues (3)

See adviser for other course options.

Select two from the following:

Acct 1050—Introduction to Financial Reporting (5)

or AgEc 1250—Principles of Accounting (5)

Mktg 3000—Principles of Marketing (4)

Mgmt 3001—Fundamentals of Management (4)

### Free Electives

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

## International Studies Minor

This minor allows students to integrate a quarter of study abroad with their chosen major field in CHE. This study abroad and the coursework pertaining to the language and culture of the chosen country/region give an international focus to the student's major field of study. Students planning to have an international studies minor must receive prior program approval.

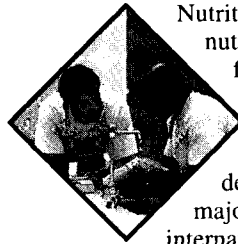
### Requirements

- Two predeparture courses, including one on international communication and one linking the human ecological framework with the student's international interests.
- One intercultural communication course upon return.
- Minimum of 10 weeks (one quarter) of study in the chosen country.
- 23 credits of the appropriate second language.
- 15 3xxx or 5xxx credits focusing on the chosen country/region.

Careful planning with the help of your academic adviser is necessary. Several courses must be taken before you leave for your study abroad experience while others must be completed after you return. Application materials and a complete list of required courses are available in 32 McNeal Hall.

## Nutrition

*Department of Food Science and Nutrition  
225 Food Science and Nutrition  
1334 Eckles Avenue  
St. Paul, MN 55108  
612/624-1290*



Nutrition explores how nutrients and the foods from which they are derived aid the body in health, growth, and development. With the major national and international concern for how

nutrition affects health and disease, there are many career opportunities for registered dietitians and nutritionists.

Nutrition and dietetics is for students planning to become registered dietitians by meeting American Dietetic Association requirements. These requirements include completion of an approved baccalaureate program, approved or accredited professional experience, and a national registration examination. Students may complete the degree program and apply for a post-baccalaureate dietetic internship or a preprofessional practice program. An alternative is to apply, before the junior year, to the University of Minnesota's Coordinated Program in Dietetics and to complete both the academic and professional experience requirements in a two-year program. Registered dietitians work in a wide variety of health care, community, educational, and corporate positions relating to food and health. Students expecting to apply to the Coordinated Program in Dietetics, an internship, or graduate school should maintain a GPA of at least 2.80 (a cumulative GPA of 3.00 or above is recommended).

Nutrition graduates choosing not to be registered dietitians may develop a wide variety of career opportunities based on their preparation in the sciences, liberal education, and nutrition.

The *nutrition science* option is for students planning to do graduate work in nutrition, related sciences, or professional programs such as medicine or dentistry. Students should be aware of the entrance requirements for the graduate or professional program of their choice and maintain a cumulative GPA of 3.00 or higher.

## Admission Requirements

### Freshmen

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra or equivalent.
- AAR score of 110 or above.

### Transfer Students

- Completion of high school preparation requirements if post-1987 high school graduate.
- High school intermediate algebra or equivalent.
- Overall GPA of at least 2.50.

## Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of nutrition majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

### Entering freshmen academic year 1994-95

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following:

#### *Writing Skills Requirement:*

Rhet 1101 (4)

or Comp 1011 or equivalent

Rhet 1151/1104 (4,1)

or Comp 1027 or equivalent

Rhet 3562 (4)

or 3xxx Comp course or equivalent

# Programs

## *Speech Communication Requirement:*

Rhet 1222 (4)

or Spch 1101 or equivalent public speaking course

## **Entering freshmen academic year 1995-96**

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements listed on page 24 of this bulletin, entering freshmen must complete the following:

## *Writing Skills Requirement:*

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

## *Speech Communication Requirement:*

Rhet 1222 (4)

or Spch 1101 or equivalent public speaking course

## **Entering transfer students academic years 1994-95 and 1995-96**

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

## **Program Requirements**

### **Computer Competency**

As a nutrition student you will use computer applications in your coursework and will be expected to have basic computer competency in word processing, spreadsheets, database management, and telecommunications. Computer competency will be assessed in the advising process and students lacking the needed skills may seek advice on courses required to learn those skills.

### **Professional Courses in the Major**

*Required Supporting Courses in Math and Sciences*  
(54-57 credits)

BioC 3021—Biochemistry (4)

Biol 1009—General Biology (5)

CBN 3001—Elementary Anatomy (4 or 5)

Chem 1051-1052—Chemical Principles I-II (4,4)

Chem 3301, 3305—Elementary Organic Chemistry I and Lab (4,2)

Chem 3302, 3306—Elementary Organic Chemistry II and Lab (4,2)

Math 1031—College Algebra and Probability (5)

LaMP 5172—Pathology for Allied Health Students (4)

or LaMP 5177—Pathology for Allied Health Students: General and System Pathology (4)

Phsl 3051—Human Physiology (5)

or Phsl 1001—Human Physiology: Introductory Survey for Allied Health Sciences (4)

VPB 3103—General Microbiology (5)

or MicB 5105—Biology of Microorganisms (5)

4-5 credits in statistics chosen from the following or in consultation with your adviser:

EPsy 5260—Introductory Statistical Methods (4)

PubH 5404—Introduction to Biostatistics and Statistical Decision (4)

PubH 5450—Biostatistics (4)

Soc 3801—Sociological Methods I: Descriptive Statistics (5)

Stat 1001—Introduction to Ideas of Statistics (4)

Stat 3011—Statistical Analyses (4)

Stat 3091—Introduction to Probability and Statistics (4)

Stat 5021—Statistical Analysis (5)

### *Required Professional Courses* (59-62 credits)

FScN 1612—Principles of Nutrition (4)

FScN 3102—Introduction to Food Science (4)

FScN 3112—Food Analysis (4)

FScN 3472—Food Selection Principles (4)

FScN 3610—Community Nutrition (3)

FScN 3612—Biological Aspects of Nutrition (4)

FScN 3730—Quantity Food Production Management [Lab] (3)

FScN 3732—Lecture in Quantity Food Production Management (2)

FScN 5100—General Seminar (1)

FScN 5612—Experimental Nutrition (2)

FScN 5620—Nutrition and Metabolism (5)

FScN 5665—Applied Clinical Nutrition I (3)

FScN 5666—Applied Clinical Nutrition II (3)

FScN 5667—Applied Clinical Nutrition III (3)

FScN 5750—Principles of Food Service Management (4)

Mgmt 3001—Fundamentals of Management (4)

Choose one of the following:

FScN 5110—Food Chemistry (4)

FScN 5120—Food Microbiology (5)

FScN 5360—Sensory Evaluation of Food Quality (4)

FScN 5643—World Food Problems (3)

3-4 credits in psychology of learning from the following:

EPsy 5114—Psychology of Student Learning (3)

EPsy 5115—Adult Learning and Educational Practice (4)

HSU 5011—The Teaching-Learning Process in the Health Care Setting (3)

## **Alternative Programs**

As an alternative, you may apply to one of the following programs.

### *Coordinated Program in Dietetics*

The basic curriculum is similar to that specified 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. A limited number of students are admitted into the program each year.

## Nutrition Science

### Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of nutrition majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

### Entering freshmen academic year 1994-95

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following:

#### Writing Skills Requirement:

The writing skills requirement is met by required major courses for students in the nutrition science majors.

#### Speech Communication Requirement:

The speech communication requirement is met by required coursework for nutrition science majors.

### Entering freshmen academic year 1995-96

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements listed on page 24 of this bulletin, entering freshmen must complete the following:

#### Writing Skills Requirement:

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

#### Speech Communication Requirement:

The speech communication requirement is met by required coursework for nutrition science majors.

### Entering transfer students academic years 1994-95 and 1995-96

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing the courses needed for completing those requirements.

### Professional Courses in the Major

#### Required Supporting Courses (90-96 credits)

- BioC 3021—Biochemistry (4)
  - BioC 5025—Biochemistry Laboratory (2)
  - Biol 1009—General Biology (5)
  - Biol 1106—General Zoology (5)
    - or Biol 3011—Animal Biology (4)
  - Biol 5003—Genetics (4)
    - or GCB 3022—Genetics (4)
  - Chem 1051-1052—Chemical Principles I-II (4,4)
  - Chem 3301, 3305—Elementary Organic Chemistry I and Lab (4,2)
  - Chem 3302, 3306—Elementary Organic Chemistry II and Lab (4,2)
  - Math 1142—Short Calculus (5)
    - or Math 1251-1252—One-Variable Differential and Integral Calculus I-II (4,4)
  - Phsl 3051—Human Physiology (5)
    - or Phsl 1001—Human Physiology: Introductory Survey for Allied Health Sciences (4)
    - or AnSci 3301—Systemic Physiology (6)
  - Phys 1104, 1107—General Physics (4,1)
  - Phys 1105, 1108—General Physics (4,1)
  - Phys 1106, 1109—General Physics (4,1)
  - Rhet 1101—Writing to Inform and Persuade (4)
    - or Comp 1011—Writing Practice (5)
  - Rhet 1104—Library Research Methods (1)
  - Rhet 1151—Writing in Your Major (4)
  - Rhet 1222—Public Speaking (4)
  - Rhet 3562—Writing in your Profession (4)
  - VPB 3103—General Microbiology (5)
    - or MicB 5105—Biology of Microorganisms (5)
- 4-5 credits in statistics chosen from the following or in consultation with adviser:

## Programs

- EPsy 5260—Introductory Statistical Methods (4)  
PubH 5404—Introduction to Biostatistics and Statistical Decision (4)  
PubH 5450—Biostatistics (4)  
Soc 3801—Sociological Methods I: Descriptive Statistics (5)  
Stat 1001—Introduction to Ideas of Statistics (4)  
Stat 3011—Statistical Analysis (4)  
Stat 3091—Introduction to Probability and Statistics (4)  
Stat 5021—Statistical Analysis (5)

### **Required Professional Courses** (33-34 credits)

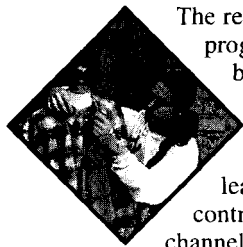
- FScN 1612—Principles of Nutrition (4)  
FScN 3102—Introduction to Food Science (4)  
FScN 3610—Community Nutrition (3)  
or FScN 5665—Applied Clinical Nutrition I (3)  
FScN 3612—Biological Aspects of Nutrition (4)  
FScN 5100—General Seminar (1)  
FScN 5110—Food Chemistry (4)  
or approved advanced chemistry course  
FScN 5612—Experimental Nutrition (2)  
FScN 5622—Macro-Nutrient Metabolism (4)  
FScN 5623—Vitamin and Mineral Metabolism (4)  
FScN 5624—Human Protein and Energy Utilization (4)

**Electives** to complete the 185 credits required for graduation with the bachelor of science degree.

*Note:* Students considering applying to medical school should check the social science and humanities requirements of the specific schools of interest. For example, the University of Minnesota Medical School requires 27 credits (non-specified courses) in social science and humanities. Thus, a nutrition science student would need to take 9 extra credits in these categories.

## Retail Merchandising

*Department of Design, Housing, and Apparel*  
240 McNeal Hall  
1985 Buford Avenue  
St. Paul, MN 555104  
612/624-9700



The retail merchandising program emphasizes business, retailing, and the study of apparel and home furnishings. Students learn about inventory control, distribution channels, personnel management, problem solving, and presentation.

Retail merchandising offers strong job opportunities. Graduates find jobs in department, specialty, and discount stores, and in direct marketing. Many graduates secure managerial-level positions with local and national retailers.

## Pre-Retail Merchandising Admission Requirements

Freshmen and transfer students are initially admitted as pre-retail merchandising majors.

### **Freshmen**

- Completion of high school preparation requirements.
- Completion of high school intermediate algebra or equivalent.
- AAR score of 110 or above.

### **Transfer Students**

- Completion of high school preparation requirements if post-1987 high school graduate.
- High school intermediate algebra or equivalent.
- Overall GPA of at least 2.50.

## Retail Merchandising Requirements for Full Major Status

After being admitted to CHE, pre-retail merchandising majors must meet the following criteria to achieve full major status in the retail merchandising program:

- Completion of DHA 1101, 1211, 3213, 3216, 3241.
- Completion of 300 hours of adviser-approved work experience.
- Overall GPA of at least 2.50.

## Graduation Requirements

- Completion of all program and college requirements.
- Overall GPA of at least 2.50.
- Completion of 185 credits.

## Liberal Education Requirements

The University of Minnesota is implementing a common set of liberal education requirements for all undergraduates on the Twin Cities campus. Liberal education courses provide students with a broad base of knowledge upon which they build an expertise in a major program area. The new requirements become effective fall quarter 1994 for all students beginning as freshmen on the Twin Cities campus. Transfer students continue to follow the liberal education requirements currently in place for their academic program and undergraduate college. The new requirements go into

effect for transfer students fall quarter 1996.

All students must complete liberal education requirements as a part of their baccalaureate education. Many of the major program courses required of retail merchandising majors also meet liberal education requirements outlined on page 24 of this bulletin. Please work closely with your academic adviser in choosing the courses needed to complete your liberal education requirements.

#### Entering freshmen academic year 1994-95

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the above requirements, entering freshmen must complete the following.

#### *Writing Skills Requirement:*

Rhet 1101 (4)  
 or Comp 1011 or equivalent  
 Rhet 1151/1104 (4,1)  
 or Comp 1027 or equivalent  
 Rhet 3562 (4)  
 or 3xxx Comp course or equivalent

#### *Speech Communication Requirement:*

Rhet 1222 (4)  
 or Spch 1101 or equivalent public speaking course

#### Entering freshmen academic year 1995-96

*Note:* The University admits freshmen fall and winter quarters only.

In addition to the liberal education requirements, listed on page 24 of this bulletin, entering freshmen must complete the following:

#### *Writing Skills Requirement:*

A new liberal education writing requirement will replace the current writing skills requirement. Please check with the admissions advisers in 32 McNeal Hall, (612) 624-1725, for up-to-date information.

#### *Speech Communication Requirement:*

Rhet 1222 (4)  
 or Spch 1101 or equivalent public speaking course

#### Entering transfer students academic years 1994-95 and 1995-96

Refer to page 25 of this bulletin for the liberal education requirements. Please work closely with your academic adviser in choosing your courses. Often you may use required courses in your major program to meet your liberal education requirements.

#### Professional Courses in the Major

##### Preparatory Courses\* (16 credits)

AgEc 1101 or Econ 1101—Principles of Microeconomics (4)  
 AgEc 1102 or Econ 1102—Principles of Macroeconomics (4)  
 Math 1031—College Algebra and Probability (4)  
 Phys 1001—The Physical World (4)  
 \*Preparatory courses may meet liberal education requirements. Consult your adviser.

##### Professional Core Courses (56 credits)

Three hundred hours of adviser-approved work experience are required before taking upper division courses in the program. Show appropriate documentation to your academic advisers before registering for upper division courses.

Acct 1050—Introduction to Financial Reporting (5)  
 DHA 1101—Introduction to the Designed Environment (3)  
 DHA 1211—Introduction to Retail Merchandising (4)  
 DHA 3241—Merchandising Principles (4)  
 DHA 5203—Field Experience in Retail Merchandising/Clothing Design (1-4)  
 DHA 5241—Retail Promotion (4)  
 DHA 5242—Managerial Decision Making (4)  
 Mgmt 3001—Fundamentals of Management (4)  
 Mgmt 3002—Psychology in Management (4)  
 Mgmt 3008—Entrepreneurship and the Smaller Enterprise (4)  
 Mktg 3000—Principles of Marketing (4)  
 Mktg 3040—Buyer Behavior (4)  
 OMS 1020—Data Analysis and Statistical Inference for Managers (4)  
 OMS 3000—Introduction to Operations Management (4)

#### Area of Emphasis

Students specialize in apparel or home furnishings.

##### Apparel Emphasis (61 credits)

###### Required

DHA 3212—Cultural Perspectives in Dress (4)  
 DHA 3213—Fashion Trend Analysis (4)

## Programs

- DHA 3214—Apparel Industries (4)
- DHA 3215—Apparel Analysis (4)
- DHA 3216—Textile Analysis (5)
- DHA 3217—Aesthetics of Clothing (4)
- DHA 5211—Issues and Trends in Textiles and Apparel (3)
- DHA 5216—Textile and Apparel Consumer (4)
- DHA 5217—International Trade in Textiles and Apparel (4)
- DHA 5254—Performance Evaluation: Fabrics and Garments (5)

A minimum of 20 additional credits selected from the following:

- DHA 1231—Clothing Design Studio I (4)
- DHA 1261—Clothing Design Studio II (4)
- DHA 1300—Introduction to Design (3)
- DHA 1323—Design Process: Drawing I (4)
- DHA 1325—Design Process: Two-Dimensional Design I (4)
- DHA 1328—Design Process: Color I (4)
- DHA 3117—History of Costume: Origins Through 18th Century (3)
- DHA 3211—Pattern Development I (4)
- DHA 3218—Pattern Development II (4)
- DHA 3263—Women's Textile Arts: An Historical Perspective (3)
- DHA 5101—Introduction to Design, Housing, and Apparel Research (4)
- DHA 5103—Field Study: National/International (1-15 cr, max 15 cr)
- DHA 5118—History of Costume: 19th and 20th Centuries (4)
- DHA 5212—Clothing and Human Behavior (4)
- DHA 5234—Clothing Design for Special Needs (4)
- DHA 5266—Ethnic Dress (3)
- HE 1191—Career Planning Strategies (2)
- IDSc 1010—Fundamentals of Information Development and Use (4)

Alternative courses may be taken with adviser approval.

### Home Furnishings Emphasis (62 credits)

#### Required

- Arch 3411—History of Architecture to 1750 (4)
- Arch 3412—History of Architecture Since 1750 (4)
- DHA 1300—Introduction to Design (3)
- DHA 3213—Fashion Trend Analysis (4)
- DHA 3216—Textile Analysis (5)
- DHA 3631—Interior Design Resources and Materials (3)
- DHA 5107—History of Decorative Arts: Textiles (3)
- DHA 5109—History of Decorative Arts: Ceramics, Metal, and Glass (3)
- DHA 5112—History of European Furniture and Interiors (3)
- DHA 5114—History of American Furniture and Interiors (3)
- DHA 5115—Twentieth Century Interiors and Furnishings (3)
- DHA 5211—Issues and Trends in Textiles and Apparel (3)
- DHA 5216—Textile and Apparel Consumer (4)
- DHA 5217—International Trade in Textiles and Apparel (4)

A minimum of 12 additional credits selected from:

- DHA 1323—Design Process: Drawing I (4)
- DHA 1325—Design Process: Two-Dimensional Design I (4)

- DHA 1328—Design Process: Color I (4)
- DHA 1331—Surface Fabric Design I (4)
- DHA 1401—Residential Technology (4)
- DHA 3328—Design Process: Color II (4)
- DHA 3334—Computer Applications to Design Problems (4)
- DHA 5101—Introduction to Design, Housing, and Apparel Research (4)
- DHA 5103—Field Study: National/International (1-15 cr, max 15 cr)
- HE 1191—Career Planning Strategies (2)
- IDSc 1010—Fundamentals of Information Development and Use (4)

Alternative courses may be taken with adviser approval.

### General Electives

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

## Youth Studies

*School of Social Work  
400 Ford Hall  
224 Church Street S.E.  
Minneapolis, MN 55455  
612/624-5888*

The School of Social Work offers youth studies courses for upper division and graduate students registered in any college of the University. Many courses may be taken for graduate credit and some are cross-listed with the College of Education. Consult the *Continuing Education and Extension Bulletin* for more information.







## Course Descriptions

# Course Descriptions

## Design (Dsgn)

See Design, Housing, and Apparel.

## Design, Housing, and Apparel (DHA)

(Department of Design, Housing, and Apparel)

**0620. INTRODUCTION TO DRAFTING.** (No cr) Architectural drafting practice and the use of drafting instruments. Line conventions, lettering, orthographic drawings, paraline drawing, architectural symbols, and vocabulary as related to interior design. (independent study only)

**1101. INTRODUCTION TO THE DESIGNED ENVIRONMENT.** (3 cr) Analysis of the interaction between people and the designed environment, both at the micro and macro levels.

**1211s (formerly TexC 1211, 1641). INTRODUCTION TO RETAIL MERCHANDISING.** (4 cr) Orientation to types of retailers; identification and research of the retail consumer; retail functions, including management and merchandise control.

**1231 (formerly Dsgn 1231, 1544). CLOTHING DESIGN STUDIO I.** (4 cr; prereq DHA major or premajor) Studio problems with emphasis on line, shape, and color for clothing design.

**1261 (formerly Dsgn 1261, 1543). CLOTHING DESIGN STUDIO II.** (4 cr) Human figure sketch and clothing illustration as a form of communication. Emphasis on color, proportion, cut, and fabric detail.

**1300 (formerly Dsgn 1300, 1501). INTRODUCTION TO DESIGN.** (3 cr) Study of basic design processes; the elements, principles, evaluation, and history of design in global perspective.

**1301f (formerly Dsgn 1301, 1201). INTRODUCTION TO VISUAL COMMUNICATION 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.

**1302 (formerly Dsgn 1302, 1202). DESIGN PROCESS: CREATIVITY.** (4 cr; prereq DHA major or premajor) Overview of creative processes, application to graphic design and creative problem solving. Emphasis on ideas, visual communication of concepts.

**1306 (formerly Dsgn 1306, 1206). SPATIAL LOGIC FOR DESIGNERS.** (4 cr; prereq DHA major or premajor) 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.

**1323 (formerly Dsgn 1323, 1523). DESIGN PROCESS: DRAWING I.** (4 cr; prereq DHA major or premajor) Problem solving in drawing with application of design elements and principles. Assignments done both in and out of design studio.

**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:

..... The comma, used in prerequisite listings, means "and."

† ..... 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 credit has been received for the course listed after this symbol.

† ..... Concurrent registration is required (or allowed) in the course listed after this symbol.

# ..... Registration Override Permit, completed and signed by the instructor, is required for registration.

Δ ..... 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). Use as a guide only. Contact the department offering the course for updates.

A prerequisite course listed by number only (e.g., prereq 5246) is in the same department as the course being described.

## DHA Course Conversion Chart I

The Department of Design, Housing, and Apparel has changed course designators and numbers.

New designator and number	Former designators and numbers	New designator and number	Former designators and numbers
DHA 1101	DHA 1001	DHA 5203	TexC 5003 TexC 5203
DHA 1211	TexC 1641 TexC 1211	DHA 5211	TexC 5622 TexC 5211
DHA 1231	Dsgn 1544 Dsgn 1231	DHA 5212	TexC 5661 TexC 5212
DHA 1261	Dsgn 1543 Dsgn 1261	DHA 5213	TexC 5621 TexC 5213
DHA 1300	Dsgn 1501 Dsgn 1300	DHA 5214	TexC 5628 TexC 5214
DHA 1301	Dsgn 1201 Dsgn 1301	DHA 5216	TexC 5662 TexC 5216
DHA 1302	Dsgn 1202 Dsgn 1302	DHA 5217	TexC 5685 TexC 5217
DHA 1306	Dsgn 1206 Dsgn 1306	DHA 5218	TexC 3221
DHA 1323	Dsgn 1523 Dsgn 1323	DHA 5231	Dsgn 5541 Dsgn 5231
DHA 1325	Dsgn 1525 Dsgn 1325	DHA 5232	Dsgn 5544 Dsgn 5232
DHA 1328	Dsgn 1528 Dsgn 1328	DHA 5241	TexC 3646 TexC 5241
DHA 1331	Dsgn 1531 Dsgn 1331	DHA 5252	TexC 5624 TexC 5252
DHA 1400	Hsg 1851 Hsg 1400	DHA 5253	TexC 5626 TexC 5253
DHA 1401	Hsg 1801 Hsg 1401	DHA 5254	TexC 5627 TexC 5254
DHA 1621	Dsgn 1550 Dsgn 1621	DHA 5261	TexC 5600 TexC 5261
DHA 1641	Dsgn 1554 Dsgn 1641	DHA 5262	TexC 5603 TexC 5262
DHA 1642	Dsgn 1555 Dsgn 1642	DHA 5263	TexC 5623 TexC 5263
DHA 3117	Dsgn 3517 Dsgn 3117	DHA 5266	TexC 5688 TexC 5266
DHA 3211	TexC 1602 TexC 3211	DHA 5289	Dsgn 5589 Dsgn 5289
DHA 3212	TexC 3661 TexC 3212	DHA 5303	Dsgn 3584 Dsgn 5303
DHA 3213	TexC 3664 TexC 3213	DHA 5327	Dsgn 5527 Dsgn 5327
DHA 3214	TexC 1643 TexC 3214	DHA 5328	Dsgn 5528 Dsgn 5328
DHA 3215	TexC 3603 TexC 3215	DHA 5331	Dsgn 5531 Dsgn 5331
DHA 3216	TexC 3621 TexC 3216	DHA 5332	Dsgn 5532 Dsgn 5332
DHA 3217	TexC 3662 TexC 3217	DHA 5334	Dsgn 5534 Dsgn 5334
DHA 3218	TexC 3218	DHA 5337	Dsgn 5537 Dsgn 5337
DHA 3232	Dsgn 3541 Dsgn 3232	DHA 5380	Dsgn 5585 Dsgn 5380
DHA 3241	TexC 3643 TexC 3241	DHA 5403	Hsg 3880 Hsg 5403
DHA 3261	Dsgn 3543 Dsgn 3261	DHA 5461	Hsg 5861 Hsg 5461
DHA 3262	TexC 3601 TexC 3262	DHA 5463	Hsg 5863 Hsg 5463
DHA 3263	TexC 3663 TexC 3263	DHA 5465	Hsg 5865 Hsg 5465
DHA 3301	Dsgn 3356 Dsgn 3301	DHA 5466	Hsg 5866 Hsg 5466
DHA 3323	Dsgn 3523 Dsgn 3323	DHA 5467	Hsg 5867 Hsg 5467
DHA 3325	Dsgn 3525 Dsgn 3325	DHA 5468	Hsg 5868 Hsg 5468
DHA 3327	Dsgn 3527 Dsgn 3327	DHA 5469	Hsg 5869 Hsg 5469
DHA 3328	Dsgn 3528 Dsgn 3328	DHA 5480	Hsg 5888 Hsg 5480
DHA 3331	Dsgn 3531 Dsgn 3331	DHA 5481	Hsg 5881 Hsg 5481
DHA 3332	Dsgn 3532 Dsgn 3332	DHA 5482	Hsg 5801 Hsg 5482
DHA 3334	Dsgn 3534 Dsgn 3334	DHA 5612	Dsgn 5575 Dsgn 5612
DHA 3335	Dsgn 3535 Dsgn 3338	DHA 5644	Dsgn 5553 Dsgn 5644
DHA 3337	Dsgn 3537 Dsgn 3337	DHA 5645	Dsgn 5552 Dsgn 5645
DHA 3350	Dsgn 3355 Dsgn 3350	DHA 5646	Dsgn 5554 Dsgn 5646
DHA 3351	Dsgn 3251 Dsgn 3351	DHA 5647	Dsgn 5555 Dsgn 5647
DHA 3352	Dsgn 3252 Dsgn 3352	DHA 5680	Dsgn 5586 Dsgn 5680
DHA 3353	Dsgn 3253 Dsgn 3353	DHA 8170	TexC 8680
DHA 3371	Dsgn 3571 Dsgn 3371	DHA 8176	Dsgn 8576
DHA 3380	Dsgn 3280 Dsgn 3380	DHA 8181	TexC 8681
DHA 3382	Dsgn 3582 Dsgn 3382	DHA 8262	TexC 8662
DHA 3463	Hsg 3863 Hsg 3463	DHA 8263	TexC 8663
DHA 3470	Hsg 3870 Hsg 3470	DHA 8264	TexC 8664
DHA 3611	Dsgn 3558 Dsgn 3611	DHA 8266	TexC 8666
DHA 3622	Dsgn 3550 Dsgn 3622	DHA 8267	TexC 8667
DHA 3623	Dsgn 3552 Dsgn 3623	DHA 8268	TexC 8668
DHA 3624	Dsgn 3556 Dsgn 3624	DHA 8280	TexC 8625
DHA 3631	Dsgn 3557 Dsgn 3631	DHA 8290	TexC 8621
DHA 3632	Dsgn 3554 Dsgn 3632	DHA 8323	Dsgn 8523
DHA 3633	Dsgn 3548 Dsgn 3633	DHA 8325	Dsgn 8525
DHA 3643	Dsgn 3553 Dsgn 3643	DHA 8328	Dsgn 8528
DHA 5107	Dsgn 5507 Dsgn 5107	DHA 8380	Dsgn 8588
DHA 5109	Dsgn 5509 Dsgn 5109	DHA 8390	Dsgn 8584
DHA 5112	Dsgn 5512 Dsgn 5112	DHA 8480	Hsg 8880
DHA 5114	Dsgn 5514 Dsgn 5114	DHA 8490	Hsg 8490
DHA 5115	Dsgn 5515 Dsgn 5115	DHA 8676	Dsgn 8556
DHA 5118	Dsgn 5518 Dsgn 5118	DHA 8680	Dsgn 8586

# Course Descriptions

**1325f (formerly Dsgn 1325, 1525). DESIGN PROCESS: TWO-DIMENSIONAL DESIGN I.** (4 cr; prereq DHA major or premajor)  
Experiments with principles of two-dimensional design.

**1328 (formerly Dsgn 1328, 1528). DESIGN PROCESS: COLOR.** (4 cr; prereq 1300, 1323 or 1325, DHA major or premajor)  
Color concepts and their applications to design.

**1331 (formerly Dsgn 1331, 1531). SURFACE FABRIC DESIGN I.** (4 cr; prereq 1300, 1323, 1325 or equiv, DHA major or premajor)  
Exploration of surface pattern and composition with varied media and materials: dyeing, resist, batik, stencil, block printing, and others.

**1334. INTRODUCTION TO COMPUTER APPLICATIONS TO DESIGN.** (2 cr; prereq predsgn comm student or #)  
Macintosh computer and basic programs used in visual communications, including desktop publishing, drawing, file management, and options for output.

**1400 (formerly Hsg 1400, 1851). INTRODUCTION TO HOUSING.** (4 cr)  
Survey of family housing in relation to needs, processes, and alternatives: buying vs. renting; policy, economic, and other variables; and constraints affecting housing decisions.

**1401 (formerly Hsg 1401, 1801). RESIDENTIAL TECHNOLOGY.** (4 cr; prereq soph or #; Phys 1001 or 1041)  
Survey of equipment and technological systems in a residential environment. Emphasis on consumption and conservation of natural resources and energy sources and human considerations in kitchen planning and appliance design. Lecture, discussion, lab.

**1621 (formerly Dsgn 1621, 1550). INTERMEDIATE DRAFTING.** (4 cr; prereq demonstrated proficiency in basic drafting techniques)  
Intermediate level drafting instruction in paraline drawings, perspective drawing, and architectural dimensioning.

**1641 (formerly Dsgn 1641, 1554). INTERIOR DESIGN STUDIO I.** (4 cr; prereq 1300, 1323, 1328, 1621, DHA major or premajor)  
Application of design elements and principles to interior design problems, including two-dimensional projects, scale models, and three-dimensional design experiments in the space lab.

**1642 (formerly Dsgn 1642, 1555). INTERIOR DESIGN STUDIO II.** (4 cr; prereq 1641, DHA major or premajor)  
Problems in designing for interior space needs with emphasis on behavioral concerns related to interiors.

**3117 (formerly Dsgn 3117, 3517). HISTORY OF COSTUME: ORIGINS THROUGH 18TH CENTURY.** (3 cr; prereq general art history course)  
Emphasis on European costume.

**3170. SPECIAL TOPICS IN DHA.** (1-4 cr; prereq depends on specific topic, check with dept)  
In-depth investigation of a single specific topic, announced in advance.

**3211 (formerly TexC 3211, 1602). PATTERN DEVELOPMENT I.** (4 cr)  
Relationship of the 3-dimensional body to the 2-dimensional pattern shape. Basic flat pattern principles, sizing and grading related to the body and pattern.

**3212. CULTURAL PERSPECTIVES IN DRESS.** (4 cr; prereq 1101)  
Understanding the function of dress in worldwide cultures. Environmental, physical, and social factors related to design of dress.

**3213 (formerly TexC 3213, 3664). FASHION TREND ANALYSIS.** (4 cr)  
Factors that influence the acceptance or rejection of apparel and other textile products at the consumer level. Analysis of current trends and future projections.

**3214s (formerly TexC 3214, 1643). APPAREL INDUSTRIES.** (4 cr; prereq AgEc 1101 or Econ 1101)  
Production processes and interdependence of textile and related industries. Influence of current national and international trends on consumer demands as reflected in product development, merchandising, marketing, and distribution.

**3215f (formerly TexC 3215, 3603). APPAREL ANALYSIS I.** (4 cr; prereq 3214, 3216)  
Physical characteristics of components related to function in total garment. Method of analysis includes visual inspection of ready-to-wear garment quality.

**3216 (formerly TexC 3216, 3621). TEXTILE ANALYSIS.** (5 cr; prereq Phys 1001)  
Physical, chemical, and biological characteristics of fiber, yarn, and fabric structures and finishes; interrelationship with choice, maintenance, and performance of textiles.

**3217 (formerly TexC 3217, 3662). AESTHETICS OF CLOTHING.** (4 cr; prereq 1101)  
Perception of design elements and artistic principles for clothing applied in specific laboratory problems.

**3218. PATTERN DEVELOPMENT II.** (4 cr; prereq 3211)  
Manipulation of basic pattern blocks to form a variety of garment and product structures. Application of sizing and grading systems to selected designs, computer manipulation of patterns.

**3232 (formerly Dsgn 3232, 3541). CLOTHING DESIGN STUDIO III.** (4 cr; prereq 3211)  
Studio problems in clothing design. Emphasis on children's wear design.

**3241 (formerly TexC 3241, 3643). MERCHANDISING PRINCIPLES.** (4 cr; prereq 1211, Math 1031)  
Principles and mathematics of merchandise inventory control; cash discounts, dating, stock turnover, open-to-buy, markup and markdown.

**DHA Course Conversion Chart II**

The Department of Design, Housing, and Apparel has changed course designators and numbers.

Former designator & number	New designator & number	Former designator & number	New designator & number	Former designator & number	New designator & number	Former designator & number	New designator & number
Dsgn 1201	DHA 1301	Dsgn 3537	DHA 3337	Dsgn 5585	DHA 5380	TexC 3214	DHA 3214
Dsgn 1202	DHA 1302	Dsgn 3541	DHA 3232	Dsgn 5586	DHA 5680	TexC 3215	DHA 3215
Dsgn 1206	DHA 1306	Dsgn 3543	DHA 3261	Dsgn 5589	DHA 5289	TexC 3216	DHA 3216
Dsgn 1300	DHA 1300	Dsgn 3548	DHA 3633	Dsgn 5612	DHA 5612	TexC 3217	DHA 3217
Dsgn 1301	DHA 1301	Dsgn 3550	DHA 3622	Dsgn 5644	DHA 5644	TexC 3221	DHA 3218
Dsgn 1302	DHA 1302	Dsgn 3552	DHA 3623	Dsgn 5645	DHA 5645	TexC 3241	DHA 3241
Dsgn 1306	DHA 1306	Dsgn 3553	DHA 3643	Dsgn 5646	DHA 5646	TexC 3262	DHA 3262
Dsgn 1323	DHA 1323	Dsgn 3554	DHA 3632	Dsgn 5647	DHA 5647	TexC 3263	DHA 3263
Dsgn 1325	DHA 1325	Dsgn 3556	DHA 3624	Dsgn 5680	DHA 5680	TexC 3601	DHA 3262
Dsgn 1328	DHA 1328	Dsgn 3557	DHA 3631	Dsgn 8523	DHA 8323	TexC 3603	DHA 3215
Dsgn 1331	DHA 1331	Dsgn 3558	DHA 3611	Dsgn 8525	DHA 8325	TexC 3621	DHA 3216
Dsgn 1501	DHA 1300	Dsgn 3571	DHA 3371	Dsgn 8528	DHA 8328	TexC 3643	DHA 3241
Dsgn 1523	DHA 1323	Dsgn 3582	DHA 3382	Dsgn 8556	DHA 8656	TexC 3646	DHA 5241
Dsgn 1525	DHA 1325	Dsgn 3584	DHA 5303	Dsgn 8576	DHA 8176	TexC 3661	DHA 3212
Dsgn 1528	DHA 1328	Dsgn 3611	DHA 3611	Dsgn 8584	DHA 8390	TexC 3662	DHA 3217
Dsgn 1531	DHA 1331	Dsgn 3622	DHA 3622	Dsgn 8586	DHA 8680	TexC 3663	DHA 3263
Dsgn 1543	DHA 1261	Dsgn 3623	DHA 3623	Dsgn 8588	DHA 8380	TexC 3664	DHA 3213
Dsgn 1544	DHA 1231	Dsgn 3624	DHA 3624	DHA 1001	DHA 1101	TexC 5003	DHA 5203
Dsgn 1550	DHA 1621	Dsgn 3631	DHA 3631	Hsg 1400	DHA 1400	TexC 5203	DHA 5203
Dsgn 1554	DHA 1641	Dsgn 3632	DHA 3632	Hsg 1401	DHA 1401	TexC 5211	DHA 5211
Dsgn 1555	DHA 1642	Dsgn 3633	DHA 3633	Hsg 1801	DHA 1401	TexC 5212	DHA 5212
Dsgn 1621	DHA 1621	Dsgn 3643	DHA 3643	Hsg 1851	DHA 1400	TexC 5213	DHA 5213
Dsgn 1641	DHA 1641	Dsgn 5107	DHA 5107	Hsg 3463	DHA 3463	TexC 5214	DHA 5214
Dsgn 1642	DHA 1642	Dsgn 5109	DHA 5109	Hsg 3470	DHA 3470	TexC 5216	DHA 5216
Dsgn 3117	DHA 3118	Dsgn 5112	DHA 5112	Hsg 3863	DHA 3463	TexC 5217	DHA 5217
Dsgn 3232	DHA 3232	Dsgn 5114	DHA 5114	Hsg 3870	DHA 3470	TexC 5252	DHA 5252
Dsgn 3251	DHA 3351	Dsgn 5115	DHA 5115	Hsg 3880	DHA 5403	TexC 5253	DHA 5253
Dsgn 3252	DHA 3352	Dsgn 5118	DHA 5118	Hsg 5403	DHA 5403	TexC 5254	DHA 5254
Dsgn 3253	DHA 3353	Dsgn 5231	DHA 5231	Hsg 5461	DHA 5461	TexC 5261	DHA 5261
Dsgn 3261	DHA 3261	Dsgn 5232	DHA 5232	Hsg 5463	DHA 5463	TexC 5262	DHA 5262
Dsgn 3280	DHA 3380	Dsgn 5289	DHA 5289	Hsg 5465	DHA 5465	TexC 5263	DHA 5263
Dsgn 3301	DHA 3301	Dsgn 5303	DHA 5303	Hsg 5466	DHA 5466	TexC 5266	DHA 5266
Dsgn 3323	DHA 3323	Dsgn 5327	DHA 5327	Hsg 5467	DHA 5467	TexC 5600	DHA 5261
Dsgn 3325	DHA 3325	Dsgn 5328	DHA 5328	Hsg 5468	DHA 5468	TexC 5603	DHA 5262
Dsgn 3327	DHA 3327	Dsgn 5331	DHA 5331	Hsg 5469	DHA 5469	TexC 5621	DHA 5213
Dsgn 3328	DHA 3328	Dsgn 5332	DHA 5332	Hsg 5480	DHA 5480	TexC 5622	DHA 5211
Dsgn 3331	DHA 3331	Dsgn 5334	DHA 5334	Hsg 5481	DHA 5481	TexC 5623	DHA 5263
Dsgn 3332	DHA 3332	Dsgn 5337	DHA 5337	Hsg 5482	DHA 5482	TexC 5624	DHA 5252
Dsgn 3334	DHA 3334	Dsgn 5380	DHA 5380	Hsg 5485	DHA 5485	TexC 5626	DHA 5253
Dsgn 3337	DHA 3337	Dsgn 5507	DHA 5107	Hsg 5801	DHA 5482	TexC 5627	DHA 5254
Dsgn 3350	DHA 3350	Dsgn 5509	DHA 5109	Hsg 5861	DHA 5461	TexC 5628	DHA 5214
Dsgn 3351	DHA 3351	Dsgn 5512	DHA 5112	Hsg 5863	DHA 5463	TexC 5661	DHA 5212
Dsgn 3352	DHA 3352	Dsgn 5514	DHA 5114	Hsg 5865	DHA 5465	TexC 5662	DHA 5216
Dsgn 3353	DHA 3353	Dsgn 5515	DHA 5115	Hsg 5866	DHA 5466	TexC 5685	DHA 5217
Dsgn 3355	DHA 3350	Dsgn 5518	DHA 5118	Hsg 5867	DHA 5467	TexC 5688	DHA 5266
Dsgn 3356	DHA 3301	Dsgn 5527	DHA 5327	Hsg 5868	DHA 5468	TexC 8621	DHA 8290
Dsgn 3371	DHA 3371	Dsgn 5528	DHA 5328	Hsg 5869	DHA 5469	TexC 8625	DHA 8280
Dsgn 3380	DHA 3380	Dsgn 5531	DHA 5331	Hsg 5881	DHA 5481	TexC 8662	DHA 8262
Dsgn 3382	DHA 3382	Dsgn 5532	DHA 5332	Hsg 5888	DHA 5480	TexC 8663	DHA 8263
Dsgn 3517	DHA 3117	Dsgn 5534	DHA 5334	Hsg 8490	DHA 8490	TexC 8664	DHA 8264
Dsgn 3523	DHA 3323	Dsgn 5537	DHA 5337	Hsg 8880	DHA 8480	TexC 8666	DHA 8266
Dsgn 3525	DHA 3325	Dsgn 5541	DHA 5231	Hsg 8890	DHA 8490	TexC 8667	DHA 8267
Dsgn 3527	DHA 3327	Dsgn 5544	DHA 5232	TexC 1602	DHA 3211	TexC 8668	DHA 8268
Dsgn 3526	DHA 3328	Dsgn 5552	DHA 5645	TexC 1641	DHA 1211	TexC 8680	DHA 8170
Dsgn 3531	DHA 3331	Dsgn 5553	DHA 5644	TexC 1643	DHA 3214	TexC 8681	DHA 8181
Dsgn 3532	DHA 3332	Dsgn 5554	DHA 5646	TexC 3211	DHA 3211		
Dsgn 3534	DHA 3334	Dsgn 5555	DHA 5647	TexC 3212	DHA 3212		
Dsgn 3535	DHA 3335	Dsgn 5575	DHA 5612	TexC 3213	DHA 3213		

# Course Descriptions

**3261 (formerly Dsgn 3261, 3543). FASHION ILLUSTRATION II.** (4 cr; prereq 1261)  
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.

**3262f (formerly TexC 3262, 3601). TAILORING.** (4 cr; prereq demonstrated proficiency in clothing construction or #)  
Principles of structuring tailored garments. Analysis of hand, machine, and fusing methods.

**3263 (formerly TexC 3263, 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.

**3301 (formerly Dsgn 3301, 3356). PRODUCTION FOR THE GRAPHIC DESIGNER.** (4 cr; prereq pass portfolio review for degree program)  
Investigation of processes and techniques for production of print communication. Fundamentals of keyline, mechanical art production, specification for printing industry.

**3323 (formerly Dsgn 3323, 3523). DESIGN PROCESS: DRAWING II.** (4 cr; prereq 1323, DHA major, pass portfolio review or Δ)  
Advanced problem solving in drawing with application of design elements and principles. Assignments done both in and out of studio.

**3325 (formerly Dsgn 3325, 3525). DESIGN PROCESS: TWO-DIMENSIONAL DESIGN II.** (4 cr; prereq 1325, DHA major, pass portfolio review or Δ)  
Experiments with principles of two-dimensional design.

**3327 (formerly Dsgn 3327, 3527). DESIGN PROCESS: THREE-DIMENSIONAL DESIGN.** (4 cr; prereq 1323, 1325, 1328, DHA major, pass Dsgn Comm or Int Dsgn portfolio review, or Δ)  
Study and application of principles of three-dimensional design.

**3328 (formerly Dsgn 3328, 3528). DESIGN PROCESS: COLOR II.** (4 cr; prereq 1323, 1328, DHA major, pass Dsgn Comm portfolio review or Δ)  
Continued study of color concepts and their application to design.

**3331 (formerly Dsgn 3331, 3531). SURFACE FABRIC DESIGN II.** (4 cr; prereq 1331, DHA major, pass Dsgn Comm portfolio review or Δ)  
Selection from printed, dyed, woven, or non-woven textiles.

**3332. (formerly Dsgn 3332, 3532). FIBER STRUCTURE: WEAVING.** (4 cr; prereq 1325, 1328 or #)  
Beginning loom techniques. Studio problems.

**3334 (formerly Dsgn 3334, 3534). COMPUTER APPLICATION TO DESIGN PROBLEMS.** (4 cr; prereq 1323, 1325, 1328)  
Solutions to the design process using Macintosh computers. Students gain experience in microcomputers, peripherals, and software.

**3335 (formerly Dsgn 3335, 3535). DESIGN PROCESS: MATERIALS.** (4 cr; prereq 1323, 1325, 1328 or #, Δ)  
Design process to convey visual concepts explored through a series of units in selected materials.

**3337 (formerly Dsgn 3337, 3537). FIBER STRUCTURE DESIGN I.** (4 cr; prereq pass Dsgn Comm portfolio review, demonstrated proficiency in sewing)  
Individual designing with two- and three-dimensional forms (non-loomed techniques).

**3350 (formerly Dsgn 3350, 3355). TYPOGRAPHIC DESIGN.** (4 cr; \$3355; pass Dsgn Comm portfolio review for degree program or Δ)  
Theory and application of principles of typographic composition. Emphasis on history of typography, type faces and letter forms, typesetting methods, terminology, type specification, copyfitting.

**3351 (formerly Dsgn 3351, 3251). GRAPHIC DESIGN I.** (4 cr; prereq 3301, 3350 or #)  
Layout techniques, materials, structure, color theory. Applications of type style and copyfitting.

**3352 (formerly Dsgn 3352, 3252). GRAPHIC DESIGN II.** (4 cr; prereq 3351 or #)  
Continued development of professional skills in layout and design for advertising. Photographic techniques, color separation, and other printing/production techniques.

**3353 (formerly Dsgn 3353, 3253). GRAPHIC DESIGN III.** (4 cr; prereq 3352)  
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.

**3371 (formerly Dsgn 3371, 3571). PROFESSIONAL ISSUES IN DESIGN COMMUNICATION.** (2 cr; prereq completion of 60 cr in program requirements, \$5303; S-N only)  
Discussion of issues in the field, possible goals, and professionalism.

**3380 (formerly Dsgn 3380, 3280). DESIGN PORTFOLIO.** (2 cr; prereq 20 cr of 32xx and/or 33xx and/or 35xx courses, pass Dsgn Comm portfolio review; S-N only)  
Compilation of individual portfolios; individual and group critiques. Preparation of slides.

**3382 (formerly Dsgn 3382, 3582). FIELD EXPERIENCE IN EXHIBITION DESIGN.** (3 cr; prereq completion of at least one-half of professional sequence, #; S-N only)  
Minnesota State Fair and other exhibitions.

**3463 (formerly Hsg 3463, 3863). HOUSING AND COMMUNITY.** (4 cr; prereq 1400 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.

**3470 (formerly Hsg 3470, 3870). PROFESSIONAL SEMINAR IN HOUSING.** (1 cr; prereq 3463; S-N only)

Discussion of professionalism and problems in the field, job opportunities, and assembly of credentials.

**3611 (formerly Dsgn 3611, 3558). INTERIOR DESIGN PROFESSIONAL PRACTICE.** (3 cr; prereq pass Int Dsgn portfolio review)

Professional ethics and issues, credentials, and business practices.

**3622 (formerly Dsgn 3622, 3550). INTERIOR DESIGN PRESENTATION AND DETAILING.** (4 cr; pass Int Dsgn portfolio review)

Various visual presentation media emphasizing techniques that aid in the communication and visualization of design process, ideas, and solutions. Detailing of interior structures, furnishings, and designs.

**3623 (formerly Dsgn 3623, 3552). COMPUTER-AIDED DESIGN, DRAFTING SYSTEM I.** (4 cr; prereq 1621 or #)

Applying 2-dimensional computer-aided design in the design process as it relates to interior design. AutoCADD software used on an IBM PC.

**3624 (formerly Dsgn 3624, 3556). COMPUTER-AIDED DESIGN, DRAFTING SYSTEM II.** (4 cr; prereq 3623)

Application of design principles using advanced 2-D and 3-D computer-aided design and application to the interior design profession using AutoCADD on the IBM PC. (CEE only)

**3631 (formerly Dsgn 3631, 3557). INTERIOR DESIGN RESOURCES AND MATERIALS.** (3 cr; prereq pass Int Dsgn portfolio review, 3621 or #)

Resources and materials used in interiors and their functional and aesthetic relationship to interior design. Includes life safety issues.

**3632 (formerly Dsgn 3632, 3554). INTERIOR BUILDING TECHNOLOGY.** (4 cr; prereq 3622 for ID major; 1401, 1621 or Δ for others)

Methods of building construction and principles of structure theory. Emphasis on interior architectural components and systems.

**3633 (formerly Dsgn 3633, 3548). LIGHTING DESIGN FOR ENVIRONMENTAL SPACES.** (3 cr; prereq pass Int Dsgn portfolio review or #)

Examination of types and uses of lighting, its relationship to color and energy conservation. Evaluation of light quantity and quality for residential and non-residential spaces.

**3643 (formerly Dsgn 3643, 3553). INTERIOR DESIGN STUDIO III.** (4 cr; prereq 3622 or #, Δ)

Intermediate interior design problems related to nonresidential spaces.

**5101. INTRODUCTION TO DHA RESEARCH.** (4 cr; prereq grad or #)

Research and scientific inquiry with examples from design, housing, and apparel.

**5103. FIELD STUDY: NATIONAL/INTERNATIONAL.** (1-15 cr [max 15 cr]; prereq #)

Faculty-directed field study in a national or international setting.

**5105. HISTORY OF VISUAL COMMUNICATION.** (4 cr; prereq intro art history course)

Historical analysis of visual communication with emphasis on technological, cultural, and aesthetic influences on graphic design.

**5107 (formerly Dsgn 5107, 5507). HISTORY OF DECORATIVE ARTS: TEXTILES.** (3 cr; prereq Arch 3411, Arch 3412 or ArtH 1002 or #)

Textiles from early civilization to the 20th century. Design, materials, and techniques.

**5109 (formerly Dsgn 5109, 5509). HISTORY OF DECORATIVE ARTS: CERAMICS, METAL, AND GLASS.** (3 cr; prereq Arch 3411, Arch 3412 or ArtH 1002 or #)

Ceramics, metal, and glass from selected historical periods in a global context.

**5112 (formerly Dsgn 5112, 5512). HISTORY OF EUROPEAN FURNITURE AND INTERIORS.** (3 cr; prereq Arch 3411, 3412 or #)

Furniture and interiors from ancient civilizations through the 19th century.

**5114 (formerly Dsgn 5114, 5514). HISTORY OF AMERICAN FURNITURE AND INTERIORS.** (3 cr; prereq 5112 or #)

Styles of American furnishings and interiors from the 17th to the 20th century.

**5115 (formerly Dsgn 5115, 5515). TWENTIETH-CENTURY INTERIORS AND FURNISHINGS.** (3 cr; prereq 5114 or #)

In-depth study of 20th-century design of interiors and furnishings from Victorian to the present time.

**5118 (formerly Dsgn 5118, 5518). HISTORY OF COSTUME: 19TH AND 20TH CENTURIES.** (4 cr; prereq 3117 or #)

Emphasis on American costume. Study of historic costumes from the Goldstein Gallery's costume collection.

**5170. SPECIAL TOPICS IN DHA.** (1-4 cr; prereq depends on specific topic, check with dept)

In-depth investigation of a single specific topic, announced in advance.

## Course Descriptions

**5203 (formerly TexC 5203, 5003). FIELD EXPERIENCE IN RETAIL MERCHANDISING AND CLOTHING DESIGN.** (1-4 cr; prereq completion of at least one-half of professional sequence and plan to be submitted and approved in advance by adviser and employer, #)

Supervised work experience relating activity in business, industry, or government to the student's area of study. Written consent of faculty supervisor before registration and integrative paper required.

**5211 (formerly TexC 5211, 5622). ISSUES AND TRENDS IN TEXTILE AND APPAREL.** (3 cr)

Topics related to the study of textiles and apparel. May include needs of the textile consumer; protection from deception and hazard; analysis of local, state, and federal legislation as well as voluntary standards; change mechanisms; business practices; and professional ethics.

**5212 (formerly TexC 5212, 5661). CLOTHING AND HUMAN BEHAVIOR.** (4 cr; prereq jr or sr 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.

**5213 (formerly TexC 5213, 5621). ADVANCED TEXTILE ANALYSIS.** (5 cr; prereq 5254)

Relating visual and tactile properties of textiles to microscopically and submicroscopically detectable physical and chemical characteristics.

**5216 (formerly TexC 5216, 5662) TEXTILE AND APPAREL CONSUMER.** (4 cr; prereq 3216, AgEc 1101 or Econ 1101 or #)

Textile and clothing problems; effects of psychological dispositions, socioeconomic condition, technology, and public/private policies.

**5217 (formerly TexC 5217, 5685). INTERNATIONAL TRADE IN TEXTILES AND APPAREL.** (4 cr; prereq #)

Comparison of production, distribution, and consumption in the United States and Europe. Effects of world trade on supply and distribution.

**5218. PATTERN DEVELOPMENT III.** (4 cr; prereq 3218)

Advanced problems in pattern manipulation and grading.

**5231 (formerly Dsgn 5231, 5541). CLOTHING DESIGN STUDIO IV.** (4 cr; prereq 3232, 5218)

Advanced problems in draping and sketching. Pencil, crayon, and watercolor techniques. Studies and reports on selected topics. Develop senior line.

**5232. CLOTHING DESIGN STUDIO V.** (4 cr; prereq 5231)

Clothing design for mass production, including costing and layout.

**5234 (formerly Dsgn 5231). CLOTHING DESIGN FOR SPECIAL NEEDS.** (4 cr, prereq Clthg Dsgn or Ret Mech sr or #)

Experimental design concepts as they relate to special market segments, i.e., physical limitations, safety protection, energy consumption, with emphasis on the integration of human needs, fabric character, and the garment structure.

**5241 (formerly TexC 5241, 3646). RETAIL PROMOTION.** (4 cr; prereq 1211, Mktg 3000)

Marketing communication theory, concepts, and research with in-depth treatment of advertising, sales promotions, point-of-purchase communication, direct marketing.

**5242 (formerly TexC 3646, 5242). MANAGERIAL DECISION MAKING.** (4 cr, prereq 5241)

Decision-making process in a variety of retail situations, including merchandise planning and management of sales and human resources.

**5252 (formerly TexC 5252, 5624). TEXTILE COLORATION AND FINISHING.** (4 cr; prereq 5213)

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.

**5253 (formerly TexC 5253, 5626). RECYCLING PROCESSES.** (3 cr; prereq 5213)

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.

**5254 (formerly TexC 5254, 5627). PERFORMANCE EVALUATION: FABRIC AND GARMENTS.** (5 cr; prereq 3216)

Understanding testing procedures, standards, and specifications used in designing and purchasing fabrics and garments. Applying test results to design and specification of garments.

**5261 (formerly TexC 5261, 5600). ADVANCED APPAREL DESIGN AND CONSTRUCTION PROBLEMS.** (2-4 cr per qtr [max 12 cr]; prereq 3216, #)

Analytical study of and construction for advanced apparel design using draping and flat pattern techniques. Relating the latest technological developments in textiles to garment design.

**5262 (formerly TexC 5262, 5603). EXPERIMENTAL STUDIES IN APPAREL.** (3-5 cr; prereq 6 cr in construction or tchg exper, #)

Study of selected procedures in areas of apparel production and design.

**5263 (formerly TexC 5263, 5623). THE DYEING MEDIUM AND COLOR.** (3 cr; prereq 1328, 3216 or #)

Principles of dye selection for specific fibers; precision dyeing for exploring perceived color relationships and expanding the utility of this medium.



**5266 (formerly TexC 5266, 5668). ETHNIC DRESS.** (3 cr; prereq 3212, Anth 1102, Soc 1001 or #)  
Sociocultural analysis of ethnic dress (apparel, accessories, and body modification) with emphasis on cultural patterns of technology, aesthetics, ritual, morality, and symbolism. External and internal influences encouraging change examined.

**5280. DIRECTED STUDY IN APPAREL SCIENCES AND DESIGN.** (1-4 cr [max 8 cr]; prereq #)  
Independent study in apparel sciences and design under tutorial guidance.

**5289 (formerly Dsgn 5289, 5589). PROBLEMS IN DESIGN: COSTUME.** (3-4 cr per qtr [max 12 cr]; prereq DHA major)  
Independent study under tutorial guidance.

**5303 (formerly Dsgn 5303, 5584). FIELD EXPERIENCE IN DESIGN COMMUNICATION.** (1-4 cr; prereq completion of at least one half of professional sequence and plan to be submitted and approved in advance by adviser and employer, #)  
Supervised work experience relating activity in business, industry, or government to the student's area of study. Written consent of faculty supervisor before registration and integrative paper required.

**5323. DESIGN PROCESS: DRAWING III.** (4 cr; prereq 3323 or #)  
Application of design principles to advanced drawing problems.

**5325. DESIGN PROCESS: TWO-DIMENSIONAL DESIGN III.** (4 cr; prereq 3325 or grad)  
Two-dimensional design and visual perception. Students complete design projects and examine design and visual perception research literature.

**5327 (formerly Dsgn 5327, 5527). THREE-DIMENSIONAL DESIGN II.** (4 cr; prereq 3327, pass Dsgn Comm portfolio review or #)  
Lectures and studio work based on unitary systems derived from modules. Applying plans based on visual perception exercises to space division in the Space Laboratory.

**5328 (formerly Dsgn 5328, 5528). COLOR AND DESIGN.** (4 cr; prereq 1328, #)  
Continued study of color concepts and their application to design.

**5331s (formerly Dsgn 5331, 5531). SURFACE FABRIC DESIGN III.** (4 cr; prereq 3331, pass Dsgn Comm portfolio review, DHA major)  
Designing in one special surface textile technique. Studio problems. Readings.

**5332 (formerly Dsgn 5332, 5532). FIBER STRUCTURE: WEAVING II.** (4 cr; prereq 3332)  
Advanced loom weaving. Exploration of pattern weaves and color.

**5334 (formerly Dsgn 5334, 5534). COMPUTER APPLICATIONS TO DESIGN PROBLEMS II.** (4 cr; prereq 3334)  
Solutions to design problems using Macintosh computers. Students use software to combine images and print and explore color and desktop publishing.

**5337 (formerly Dsgn 5337, 5537). FIBER STRUCTURE DESIGN: QUILTING.** (4 cr; prereq pass Dsgn Comm portfolio review)  
Application of color and design principles through techniques of patchwork and quilting.

**5380 (formerly Dsgn 5380, 5585). DIRECTED STUDY IN DESIGN COMMUNICATION.** (1-4 cr per qtr [max 8 cr]; prereq #)  
Independent study in design under tutorial guidance.

**5403 (formerly Hsg 5403, 3880). INTERNSHIP IN HOUSING.** (3 cr; prereq completion of one-half of professional sequence, 3470, #; S-N only)  
Supervised work in the community or international study. Seminar and major paper required.

**5461 (formerly Hsg 5461, 5861). HOUSING MANAGEMENT.** (5 cr; prereq 3463 or #)  
Management of multi-unit housing. Historical perspectives, current status of housing, management approaches, psychosocial impact of housing and community design, specific residential populations. Students conduct a post-occupancy evaluation of a housing complex.

**5463 (formerly Hsg 5463, 5863). HOUSING POLICY.** (3 cr, §PA 5611; prereq grad or adult special or 3463)  
Role of American national, state, and local government in financing, control, taxation, and construction of housing.

**5465 (formerly Hsg 5465, 5865). HOUSING IN WORLD PERSPECTIVE I.** (4 cr; prereq 3463 or #)  
Social analysis of housing around the world; emphasis on population, environment, and social organization of nations as contexts for national policy and housing choices of households.

**5466 (formerly Hsg 5466, 5866). HOUSING IN WORLD PERSPECTIVE II.** (4 cr; 5465 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.

**5467 (formerly Hsg 5467, 5867). HOUSING AND THE SOCIAL ENVIRONMENT.** (4 cr; prereq 3463 or #)  
Housing choices of households in the context of the social environment; emphasis on the special needs of the elderly, disabled, minorities, large families, and female-headed households.

## Course Descriptions

**5468 (formerly Hsg 5468, 5868). HOUSING PROBLEMS OF THE FAMILY.** (5 cr; prereq 1401, 3463 or 1642 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.

**5480 (formerly Hsg 5480, 5888). DIRECTED STUDY IN HOUSING.** (1-4 cr per qtr [max 8 cr]; prereq #)  
Independent study in housing under tutorial guidance.

**5481 (formerly Hsg 5481, 5881). DESIGNED ENVIRONMENTS FOR AGING.** (4 cr; prereq 1642 or 3463 or #; offered alt yrs)

Design of environments with potential to compensate for deficits in physical and mental functioning; emphasis on older adults and barrier-free, adaptable, and responsible physical environments.

**5482 (formerly Hsg 5482, 5801). THE FAMILY AND ENERGY ISSUES.** (3 cr; prereq 1400, 1401 or #; offered alt yrs)

Analysis of family behavior as it relates to energy use, impact of scarce resources on quality of family functioning, family/energy issues in future.

**5483. HOUSING DISCRIMINATION.** (4 cr; prereq 3463 or #)

Causes, effects, and patterns of housing segregation and discrimination; public policies aimed at addressing the problems.

**5485 (formerly Hsg 5485). HOMELESSNESS.** (5 cr)  
Causes of homelessness in contemporary times, analysis of subpopulations among the homeless, public policies aimed at addressing the problem.

**5612 (formerly Dsgn 5612, 5575). INTERIOR DESIGN RESEARCH.** (2 cr; prereq 3643 or #)

Examination and development of studies related to interior design.

**5634. INTERIOR DESIGN CODES AND ENVIRONMENTAL ISSUES.** (3 cr)

Impact of environmental issues, legislation, and social awareness on designing for life safety, health, diverse populations, and Earth's resources.

**5645 (formerly Dsgn 5645, 5552). INTERIOR DESIGN STUDIO V.** (4 cr; prereq 3621, 3631, 3633, 3643, #)

Advanced interior design problems related to residential spaces.

**5646 (formerly Dsgn 5646, 5554). INTERIOR DESIGN STUDIO VI.** (4 cr; prereq 3216, 3631, 3633, 3643, #)

Advanced interior design problems related to non-residential spaces.

**5647 (formerly Dsgn 5647, 5555). INTERIOR DESIGN THESIS.** (6 cr; prereq 5612, 5645, 5646)

Comprehensive independent interior design project generated from research conducted in 5612. (This is the culmination of studio work. It can be taken for—but is not limited to—honors credit.)

**5680 (formerly Dsgn 5680, 5586). DIRECTED STUDY IN INTERIOR DESIGN.** (1-4 cr per qtr [max 8 cr]; prereq #)

Independent study in interior design under tutorial guidance.

### For Graduate Students Only

(For descriptions, see *Graduate School Bulletin*)

**8103. ADVANCED RESEARCH METHODS IN DHA**

**8170. SPECIAL TOPICS IN DHA**

**8176. SEMINAR: DHA INSTRUCTION**

**8181. INTEGRATIVE SEMINAR (1 cr)**

**8262. LITERATURE OF DRESS I**

**8263. LITERATURE OF DRESS II**

**8264. FASHION THEORY AND ANALYSIS**

**8266. AESTHETIC CONCEPTS RELATED TO APPAREL DESIGN**

**8267. THEORETICAL ORIENTATIONS IN CLOTHING AND HUMAN BEHAVIOR**

**8268. METHODOLOGICAL ORIENTATIONS IN CLOTHING AND HUMAN BEHAVIOR**

**8280. DIRECTED STUDY IN APPAREL SCIENCES AND DESIGN**

**8290. READINGS IN APPAREL SCIENCES AND DESIGN**

**8323. DESIGN PROCESS: DRAWING**

**8325. DESIGN PROCESS: TWO-DIMENSIONAL DESIGN**

**8328. DESIGN PROCESS: COLOR**

**8380. DIRECTED STUDY IN DESIGN COMMUNICATION**

**8390. READING IN DESIGN COMMUNICATION**

**8467. HOUSING THEORY**

**8480 (formerly Hsg 8480, 8880). DIRECTED STUDY IN HOUSING**

**8490 (formerly Hsg 8490). READINGS IN HOUSING**

**8671. INTERIOR DESIGN CRITICISM AND THEORY**

**8676. ENVIRONMENTAL STUDIES IN INTERIOR DESIGN**

**8680. DIRECTED STUDY IN INTERIOR DESIGN**

**8690. READINGS IN INTERIOR DESIGN**

**8777. THESIS CREDITS: MASTER'S**

**8888. THESIS CREDITS: DOCTORAL**

## Family Education (FE)

(formerly Home Economics Education)

**3910. EDUCATIONAL METHODS FOR FAMILY EDUCATORS.** (3 cr; prereq jr, non-HEEd major)

For professionals whose work includes educating people about families. Skills necessary to organize, implement, and evaluate presentations and programs for individuals or groups.

**5001. SPECIAL TOPICS.** (1-6 cr)

Study of topic not covered by available courses.

**5002. THINKING, LEARNING, AND TEACHING IN WORK, FAMILY, AND COMMUNITY.** (3 cr; A-F only)

Nature of thinking, learning, and teaching in everyday life contexts of work, family, and community. Theory and practice relevant to stimulating and supporting thinking and learning within these contexts.

**5003. INTERNSHIP: COMMUNITY/WORK SETTINGS.** (3-12 cr [max 12 cr, max 3 cr may be used in MEd and MA programs]; prereq #; S-N only)

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; prereq grad or #)

Methods and techniques of formal and nonformal education used by Extension Service and other organizations.

**5023. EXTENSION METHODS FOR DEVELOPING COUNTRIES.** (3 cr)

Extension methods to promote the rapid adoption of improved practices.

**5024. EXTENSION HISTORY AND PHILOSOPHY.** (3 cr)

Origin, philosophy, historical development, objectives, and organizational structure of Extension Service.

**5025. EXTENSION PROGRAM DEVELOPMENT.** (3 cr)

Planning, implementing, and evaluating the program development process.

**5026. EXTENSION ADMINISTRATION.** (3 cr; 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])

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.

**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])

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 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. FAMILY EDUCATION CURRICULUM.** (3 cr)

Research and theory; developing programs for all ages; evaluating materials.

**5305. FAMILY EDUCATION CURRICULUM: COLLEGE LEVEL.** (3 cr; prereq #)

Research and literature; course and program development in higher education; analyzing current college programs; producing and evaluating curriculum materials.

**5310. METHODS OF TEACHING FAMILY EDUCATION.** (3 cr)

Theory and relevant research, application to educational objectives, strategies, student needs, and program evaluation.

## Course Descriptions

### **5315. EVALUATION IN FAMILY EDUCATION.** (3 cr)

Collecting and interpreting evidence related to individual and program performance.

### **5320. ADULT EDUCATION IN FAMILY EDUCATION.** (3 cr)

Planning a community program; teaching procedures; special problems.

### **5321. INTERNATIONAL PERSPECTIVES IN FAMILY EDUCATION.** (3 cr)

Family education around the world; commonalities and differences in purpose, problems, history, methods of delivery, and context.

### **5404. INTRODUCTION TO EARLY CHILDHOOD FAMILY EDUCATION PROGRAMS.** (1 cr)

History, philosophy, and implementation of programs.

### **5405. CHILD DEVELOPMENT AND PARENT EDUCATION.** (1-6 cr [max 12 cr]; A-F only)

Objectives, content, curriculum methods, materials, and evaluation strategies for teaching diverse groups 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)

Issues and current literature focused on emerging topics relevant to parent and family education.

### **5407. FAMILY EDUCATION.** (1-4 cr [max 12 cr]; A-F only)

Objectives, content, curriculum methods, materials, and evaluation strategies for teaching diverse groups about family life.

### **5408. EDUCATION FOR WORK-FAMILY RELATIONSHIPS.** (3 cr; A-F only)

Interactions between work and family, with focus on educational applications for youth and adults.

### **5409. GROUP METHODS FOR PARENT AND FAMILY EDUCATION.** (2 cr; A-F only)

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-F 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.

### **5416. PARENT EDUCATION: ADVANCED.** (prereq 5405 or #; A-F only)

Evolving perspectives of parent education. Emphasis on psycho-dynamic, conceptual change approaches and reflective and dialogic approaches for working with parents in understanding beliefs and examining their origins and consequences. Issues related to diversity, self-awareness, and professional ethics.

### **5500. PROSEMINAR: FAMILY EDUCATION.** (2 cr)

Relation of the processes and standards of rational thought to professional competence and the goals of a graduate program of study.

### **5510. HISTORY, PHILOSOPHY, AND PROFESSIONAL PRACTICE OF FAMILY EDUCATION.** (3 cr; A-F only)

Critical analysis of family education and teaching of family education; identification of practical problems encountered by families; development of a personal orientation toward becoming a family education teacher.

### **5511. FAMILY EDUCATION INSTRUCTION IN SECONDARY SCHOOLS.** (5 cr; prereq 5510; A-F only)

Examination of curriculum perspectives and development of curriculum, instructional methods, and student evaluation for family studies in secondary schools.

### **5512. CLINICAL SEMINAR: THE SCHOOL SETTING.** (4 cr, §Ind 5512; S-N only)

Examination of and experience with the school as a social-political setting, the role of vocational education in the school, the relation between adolescent development and curriculum, and the patterns of organizational and interpersonal communication within the school.

### **5513. CLINICAL SEMINAR: EDUCATIONAL PRACTICE.** (4 cr; prereq postbac student or #)

Development of curriculum and instructional materials for school classrooms and laboratories and the conducting of research in school settings.

### **5514. CLINICAL SEMINAR: TEACHING.** (12 cr; prereq postbac student or #; S-N only)

Teaching experience in a public school setting.

### **5520. PHILOSOPHY OF FAMILY EDUCATION.** (4 cr; prereq #)

Application of philosophic thought to conceptions of family education upheld in literature and practice.

### **5600. PRACTICUM: ADULT EDUCATION.** (1-6 cr; prereq 5320 or AdEd 5411, #; A-F only)

Individual field assignments under supervision.

### **5900. INDEPENDENT STUDY IN FAMILY EDUCATION.** (1-3 cr per qtr [max 12 cr]; prereq #)

Self-directed study, with faculty guidance as needed, in areas not covered by regular courses.

## **For Graduate Students**

(For descriptions, see *Graduate School Bulletin*)

### **8520. SEMINAR: HISTORY AND PHILOSOPHY OF FAMILY EDUCATION**

### **8530. SEMINAR: FAMILY EDUCATION**

### **8631. FAMILY EDUCATION TEACHING PRACTICUM**

### **8900. PROBLEMS: FAMILY EDUCATION**

## Family Social Science (FSoS)

(Department of Family Social Science)

### 1001f,w,s. INTRODUCTION TO FAMILY RELATIONSHIPS. (4 cr)

Partner selection, interaction in committed relationships, parenting, gender roles, and impact of social issues on family relationships. (Day and CEE)

### 1025s. 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. (CEE only)

### 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.

### 3231f,s. PLANNING FOR EDUCATION AND CAREER. (2 cr; prereq FSoS major)

Systematic preparation for upper division education, research and field internships, and career possibilities in family social science.

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

### 3260s. FAMILY RESOURCE MANAGEMENT. (4 cr; intro course in econ, psy, soc, cult anth, and pol sci recommended)

Examination of managerial behaviors in families, including valuing, goal setting, problem solving and decision making, planning and implementation, as well as resource use and creation.

### 3600f. FAMILY ISSUES ACROSS THE LIFESPAN. (5 cr; prereq intro course in psy, soc)

Major family theories serve as frameworks to analyze issues confronting families throughout the life span and to explore connections between family and society.

### 5001f,s. HUMAN SEXUAL BEHAVIOR. (5 cr; prereq 90 credits, 3600 or grad status in social, behavioral, educational, health science, or human service program or #)

Multidisciplinary approach to sexual development through individual/family life cycles; emphasis on scientific knowledge for promotion of sexual health through individual, family, and community services; ethics and values issues. (Day and CEE)

### 5025f,w. PARENTING. (4 cr; prereq 5200 or 5202, CPsy 1301)

Parenting methods, the child's development from infancy through adolescence. Helps students identify differing parenting techniques, develop their own parenting approach, and conduct parenting classes. (Day and CEE)

### 5200f,w. FAMILY SYSTEMS. (5 cr; prereq intro course in psy, soc)

Advanced survey of current developments in family social science emphasizing families as complex systems of interpersonal relationships that also interact with larger social systems. (Day, CEE, and Independent Study)

### 5202s. FAMILY PSYCHOLOGY. (4 cr; prereq 3600 for FSoS majors; psy 3201 for psy majors and others)

Interaction and communication that take place in families of origin, families of choice, and other close relationships. Dynamic processes of family and couple relationships within diverse social contexts. (Day and CEE)

### 5205w. INTRODUCTION TO FAMILY RESEARCH METHODS. (4 cr; prereq 3260, 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.

### 5206f,w,s. UNDERGRADUATE RESEARCH INTERNSHIP. (3-6 cr per qtr [max 15 cr]; prereq 5205, #)

Opportunities for family social science majors to work with faculty on research projects that may include research planning, proposal writing, literature review, data collection, data coding and/or cleaning, data analyses, and research reporting.

### 5210f. FAMILY IN WORLD PERSPECTIVE. (4 cr; prereq 3600 or 5200, intro cult anth course 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.

### 5217. CONSUMER ECONOMICS AND POLICY. (4 cr; prereq 3260, intro course in pol sci, econ, psy, soc)

Analysis of the interaction of families and global markets in resource and product consumption to maintain lifestyles. Government policies that regulate consumer products and legal processes to repair consumer damages.

### 5218f. 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 insurance; public, private pensions; and estate planning.

### 5220s. FAMILY ECONOMICS. (4 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.

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

Independent reading or research under faculty supervision.

## Course Descriptions

**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 the *Class Schedule* for topics.

**5241. LEGAL-ECONOMIC CONTROVERSIES IN FAMILY LIFE.** (4 cr, prereq 3260 or 3600 or 5200 or #)

Interdisciplinary seminar on legal-economic controversies across the family life span for diverse family forms. Alternative family definitions and living arrangements; premarital and marital contracts; alternative means of parenting; income, support, and debt issues; property transfer at death and divorce; decision making for health and long-term care.

**5242. DEATH, OTHER LOSSES, AND THE FAMILY.** (3 cr; prereq 3600 or 5200 or #)

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

**5249f,w,s. FIELDWORK—DIRECTED COMMUNITY WORK EXPERIENCE.** (5, 10, 15 cr [max 15 cr]; prereq 3231, FSoS major, #)

Directed preprofessional work experience related to the student's field of study.

**5251f. AGING FAMILIES.** (4 cr; prereq 3600 or 5200 or SW 5024 or #)

Aging families examined as complex developing systems interacting with a changing social structure. Marital relationships, role changes, and family caregiving issues studied.

**5252s. AGING, FAMILY, AND SOCIETY.** (4 cr; prereq 3260 or 3600, SW 3202 or intro pol sci course or #)

Elderly populations from diverse cultures are examined within the context of individual life history, family systems, and social structures.

**5253w. HUMANITIES, AGING, AND FAMILY LIVING.** (4 cr; prereq FSoS 5200 or SW 5024 or equiv)

Aging and family living examined from the perspective of literature and film. (Day and Extension)

**5255w,s. APPROACHES TO FAMILY POLICY.** (4 cr; prereq SW 3101 or Pol 1001 or #)

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

**5256f,s. FAMILY POLICY: AN INTERNATIONAL PERSPECTIVE.** (4 cr; prereq 5210 or 5202, 5255 or #)

Compares policy choices and actions of different countries in areas directly affecting families—health, education, social services, income maintenance, employment and human resources, taxes—and the values and traditions such policies represent.

**5260w. DYNAMICS OF FAMILY DECISION MAKING.** (4 cr; prereq 3260 or #)

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

**5500s. RACIAL AND ETHNIC DIVERSITY IN FAMILIES.** (4 cr; prereq 3600)

Overview of family issues of various American racial and ethnic populations. Combines a study of research and case studies with individual projects to develop and enrich understanding of cultural diversity. (Day and Extension)

**Alcohol and Drug Counseling Education Courses (FSoS) (CEE only)**

**3026. 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.

**3027. 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.

**3028. 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.

**3029. 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. Videotape gives students feedback.

**3030. 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. Identifying and challenging client's "deep structure," advanced empathy, immediacy, confrontation, reframing, and problem solving.

**3031. 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.

**3032. 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.

**3034. 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.

**3035. 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 internship (1,000 hours) in three to four community agencies (separate registration required for each placement, required closed class permission slip available at program office).

**3037. 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.

**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.

### For Graduate Students

(For descriptions, see *Graduate School Bulletin*)

**8200. SEMINAR: RESEARCH AND INTERPRETATION**

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

**8205. QUALITATIVE FAMILY RESEARCH**

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

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

**8216. MARITAL AND FAMILY ASSESSMENT**

**8217. CLINICAL INTERVENTIONS FOR SEXUAL PROBLEMS**

**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**

**8242. VALUE THEORIES AND RESEARCH IN FAMILY SOCIAL SCIENCE**

**8251. PROBLEMS: FAMILY SOCIAL SCIENCE**

**8252. PROBLEMS: FAMILY SOCIAL SCIENCE**

**8255. CONCEPTUAL FRAMEWORKS IN THE FAMILY**

**8256. GENERAL SYSTEMS THEORY AND FAMILY SYSTEMS**

**8257. FAMILY THEORY DEVELOPMENT**

**8258. RESEARCH AND THEORY IN FAMILY ECONOMICS/MANAGEMENT**

**8260. FAMILY DECISION MAKING**

**8261, 8262. PROCESS SEMINAR FOR FAMILY I, II**

**8266. FAMILY RESEARCH METHODOLOGY I**

**8267. FAMILY RESEARCH METHODOLOGY II**

**8270. PRACTICUM IN FAMILY RESEARCH**

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

**8319. ETHICAL AND LEGAL ISSUES IN MARRIAGE AND FAMILY THERAPY**

**8500, 8501, 8502. FAMILY THERAPY PRACTICUM I, II**

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

### Food Science and Nutrition (FScN)

(*Department of Food Science and Nutrition*)

**1020. INTRODUCTORY MICROBIOLOGY.** (4 cr)  
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.

**1102. TECHNOLOGY OF FOOD PROCESSING.** (4 cr; prereq high school chemistry and biology)  
Introduction to food processing technology with emphasis on preventing biological, microbiological, physical, and chemical deterioration. Changes in food composition, microbiological safety, food laws and regulations, technologies of major food processes such as canning, freezing, and drying.

**1612. PRINCIPLES OF NUTRITION.** (4 cr; prereq high school chemistry and biology)  
Fundamental concepts: human nutritional requirements, the function of nutrients, and nature of deficiencies. Vegetarianism, weight loss, fad diets, activity, obesity, cancer, heart disease, food processing, safety, and world food problems.

**3102. INTRODUCTION TO FOOD SCIENCE.** (4 cr; prereq Chem 1002 or Chem 1052)  
Introduction to the composition and the chemical and physical properties of foods; interaction, reaction, and evaluation of foods due to formulation, processing, and preparation.

**3112. FOOD ANALYSIS.** (4 cr; prereq 3102)  
Analyzing food composition (proximate, mineral, vitamins, and food contamination). Physical methods of analysis.

## Course Descriptions

### **3135. FOOD PROCESSING I.** (4 cr; prereq 1102, 3102, Math 1031)

Qualitative and quantitative discussion of principles of product movement and modification used in food processing. Operations needed for proper functioning of a food processing facility such as pumping, homogenization, membrane separations, milling, and dry blending.

### **3136. FOOD PROCESSING II.** (4 cr; prereq 3135)

Discussion of major food processing operations including heating and cooling, evaporation, drying, and process automation, from the perspective of the introduction and principles of equipment and quantitative base for operations.

### **3400. FOOD COMMUNICATION TECHNIQUES.**

(3 cr; prereq 3102)

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.

### **3472. FOOD SELECTION PRINCIPLES.** (4 cr; prereq 4 cr in food science and nutrition)

Consumer trends and food selection. Food distribution system. Food selection principles. Information used when making and evaluating food selection decisions. Use of computer-based nutrient calculation systems.

### **3610. COMMUNITY NUTRITION.** (3 cr; prereq 1612, 5 cr anth, psy or soc)

Goals of community food and nutrition programs, including national, international, public, and private programs; cultural food patterns; assessing needs, planning, implementing, and evaluating food and nutrition programs for groups of people.

### **3612. BIOLOGICAL ASPECTS OF NUTRITION.**

(4 cr; prereq 1612, Chem 3302 or equiv)

Biological aspects: influence of biological changes throughout the life cycle on nutrient requirements, needs as affected by exercise, digestion and absorption, energy and other nutrient balances, protein energy malnutrition, infection.

### **3662. INTRODUCTION TO THE CLINICAL PRACTICE OF DIETETICS.**

(2 cr; prereq 12 cr in food science and nutrition, regis in coordinated program in dietetics)

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

### **3703. FIELD EXPERIENCE IN FOOD SERVICE MANAGEMENT.**

(3-18 cr; prereq regis in coordinated program in dietetics or #)

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

### **3730. QUANTITY FOOD PRODUCTION MANAGEMENT.**

(3 cr; prereq 3102, 3472)

Participation in the management procedures used in the selection, storage, preparation, pricing, and service of food in quantity. Quantity food service facilities used as laboratories. Field trips may be required.

### **3732. LECTURE IN QUANTITY FOOD**

**PRODUCTION MANAGEMENT.** (2 cr; prereq 3102, 3472)

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; prereq 15 cr food science and nutrition, #; A-F only)

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

### **5100. GENERAL SEMINAR.** (1 cr; prereq sr or #; A-F

only)

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

### **5110. FOOD CHEMISTRY.** (4 cr; prereq 3102, BioC 3021)

Study of chemical structures and functional properties of food components in relationship to their roles as parts of complex biochemical systems and as modified by various environmental and processing factors.

### **5111. INDEPENDENT STUDY IN FOOD SCIENCE AND NUTRITION.**

(1-5 cr [may be repeated for cr]; prereq Δ)

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

### **5120. FOOD MICROBIOLOGY.** (5 cr; prereq 1102, 3112, MicB 5105 or VPB 3103 or #)

Relationship of environment to occurrence, growth, and survival of microorganisms in foods: methods of evaluation, mechanisms to control, genera and species of importance, control of foodborne pathogens and toxins. Enumeration of, isolation of, and identification of microbes in foods.

### **5122. CONTROL SYSTEMS IN FOOD**

**MICROBIOLOGY.** (2 cr; prereq 5120)

Control and destruction of microorganisms in foods; hazard analysis; critical control points for control of microbes; chemical, physical and microbiological considerations in cleaning and sanitizing food contact surfaces and equipment; microbiological criteria for raw and processed foods; sampling methodologies.

### **5123. FOOD FERMENTATIONS AND**

**BIOTECHNOLOGY.** (3 cr; prereq 5120)

Food fermentation processes; characteristics of microorganisms involved in food fermentations and production of food ingredients; composition and factors influencing activity of starter cultures; microbiology of natural and controlled fermentations; properties of lactic bacteriophages and methods of control during dairy fermentations.



**5135. FOOD ENGINEERING UNIT OPERATIONS.**

(5 cr; prereq 1102 or ¶1102, Math 1142, Phys 1042)  
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).

**5312. INSTRUMENTAL ANALYSIS OF FOODS.**

(3 cr; prereq 3112, 5110)  
Application of instrumental methods of analysis to the examination of food products.

**5314. PHYSICO-CHEMISTRY OF FOODS.** (4 cr; prereq 5110)

Characterization of crystalline systems, gels, emulsions, and foams; functionality of food macromolecules in these systems.

**5316. QUANTITATIVE LIGHT MICROSCOPY IN AGRICULTURE AND FOOD RESEARCH.** (4 cr; prereq Biol 1009 or Chem 1052)

The light microscope and its variants. Description and applications of quantitative instruments for characterizing cell, tissue, and other raw or processed materials. Digital image analysis, scanning microspectrophotometry, and laser scanning microscopy.

**5360. SENSORY EVALUATION OF FOOD QUALITY.** (4 cr; prereq 3102, Stat 3012 or 5021)

Fundamentals of sensory perception. Test designs and methods used in studying sensory quality of foods.

**5380. FOOD PACKAGING.** (3 cr; prereq 1102, 3102, Phys 1042 or equiv)

Packaging materials basics and principles of packaging development and product protection as they apply to foods.

**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.

**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.

**5462. ADVANCED TOPICS IN SENSORY EVALUATION OF FOOD.** (2-4 cr; prereq 5360)

Review of current literature pertinent to specific topics under active investigation.

**5474. FOOD MARKETING ECONOMICS.** (4 cr, §AgEc 5550; prereq AgEc 3101 or equiv)  
Economics of food marketing in the United States. Food consumption trends; consumer food behavior; food expenditure and consumption data; consumer survey methodology; the food distribution and retailing system; food policy issues related to food marketing. Students pursue individual and group projects.

**5512. MEAT TECHNOLOGY.** (4 cr; prereq 5110)  
Industrial processing of meat, fish, and poultry products, including protein functionality, thermal processing, curing, smoking, and deterioration during storage. Use of preblending and least-cost analysis in product development and formulation.

**5522. TECHNOLOGY OF FLUID AND CONCENTRATED MILK PRODUCTS.** (4 cr; prereq 3136, 5110)

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 5110, 5123)

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 3102)

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 3136, 5110, 5120, 5135)

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.

**5540. FATS AND OILS CHEMISTRY AND TECHNOLOGY.** (4 cr; prereq 5110)

Nature of fats and oils; their structure, composition, chemical and physical properties; raw materials for fat and oil products; extraction, refining, hydrogenization, and other industrial manipulations; handling, storage, analysis and grading of raw materials and finished products.

**5550. GRAINS: INTRODUCTION TO CEREAL CHEMISTRY AND TECHNOLOGY.** (4 cr; prereq Biol 1009 or Chem 1052)

Origins, structure, biochemistry, and cellular properties of major cereal grains as they relate to primary (milling) and secondary (production of cereal products) processing. Relationship between structure and functionality as determinants of quality in grains and grain products. Quality evaluation technologies.

## Course Descriptions

### **5555. FREEZING AND DEHYDRATION OF FOODS.** (5 cr; prereq 1102, 5135)

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.** (4 cr; prereq 1102, 5110)

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. (CEE only)

### **5612. EXPERIMENTAL NUTRITION.** (2 cr; prereq 3612, ¶Biol 3021)

Lab experience in chemical and biochemical methods of analysis of nutritional status.

### **5620. NUTRITION AND METABOLISM.** (5 cr; prereq 3612 or #, BioC 3021)

Physiological function and metabolic fate of carbohydrates, lipids, and proteins, and their involvement in fulfilling energy needs for maintenance, growth, and work. Physiological function of vitamins and minerals.

### **5622. MACRO-NUTRIENT METABOLISM.** (4 cr; prereq 3612, BioC 3021, Phsl 3051)

Physiological function and metabolic fate of carbohydrates, lipids, and proteins, and their involvement in fulfilling energy needs for maintenance, growth, and work.

### **5623. VITAMIN AND MINERAL METABOLISM.** (4 cr; prereq 3612, BioC 3021, Phsl 3051)

Nutritional, biochemical, and physiological function of essential vitamins and minerals in humans and experimental animal models.

### **5624. HUMAN PROTEIN AND ENERGY UTILIZATION.** (4 cr; prereq 5622)

Regulation of human protein and energy utilization, interactions, adaptations; critical evaluations of methods of determining requirements; technical and ethical problems in human experimentation, and determination of recommended levels of intake.

### **5642. FIELD EXPERIENCE IN COMMUNITY NUTRITION.** (3-18 cr; prereq at least one course in human nutrition, #)

Application of nutrition information to problems of health and welfare; assigned readings, discussions, and experience in a community agency.

### **5643. WORLD FOOD PROBLEMS.** (3 cr, §AgEc 5790, §Agro 5200, §CAPS 5280; limited enrollment; prereq sr or grad)

Multidisciplinary approach to social, economic, and technical problems of feeding the world's growing population. Principles sought from social, economic, plant, animal, and food sciences for their application to world food problems.

### **5662. CURRENT ISSUES IN CLINICAL NUTRITION.** (3 cr; prereq 5620, 5667)

Evaluation of current scientific research and literature related to clinical nutrition.

### **5664. FIELD EXPERIENCE IN CLINICAL NUTRITION.** (3-18 cr; prereq human nutrition course, #)

Application of nutrition information to problems of health and disease; assigned readings, discussions, and experience in a clinical facility.

### **5665. APPLIED CLINICAL NUTRITION I.** (3 cr; prereq BioC 3021, LaMP 5177 or ¶LaMP 5177, Phsl 1001 or Phsl 3051)

Nutritional assessment and support; fluid and electrolyte balance; diet/drug interactions. Nutritional intervention in disorders of the gastrointestinal system and in cancer.

### **5666. APPLIED CLINICAL NUTRITION II.** (3 cr; prereq 5665, 5662 or ¶5662)

Continuation of 5665. Pathology, treatment, and nutritional therapy of diseases of cardiovascular and respiratory systems and common disorders of endocrine system, notably diabetes mellitus; nutrition intervention in obesity.

### **5667. APPLIED CLINICAL NUTRITION III.** (3 cr; prereq 5666)

Pathology, treatment, and nutrition therapy for diseases of urinary tract, inborn errors of metabolism, and allergies. Nutritional considerations in eating, neurological, muscular, and skeletal disorders. Special nutrition considerations in caring for pediatric patients.

### **5668. ADVANCED CLINICAL NUTRITION.** (2 cr; prereq dietetic internship status, 5662 or #)

Integrated approach to prevention and treatment of illness focusing upon the role of nutrition in total medical care.

### **5693. SELECTED ASPECTS OF NUTRITION.** (2-4 cr [may be repeated for max 12 cr]; prereq sr, 3102, 3612)

In-depth investigation of a single, preselected aspect of nutrition in any one offering. Teaching procedure and approach determined by nature of topic and student needs. Specific topic announced in advance of course offering.

### **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 FOOD SERVICE MANAGEMENT IN HEALTH CARE FACILITIES.** (3 cr; prereq 3 cr elementary statistics, 6 cr econ, #)

Management techniques applied to food services for health care facilities. Methods of analysis and control.

### **5705. FIELD EXPERIENCE IN FOOD SERVICE MANAGEMENT.** (3-18 cr; prereq regis in coordinated program in dietetics or #)

Application of principles of food service management to problems in community, commercial, or health care facility.

**5732. PRINCIPLES OF FOOD SERVICE ORGANIZATION AND MANAGEMENT.** (4 cr; prereq sr, 3732, Mgmt 3001, regis in coordinated program in dietetics)  
Management of food service personnel, financial control, regulations, related administrative problems.

**5750. PRINCIPLES OF FOOD SERVICE MANAGEMENT.** (4 cr; prereq 3730 or 3732, Mgmt 3001)  
Application of management principles in a food service. Business procedures, personnel management, cost control, financial management, and related administrative problems. Field trips may be required.

**5755. CURRENT TOPICS IN FOOD SERVICE MANAGEMENT.** (4 cr [may be repeated for cr, max 8 cr]; prereq #)  
In-depth examination of timely issues. Content varies quarterly.

### For Graduate Students

(For descriptions, see *Graduate School Bulletin*)

**8101. RESEARCH SEMINAR**

**8205. GENERAL SEMINAR**

**8311. FLAVOR CHEMISTRY**

**8312. REACTION KINETICS OF FOOD DETERIORATION**

**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**

**8603. ADVANCED TOPICS IN NUTRITION**

**8621. INDEPENDENT STUDY: NUTRITION**

**8777. THESIS CREDITS: MASTER'S**

**8888. THESIS CREDITS: DOCTORAL**

**Nutr 8745. SEMINAR**

**Nutr 8777. THESIS CREDITS: MASTER'S**

**Nutr 8888. THESIS CREDITS: DOCTORAL**

**Nutr 8990. GRADUATE RESEARCH**

## Home Economics (HE)

Home Economics courses are now listed under Human Ecology, below.

## Human Ecology (HE)

(*College of Human Ecology*)

**1191. CAREER PLANNING STRATEGIES.** (2 cr; S-N only)

Identifying and developing professional and personal goals through career decision making. Self assessment, occupational research, job search techniques. Preparation for professional experiences.

**3201. SEMINAR: HUMAN ECOLOGY.** (2 cr; prereq jr status in human ecology major, #; A-F only)  
Philosophy, current issues, and interdisciplinarity of human ecology.

**3202. SEMINAR: RESEARCH AND REFLECTIVE PRACTICE.** (1 cr; prereq jr status in human ecology major, #; A-F only)

Developing skills in research, analytic thinking, and reflective practice for human ecology. Skill development in problem finding and problem analysis. Social justice issues in human ecology. Building an agenda of concern. Beginning field experience. Planning for change.

**5003. FIELD EXPERIENCE.** (1-5 cr [max 15 cr]; prereq #)

Directed preprofessional work experience in home economics position in business or industry.

**5130. INDEPENDENT STUDY IN HOME ECONOMICS.** (max 16 cr; prereq #)

**5140. SPECIAL TOPICS IN HUMAN ECOLOGY.** (max 16 cr)

**5201. SEMINAR: RESEARCH AND ACTION FOR SOCIAL CHANGE.** (1 cr; jr status in human ecology major, #; A-F only)

Implementing a plan of social change; assessing and evaluating action; strategies in organizational, community, and social change; politics, legislation, social policy, and other approaches to social change; citizen and professional responsibility and approaches to social change.

**5725. SEMINAR IN INTERNATIONAL STUDIES.** (4 cr)

Interdisciplinary seminar integrating CHE disciplines with a focus on global issues in an ecological model.

**5726. PRACTICUM IN INTERNATIONAL STUDIES.** (Cr ar)

International work, study, or research arranged by individual students with faculty advice and counsel, including an approved academic exercise.

# Course Descriptions

## Rhetoric (Rhet)

(Department of Rhetoric, College of Agriculture)

### 1101f,w,s. WRITING TO INFORM AND PERSUADE.

(4 cr, §Comp 1011; A-F only)

Relationship of thesis construction and clear thinking to informative and persuasive writing. Importance of thesis sentence, evidence, coherence, clarity, and correctness. Emphasis on the writing process in producing several short papers (250-750 words).

### 1104f,w,s. LIBRARY RESEARCH METHODS. (1 cr; S-N only)

On-site and interactive video instruction in information retrieval techniques to strengthen skills in using the library. Students work independently to satisfactorily complete all exercises and problem-solving assignments. Students must attend an orientation session. Computer-assisted instruction.

### 1151f,w,s. WRITING IN YOUR MAJOR. (4 cr; prereq

1104, fr comm requirement, soph status; A-F only)  
Students investigate and write about subjects related to their majors. Emphasis on gathering, evaluating, synthesizing, and summarizing information; adapting it for various audiences. Assignments include literature review, abstract, fact sheet, instructions, and feature article.

### 1200f,w,s. INFORMATION TECHNOLOGY IN SCIENTIFIC AND TECHNICAL PROFESSIONS.

(3 cr; prereq College of Agriculture undergrad; A-F only)

How to use computers to communicate, gather, analyze, manage, and store information in scientific and technical professions. Emphasis on main functions of and integration of data from word processing, telecommunications, database, and spreadsheet applications.

### 1220. PRINCIPLES OF HUMAN COMMUNICATION. (4 cr)

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.

### 1222f,w,s. PUBLIC SPEAKING. (4 cr; prereq fr comm requirement; A-F only)

Practical course in fundamentals of effective speechmaking. Emphasis on researching and organizing a speech and communicating with an audience.

### 1301. HUMANITIES: MODERN THOUGHT AND THE ENLIGHTENMENT. (4 cr)

Introduction to humanities tracing the impact of the scientific revolution on human thought. Emphasis on 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; the rise of laissez-faire capitalism, socialism, Marxism; modern "individualism" and traditional views of community; utilitarianism and deontological approaches to ethics.

### 1303f,w,s. HUMANITIES: SCIENCE, RELIGION, AND THE SEARCH FOR HUMAN NATURE. (4 cr)

Darwin's theory of evolution and its effect on 19th- and 20th-century institutions. Emphasis on the attempts of social philosophers to extrapolate from biological theory to political, cultural, and religious life; scientific and religious ways of knowing; the rise of existentialism.

### 1310f,w,s. 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. (4 cr)

Topics vary quarterly and are listed in the *Class Schedule*. For full details, inquire at the department office before registration.

### 1380. FICTIONAL HISTORY: 20TH CENTURY THROUGH THE EYES OF NOVELISTS. (3 cr;

prereq fr comm requirement)

Reading of 20th-century documentary novels; the nature of artistic/historical truth; rhetoric of novels; cross-cultural comparisons. Typical reading: novels about colonialism in Africa; partition of India; the Holocaust; Palestinian-Israeli conflict.

### 1441. COLLEGE READING AND LEARNING SKILLS. (4 cr)

Lecture and individual and small group practice in developing speed, comprehension, retention, and flexibility in reading college assignments; clarity and precision in written expression; accurate and effective listening; control of communication-related anxiety, including test taking; vocabulary.

### 3101f,s. FUNCTIONAL PHOTOGRAPHY. (4 cr; prereq 3562 or DHA 1300)

Practical course in basic photographic communication. Techniques of producing 35mm color transparencies for use in group presentations, teaching, publications, and audiovisual productions.

**3105w. CORPORATE VIDEO FOR TECHNICAL COMMUNICATORS.** (4 cr; prereq 3562 or equiv)  
Video production including video team roles, production technology, and the development process. Students apply rhetorical principles in analyzing video, develop a treatment, and write a script. Meets concurrently with 5105.

**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.

**3266f,w,s. COMMUNICATION, DISCUSSION IN SMALL GROUP DECISION MAKING.** (4 cr; prereq 1222 or #)  
Role of communication techniques in the small group decision-making process. Emphasis on problem-solving discussion requiring some kind of formal outcome.

**3270. SPEECH: SPECIAL PROBLEMS.** (1-5 cr; prereq #, Δ)  
Supervised reading and research on advanced speech-communication topics not covered in regularly scheduled speech offerings. Because of the advanced and independent nature of this course, the primary burden of development usually rests with the student.

**3276. SPECIAL TOPICS IN RHETORIC AND COMMUNICATION.** (4 cr; prereq #, Δ)  
Supervised reading and research on advanced rhetoric, communication, and speech topics not covered in regularly scheduled offerings.

**3370. AMERICAN HUMANITIES.** (4 cr)  
Examination of the American character and changes it has undergone in the 19th and 20th centuries as exemplified by social, artistic, literary, and architectural records.

**3374. HUMANITIES: SPECIAL PROBLEMS.** (1-2 cr; prereq #, Δ)  
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.

**3380f,w,s. HUMANITIES: THE LITERATURE OF SOCIAL REFLECTION.** (2 cr)  
Contemporary social issues as reflected in cultural documents. Use of imaginative literature as a forum where social questions are discussed, evaluated, and resolved.

**3381. HUMANITIES: 20TH-CENTURY CULTURE.** (4 cr)  
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.

**3382. HUMANITIES: ETHICS OF TOTAL WAR.** (3 cr)  
Ethical dilemmas of total war in WW II: the Holocaust, unrestricted submarine warfare, indiscriminate bombing, the atomic bomb. These dilemmas experienced through film, novels, music, painting.

**3390s. HUMANITIES: TECHNOLOGY, SELF, AND SOCIETY.** (4 cr; prereq jr, STC or pre-STC or Δ)  
Major shifts in technology from 19th century to the present in the United States, especially in relation to capitalism. Technology and the concepts of nature, work, political and social organization, and self. Interdisciplinary materials used.

**3395. IN SEARCH OF NATURE.** (4 cr)  
The human need for a relationship with nature, the images of nature developed from this need, and the variety of ways humans organize their surroundings to reflect this need. Contemporary American response.

**3562f,w,s. WRITING IN YOUR PROFESSION.** (4 cr; prereq fr comm requirement, 1151, jr or sr status; A-F only)  
Projects in writing professional reports. Analyses of audience and situation; writing effectively to meet the needs of particular readers. Assignments include writing instructions, feasibility report, proposal, memorandum, letter of application, and résumé.

**3565. WRITING FOR PUBLICATION.** (4 cr; prereq 3562, #)  
Writing and preparing manuscripts for publication; adaptation to specialized and general reader; professional, trade, and general publications; information sources and topic selection; marketing techniques.

**3574. PUBLICATIONS MANAGEMENT.** (3 cr; prereq 3562; A-F only)  
Managing publications from initial manuscript to first publication. Scheduling, layout and design, liaisons with printers or authors, typography, processing illustrations.

**3582s. SENIOR SEMINAR.** (3 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.

**3670. VISUAL RHETORIC: THEORIES AND APPLICATIONS.** (4 cr; prereq 1200 or equiv, 3562 or equiv)  
Theoretical and practical aspects of visual rhetoric in scientific and technical communication. Develops visual literacy by introducing terms, rhetorical considerations, design principles, tools and applications, and ethical and social responsibilities. Lecture and lab.

## Course Descriptions

### **3690. SCIENTIFIC CONTROVERSY.** (3 cr; prereq 1101 or equiv)

Personal, social, and political challenges created by science and technology. Animal experimentation, organ transplants, frozen embryos, ozone depletion, pollution, and nuclear waste. Public discourse on these issues examined from a rhetorical point of view.

### **3700. RHETORICAL THEORY: PERSUASION AND THE LITERATURE OF SCIENCE.** (3 cr; prereq fr comm requirement)

Introduction to principles and history of rhetorical theory and criticism. Emphasis on classical theories, especially those of Plato and Aristotle. Practice of rhetorical criticism of contemporary communication, including scientific communication. (Meets concurrently with 5700)

### **5100. TECHNICAL COMMUNICATION: SPECIAL PROBLEMS.** (Cr ar; prereq #, Δ)

Supervised reading, research, and work on advanced technical communication projects not covered in regularly scheduled courses.

### **5105. CORPORATE VIDEO FOR TECHNICAL COMMUNICATORS.** (4 cr, §3105)

Video production including video team roles, production technology, and the development process. Students apply rhetorical principles in analyzing video, develop a treatment, write a script, and prepare an annotated bibliography on a video-related topic. (Meets concurrently with 3105)

### **5165. STUDIES IN ORGANIZATIONAL COMMUNICATION, CONFLICT, AND CHANGE.**

(4 cr; prereq fr comm requirement or equiv or grad status)

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 fr comm requirement or equiv or grad status)

Analysis of a manager's position in an organizational communication network. Focus on the possible forms, contexts, and functions of a manager's communication. Assessing and developing personal competence and confidence in managerial communication. Lectures, discussions, readings, experiential exercises, and field research.

### **5180. INTERNSHIP IN SCIENTIFIC AND TECHNICAL COMMUNICATION.** (2-6 cr; prereq STC major or grad, #, Δ)

On-the-job experience at the University or in industry or government.

### **5257. SCIENTIFIC AND TECHNICAL PRESENTATIONS.** (4 cr; prereq 1222, 3562 or grad status 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 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)

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.

### **5400. COMMUNICATION PROGRAM PLANNING AND EVALUATION.** (4 cr; prereq jr or sr or grad and/ or comm work exper)

Methods and process for planning and evaluating communication and information activities in organizations. Study of examples, materials, and resources for planning, budgeting, and assessing organizational communication programs.

### **5500. RESEARCH IN COMMUNICATION STRATEGIES.** (4 cr)

Fundamental terminology of descriptive and experimental research, communication research, questionnaire techniques, interviewing techniques, survey and experimental designs, the steps in organizing and conducting field and empirical research, and basic statistical and computer techniques. Emphasis on application of various research methods to particular communication strategies or settings.

### **5531f. SCIENTIFIC AND TECHNICAL COMMUNICATION COURSE DEVELOPMENT: PHILOSOPHY AND METHODOLOGY.** (4 cr; prereq STC sr or grad or RSTC grad, 3562 or #; A-F only)

Reading, observation, and discussion of theories and methodologies as they relate to composition and to scientific and technical communication. Emphasis on learning to teach first-year college students written or oral persuasive strategies. Students practice assignment and course development, justification, and evaluation.

### **5532w. SCIENTIFIC AND TECHNICAL COMMUNICATION COURSE DEVELOPMENT: MENTORED TEACHING.** (2 cr; prereq 5531, STC or RSTC grad or #; A-F only)

Students mentor with a faculty member and teach course units, prepare and evaluate course assignments, conduct conferences with student writers or speakers, and through observation and practice help oversee the educational process within an actual course.

**5533s. SCIENTIFIC AND TECHNICAL COMMUNICATION COURSE DEVELOPMENT: TEACHING SEMINAR.** (1 cr; prereq 5532, STC or RSTC grad or #; A-F only)

Usually concurrently with their first teaching assignments, students share observations and solve teaching problems within the seminar setting.

**5540. TOPICS IN SCIENTIFIC AND TECHNICAL COMMUNICATION.** (Cr ar; prereq #)

Topics announced in the *Class Schedule*.

**5560. EDITING FOR TECHNICAL COMMUNICATION.** (4 cr; prereq STC premajor or major or grad; A-F only)

Editorial process; editor-writer relationship; copyediting; preparing scientific and technical documents; handling format, visuals, and quantitative materials.

**5572. PROCEDURES AND POLICIES MANUAL.**

(3 cr; prereq STC or pre-STC major, fr comm requirement, 3562 or grad or #)

Problem analysis, process management, gathering information, writing procedures, verification, constructing the finished manual.

**5573. GRANT PROPOSAL.** (3 cr; prereq STC or pre-STC major, fr comm requirement, 3562 or grad or #)

Writing the grant proposal, including establishing credibility, problem statement, program objectives, plan of action, evaluation, budget presentations, and proposal summary. Designed to serve both real and hypothetical situations.

**5575. NEWSLETTER.** (3 cr; prereq STC or pre-STC major, fr comm requirement, 3562 or grad or #)

Newsletter design and production. Students learn to write and edit newsletter articles and gain hands-on experience in typography, graphic design, formatting, layout, and distribution procedures. They produce a newsletter using Macintosh desktop publishing.

**5581. DOCUMENT DESIGN.** (4 cr; prereq 3562, STC sr or grad; A-F only)

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 exper in scientific comm 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.

**5680. GENDER AND THE RHETORIC OF SCIENCE AND TECHNOLOGY.** (4 cr; prereq 1101 or equiv)

How cultural gender roles and biological sex influence communication within scientific and technical communities. Communication strategies of professional writers, scientists, and technologists.

**5700. RHETORICAL THEORY: PERSUASION AND THE LITERATURE OF SCIENCE.** (4 cr, §3700; prereq grad; A-F only)

Principles and history of rhetorical theory and criticism. Emphasis on classical theories, especially those of Plato and Aristotle. Practice of rhetorical criticism of contemporary communication, including scientific communication. Study of contemporary scholarship in the rhetoric of science and technical communication. (Meets concurrently with 3700)

**For Graduate Students Only**

(For descriptions, see *Graduate School Bulletin*)

**8100. RESEARCH METHODS IN RHETORIC AND SCIENTIFIC AND TECHNICAL COMMUNICATION**

**8110. THEORY AND RESEARCH IN AUDIENCE ANALYSIS**

**8120. READING AND WRITING PROCESSES AND THE TECHNICAL COMMUNICATOR**

**8180. DESIGN PROJECT**

**8181. STC CAPSTONE PROJECT**

**8210. THEORY AND RESEARCH IN MEDIA SELECTION**

**8258. INFORMATIONAL RESEARCH INTERVIEWING IN SCIENTIFIC AND TECHNICAL COMMUNICATION**

**8500. QUALITATIVE RESEARCH: STRATEGIES IN TECHNICAL COMMUNICATION**

**8510. THEORY AND PRACTICE IN DESIGNING MESSAGES**

**8515. TOPICS IN THE RHETORIC OF SCIENCE AND TECHNOLOGY: THEORY, HISTORY, CRITICISM**

**8525. TOPICS IN CULTURE AND COMMUNICATION**

**8556. SEMINAR IN SCIENTIFIC AND TECHNICAL COMMUNICATION PEDAGOGY: THEORY AND RESEARCH**

**8777. THESIS CREDITS: MASTER'S**

**8888. THESIS CREDITS: DOCTORAL**

## Course Descriptions

### Social Work (SW)

*(School of Social Work)*

**1001f,w.s. 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.

**3201. INTERVENTIONS WITH INDIVIDUALS AND GROUPS.** (4 cr)  
Applying social work skills and values to work with individuals and small groups, using an ecological framework.

**3202. INTERVENTIONS IN COMMUNITY AND SOCIAL POLICY.** (4 cr)  
Applying social work skills and values to community organization, social action, and social problems, using an ecological framework.

**3970f,w.s. DIRECTED STUDIES.** (1-15 cr per qtr; prereq #)  
Guided individual reading or study.

**3990f,w.s. DIRECTED RESEARCH.** (Cr ar; prereq #)

**5010f,w.s. SEMINAR: SPECIAL TOPICS.** (3 cr)

**5024f. MULTIDISCIPLINARY PERSPECTIVES ON AGING.** (4 cr, §CPsy 5305, §Educ 5440, §HSU 5009, §Phar 5009, §PA 5671, §Soc 5960)  
Multidisciplinary introduction to aging and the aging process.

**5025. INTERNATIONAL SOCIAL WELFARE.** (3 cr; prereq 1001 or #)  
Role of international social welfare in meeting basic human needs and in promoting human rights, social justice, and peace; theories, models, and strategies of social welfare in different economic and political systems; emphasis on the Third World.

**5026. MEDIATION AND CONFLICT RESOLUTION.** (3 cr)  
Students develop beginning skills as mediators and learn to make informed decisions regarding the appropriateness of mediation in divorce, neighborhood disputes, and conflicts between parents and adolescents, spouses, and crime victims and offenders.

**5027w. PEACE AND JUSTICE AS SOCIETAL VALUES.** (3 cr)  
Direct, structural, and cultural violence; connection between peace and justice; role of personal empowerment, alternative institutions, and nonviolent action; global-national-local action strategies.

**5028w. SOCIAL WORK IN THE SCHOOLS.** (3 cr)  
Applying social work methods and skills in a school setting. Consultation, advocacy, developing clinical skills, and using community resources as a school social worker.

**5100f. YOUTH IN THE WORLD.** (3 cr, §YoSt 5100)  
Theoretical and conceptual framework for understanding adolescents and youth in everyday life.

**5111f,w.s. CONTEMPORARY POLICY AND PROGRAMS IN SOCIAL WELFARE.** (3 cr for grads, 4 cr for undergrads; prereq grad standing or 12 cr social sciences)  
Concepts and principles of social policy for social welfare programs and services.

**5123s. FINANCIAL MANAGEMENT IN PUBLIC AND NONPROFIT ORGANIZATIONS.** (3 cr, §PA 5123)  
Design, installations, and use of accounting and control systems in public and nonprofit agencies. Public accounting standards and practices. Financial administration. Debt management. Controllership and post auditing. Financial reporting. Contract and procurement management systems.

**5211f,w.s. ADVANCED THEORIES OF HUMAN GROWTH AND CHANGE.** (3 cr for grads, 4 cr for undergrads; prereq grad standing or 12 cr social sciences)  
Socio-psycho-biological factors associated with individual and group development as applied to social work practice.

**5212w. SOCIAL WORK WITH OLDER ADULTS.** (3 cr)  
Social work knowledge, skills, and values as applied to working with older adults.

**5234w. CLINICAL PRACTICE WITHIN A HOSPITAL AND HEALTH CARE SETTING.** (3 cr)  
Prepares students for practice in a hospital or health care setting. Provides focused, practice-oriented learning environment that builds on previous experiential and academic learning.

**5312f. SEMINAR: DIRECT WORK WITH ADOLESCENTS.** (3 cr; §YoSt 5312)  
Direct work with troubled and at-risk adolescents in a wide range of settings in which social workers are typically involved.

**5341. THE ECOLOGIES OF BLACK CHILD DEVELOPMENT.** (3 cr; prereq CPsy 5310)  
Social, affective, and cognitive development of black children using life course/ecological conceptual framework. Emphasis on development of and crises facing young black males.

**5349f. 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. SOCIAL WORK PRACTICE IN CHILD WELFARE.** (3 cr)

Advanced survey of child welfare policies; use of multisystemic interventions; impact of poverty, race, ethnicity, and gender on policy and practice; current developments in family preservation, relative placement, foster care, adoptions, and Indian child welfare; role of social work in child protection services.

**5414s. SOCIAL GROUP WORK.** (3 cr)

Principles of social group work practice applicable to a variety of task and treatment groups. Small group as a social process to achieve task and treatment goals, communication in groups, decision-making self-help, and therapeutic groups. Stages of group development and termination.

**5498. CHILD DEVELOPMENT AND SOCIAL POLICY.** (3 cr; prereq PA 5498)

Intersection of developmental conceptual orientations with policies affecting children and families.

**5601f,w,s. ETHNOCULTURAL CONCEPTS IN SOCIAL WORK PRACTICE.** (3 cr for grads, 4 cr for undergrads)

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.

**5970f,w,s. INDEPENDENT STUDY IN SOCIAL WORK.** (cr ar)

Independent study in areas of special interest to students and faculty.

**For Graduate Students Only**

(For descriptions, see *Graduate School Bulletin*)

**8010. FIELD INSTRUCTION I****8020. FIELD INSTRUCTION II****8030. FIELD INSTRUCTION IN SOCIAL WORK III****8104. CHILD WELFARE AND THE LAW****8121. SOCIAL POLICY AND DELIVERY SYSTEMS FOR FAMILY AND CHILDREN'S SERVICES****8122. HEALTH/MENTAL HEALTH POLICY****8130. SEMINAR: HISTORY OF SOCIAL WORK****8180. SOCIAL POLICY FORMULATION AND ANALYSIS****8301. INTRODUCTION TO HUMAN SERVICES MANAGEMENT THEORY AND PRACTICE****8305. COMMUNITY DEVELOPMENT****8307. ADVANCED TRAINING IN HUMAN SERVICES MANAGEMENT THEORY AND PRACTICE****8311. ISSUES AND INTERVENTIONS IN CHILD SEXUAL ABUSE****8350. PLANNED SOCIAL CHANGE****8400. SOCIAL WORK METHODS I****8401. SOCIAL WORK METHODS II****8402. SOCIAL WORK METHODS III****8406. SUPERVISION AND CONSULTATION IN SOCIAL WORK PRACTICE****8407. STRATEGIES OF FAMILY INTERVENTION****8408. DIRECT WORK WITH CHILDREN AND FAMILIES****8421. SOCIAL WORK PRACTICE: PSYCHOPATHOLOGY AND INTERVENTION****8422. SOCIAL WORK PRACTICE WITH PERSONS WITH SERIOUS AND PERSISTENT MENTAL ILLNESS****8424. SOCIAL WORK WITH INVOLUNTARY CLIENTS****8425. TASK-CENTERED PRACTICE****8426. INTERVENTION WITH BATTERED WOMEN AND THEIR FAMILIES****8427. FAMILY-CENTERED, HOME-BASED SERVICES****8450. SPECIAL TOPICS: PRACTICE WITH INDIVIDUALS, FAMILIES, AND GROUPS****8461. THEORY AND MODEL DEVELOPMENT IN SOCIAL WORK****8888. THESIS CREDITS: DOCTORAL****8901. SOCIAL WORK RESEARCH METHODS****8902. DIRECT PRACTICE EVALUATION****8903. PROGRAM EVALUATION****8950. SPECIAL TOPICS IN SOCIAL WORK RESEARCH****8970. DIRECTED STUDY****8990. RESEARCH PROJECTS****8991. RESEARCH SEMINAR****8992. RESEARCH SEMINAR**

See additional *School of Social Work* courses under *Youth Studies (YoSt)*.

## Course Descriptions

### Textiles and Clothing (TexC)

See Design, Housing, and Apparel.

### Youth Studies (YoSt)

(School of Social Work)

#### 3100f. INTRODUCTION TO YOUTH WORK. (3 cr)

Exploration of settings in which youth work is done—schools, informal education, juvenile justice, mental and physical health organizations, religious organizations. Key issues, policy and programmatic responses, roles and tasks of youth worker, and career patterns are discussed for each setting. (CEE only)

#### 5100f,w. YOUTH IN THE WORLD. (3 cr, §SW 5100; prereq 5330 or CPsy 3303 or #)

Encourages critical thinking about how youth are understood in scholarship, public discourse, and professional practice. Building a basis for understanding and working with or on behalf of youth. (Day and CEE)

#### 5120f,w,s,su. INDEPENDENT STUDY IN YOUTH STUDIES. (Cr ar [max 12 cr]; prereq #)

Independent reading and/or research under faculty supervision. (Day and CEE)

#### 5130f,w,s. 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; inquire for details. (CEE only)

#### 5132s. EXPERIENTIAL LEARNING. (3 cr; prereq CPsy 3303 or #)

Purpose and models of experiential learning in schools and agencies serving youth. Emphasis on how to develop, implement, and evaluate such programs. (Day and CEE)

#### 5200w. YOUTH POLICY: ENHANCING HEALTHY DEVELOPMENT IN EVERYDAY LIFE. (3 cr; prereq 6 cr social sciences, working with youth, #)

Creates youth policy directed at enhancing healthy development through community building, program development, and other strategies. (Day and CEE)

#### 5201-5202-5203f,w,s,su. PRACTICUM. (4 cr per qtr; prereq 3100, 5330 or CPsy 3303, #)

Two-hour seminar and 12 to 15 hours of fieldwork each week. Students reflect on and integrate knowledge about youth with ongoing experience in work with youth. (Day and CEE)

#### 5230f,s. WORK WITH YOUTH—INDIVIDUAL.

(3 cr per qtr; prereq Soc 1001, Psy 1001, CPsy 3303 or #) Examination of 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. This first course in a three-quarter sequence emphasizes work on a one-to-one basis. (CEE only)

#### 5231f,w. WORK WITH YOUTH—FAMILY. (3 cr per qtr; prereq 5230, FSoS 5200 or #)

Emphasis on how adolescents learn to get along with themselves and their role in the family. Theories and techniques of therapy with adolescents and their families; practical methods of structural change; developing effective communication, decision-making, and problem-solving systems; winning the family's cooperation; the role of the therapist in family therapy. (CEE only)

#### 5232w,s. WORK WITH YOUTH—GROUP. (3 cr per qtr; prereq 5230 or #)

Helps practitioners with adolescents to increase knowledge and understanding of adolescent group needs and associations; increase knowledge of group process; and enhance skill in working with groups of adolescents in the community, group living situations, and group therapy. (CEE only)

#### 5312f. DIRECT WORK WITH ADOLESCENTS.

(3 cr, §SW 5312; prereq 6 cr social sciences, exper working with youth, #)

Direct work with troubled youth and at-risk adolescents in a wide range of settings in which youth workers or social workers are typically involved. Emphasis on young people in groups in the "life space" in everyday life, rather than one-to-one office-based interactions. (Day and CEE)

#### 5330f. CHILD AND ADOLESCENT PSYCHOLOGY FOR PRACTITIONERS. (3 cr; prereq courses in educational psychology, child or adolescent psychology)

Application of theory and research about children and adolescents, including how findings can be used and how theories facilitate understanding of behavior. (CEE only)

#### 5331w. YOUTH AGENCIES, ORGANIZATIONS, AND SERVICE SYSTEMS. (3 cr; prereq two courses in sociology/anthropology, work experience in youth agency or organization)

Overview of major forms of youth agencies, organizations, systems. Emphasizes sociopolitical structures, legitimacy, ideologies, goals, programs, services; staff, legal, ethical issues, youth participation. (CEE only)

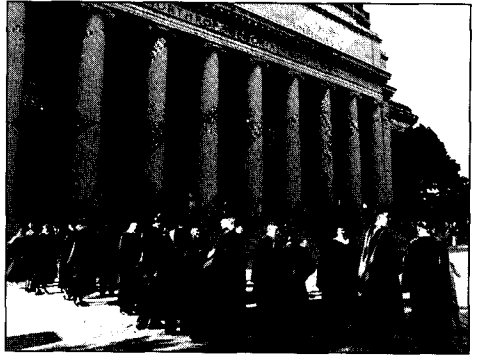
#### 5401. COMMUNICATING WITH ADOLESCENTS ABOUT SEXUALITY. (3 cr; prereq 6 cr social sciences, exper working with youth or #)

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. (CEE only)

### 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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Health Center  
Melvin George, Vice President for  
Institutional Relations  
Anne H. Hopkins, Vice President for Arts,  
Sciences, and Engineering  
To be announced, Vice President for Student  
Affairs  
Mark Brenner, Acting Vice President fo  
Research and Acting Dean of the  
Graduate School  
Mark B. Rotenberg, General Counsel

## College of Human Ecology Administrators

Mary E. Heltsley, Dean (32 McNeal)  
Bonnie Braun, Associate Dean for Extension  
and Outreach (37 McNeal Hall)  
Dennis A. Savaiano, Associate Dean (32  
McNeal Hall)  
Jeanne Exline, Director, Career Services (68  
McNeal Hall)  
Sarah Greening, Assistant to the Dean (32  
McNeal Hall)

Melinda B. Hoke, Development Officer  
(58 McNeal)  
Jacqui A. Koosman, Director, Personnel  
Services (32 McNeal Hall)  
Katherine Maple, Director, Academic  
Student Services (32 McNeal Hall)  
Grace Wahlert, Director, Fiscal and  
Facilities Management (48 McNeal Hall)

## Program Committee Chairpersons

Clothing Design—Marilyn DeLong  
Design Communication—Timothy Blade  
Family Social Science—William Goodman  
Food Science—Zata Vickers  
Human Ecology—Dennis Savaiano  
Housing—Becky Love Yust  
Interior Design—Delores Ginthner, Denise  
Guerin  
Nutrition—Linda J. Brady  
Retail Merchandising—Kim Johnson

## Department Faculty

### Design, Housing, and Apparel

(240 McNeal Hall)

#### *Professor*

Earl W. Morris, *head*  
William J. Angell  
Marian-Ortolf Bagley  
Signe T. Betsinger  
Timothy T. Blade  
Marilyn R. DeLong  
Joanne B. Eicher

#### *Associate Professor*

Homa Amir-Fazli  
Ann M. Erickson  
Evelyn M. Franklin  
Edward G. Goetz  
Denise A. Guerin  
Kim K. P. Johnson  
Wanda N. Olson  
Gloria M. Williams

#### *Assistant Professor*

Sherri A. Gahring  
Delores A. Ginthner  
Karen L. LaBat  
Barbara E. Martinson  
Becky Love Yust

**Goldstein Gallery**

Suzanne Baizerman, *director*  
 Timothy Blade, *decorative arts curator*  
 Marilyn DeLong, *costume curator*

**Family Education**

(325 Vocational-Technical Education)

*Professor*

Ruth Thomas  
 Howard Williams

*Associate Professor*

Marilyn Rossmann, *coordinator*  
 Jerry McClelland  
 Jane Plihal  
 Mary Ann Smith  
 James Stone III

**Family Social Science**

(290 McNeal Hall)

*Professor*

Harold D. Grotevant, *head*  
 Jean Bauer  
 Pauline Boss  
 William Doherty  
 M. Geraldine Gage, *emeritus*  
 Mary E. Heltsley  
 M. Janice Hogan  
 David H. Olson  
 Kathryn Rettig  
<sup>1</sup>Paul C. Rosenblatt  
 Shirley Zimmerman

*Associate Professor*

Bonnie Braun  
 Sharon Danes  
<sup>1</sup>Daniel Detzner  
 Janet Macy  
 James Maddock  
 Marlene Stum

*Coordinator*

William J. Goodman

*Research Associate*

Cathy Schulz

*Assistant to the head*

Brian Ault

**Alcohol and Drug Counseling Education Program**

Philip Colgan  
 Constance Fabunmi

**Food Science and Nutrition**

(225 Food Science and Nutrition)

*Professor*

Frank Busta, *head*  
 Joseph J. Warthesen, *associate head*  
 Paul B. Addis  
<sup>1</sup>C. Eugene Allen  
 William M. Breene  
 A. Saari Csallany  
 Eugenia A. Davis  
 Richard J. Epley  
<sup>2</sup>R. Gary Fulcher  
<sup>1</sup>Theodore P. Labuza

Allen S. Levine  
<sup>3</sup>Larry L. McKay

Irving J. Pflug  
 Gary A. Reineccius  
 Dennis A. Savaiano  
 Joanne L. Slavin  
 David E. Smith  
 Sita R. Tatini  
 Edmund A. Zottola

*Associate Professor*

Elaine H. Asp  
 Mrinal Bhattacharya  
 Linda J. Brady  
 Arthur B. Davis  
 Daniel D. Gallaher  
 Susan K. Harlander  
 Craig A. Hassel  
 H. William Schafer  
 Zata M. Vickers

*Assistant Professor*

William A. Atwell  
 Roderick A. Barke  
 Eric D. Bastian  
 Paul S. Brady

<sup>1</sup> *Recipient of the Horace T. Morse-Minnesota Alumni Association Award for Outstanding Contributions to Undergraduate Education*

<sup>2</sup> *General Mills Land-Grant Chair in Cereal Chemistry and Technology*

<sup>3</sup> *Kraft General Foods Chair in Food Science*

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## Administration and Faculty

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Mary E. Darling  
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Mindy S. Kurzer  
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Louise M. Mullan, Jr.  
Chang-Ho Park  
Marla M. Reicks  
R. Roger Ruan

*Assistant Clinical Specialist*

Julie Schaumann

*Lecturer*

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Mary C. McFadden  
Karen E. Moxness  
Karl S. Willson

*Assistant to the Head*

Geraldine M. Skogen

*Assistant Professor*

Sandra Beeman  
Mark G. Frenzel  
Nancy L. Leland  
Oliver Williams

*Coordinator and Instructor*

Mary K. Burnison  
Nancy Johnston, *director of graduate studies*  
Ronald L. Pitzer  
Maura Sullivan

*Adjunct Faculty*

Richard Bolan  
Rose Brewer  
Clarke Chambers  
Barbara Nelson  
Robert ten Bensel

*Lecturer*

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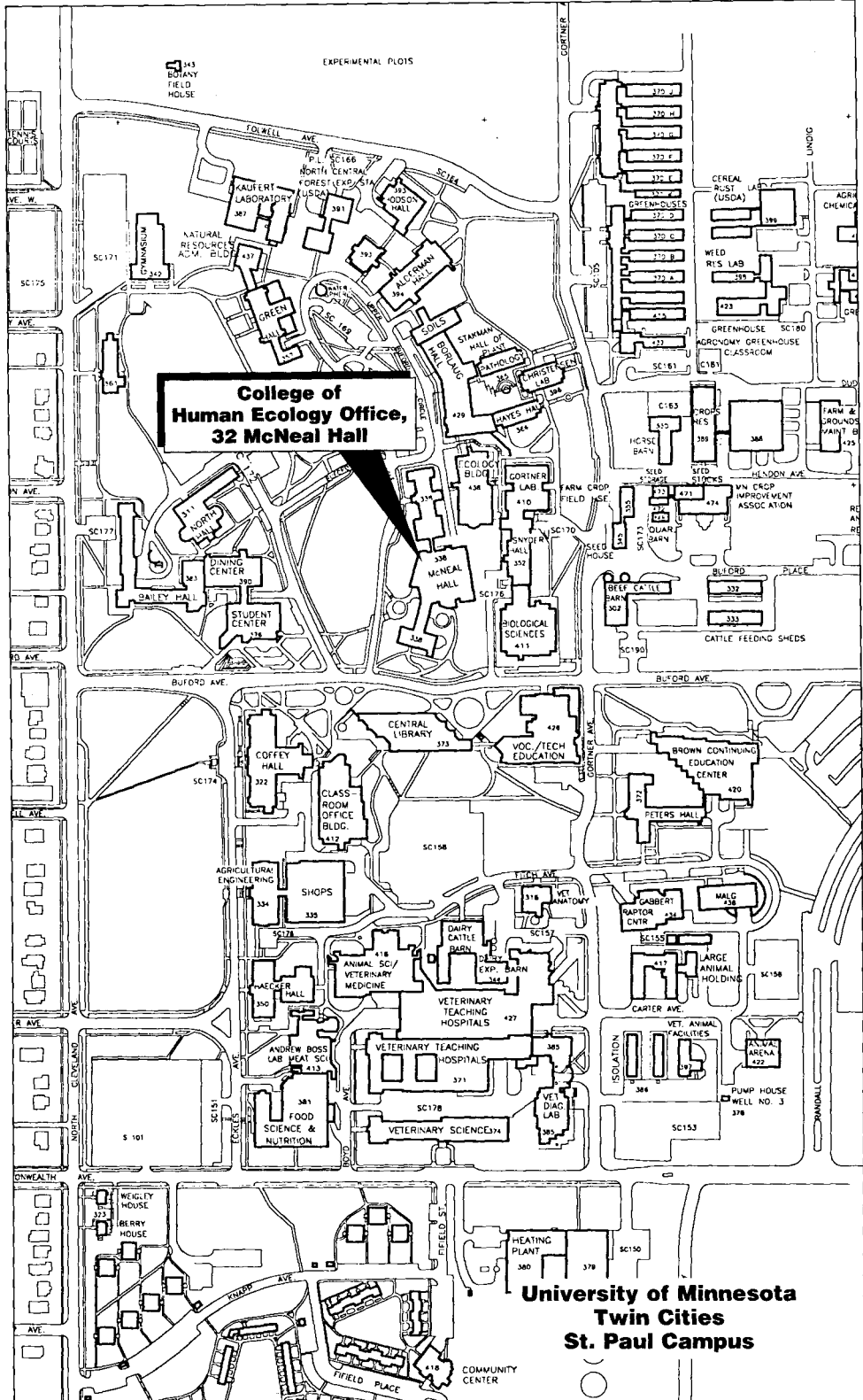
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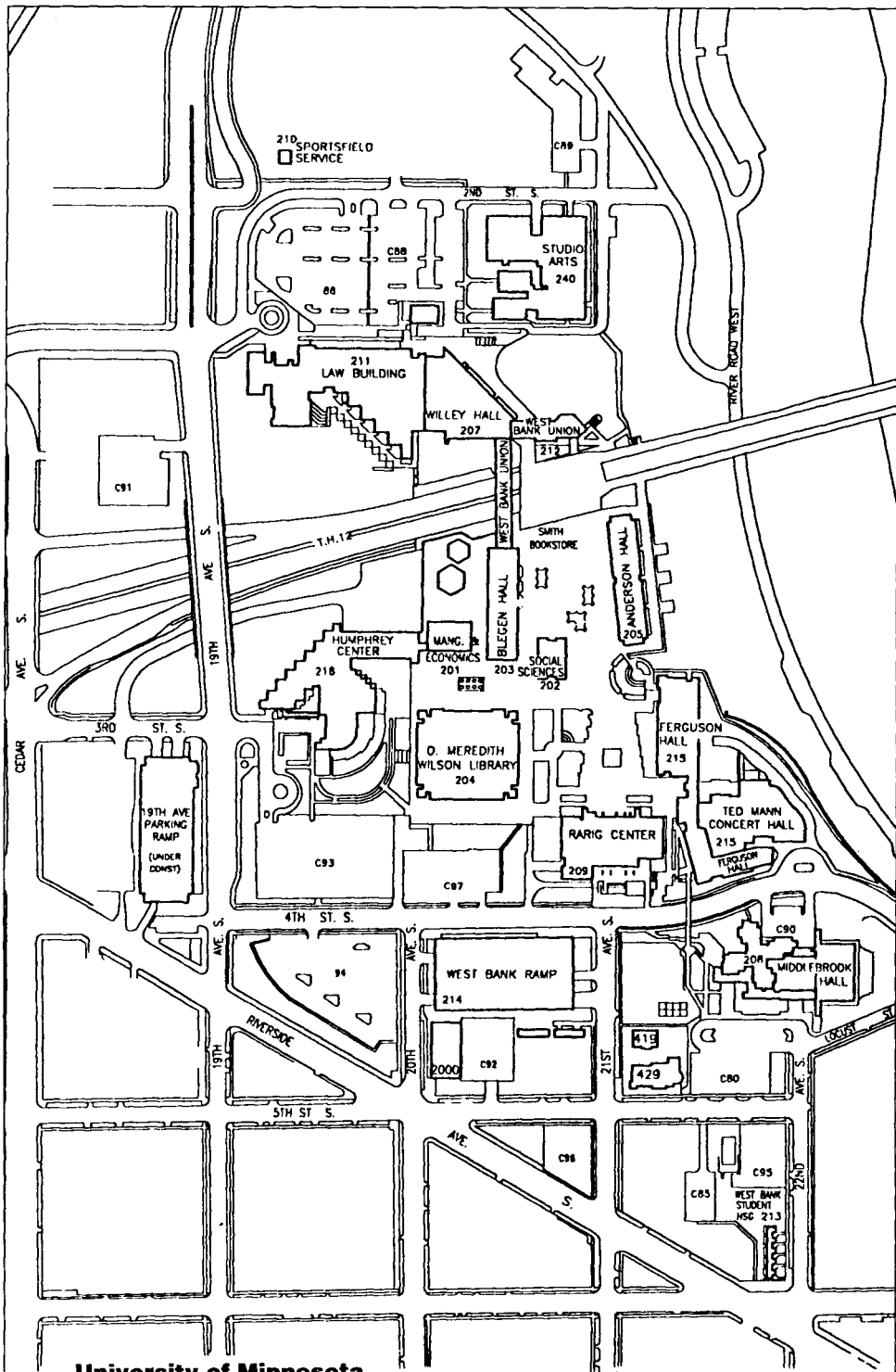
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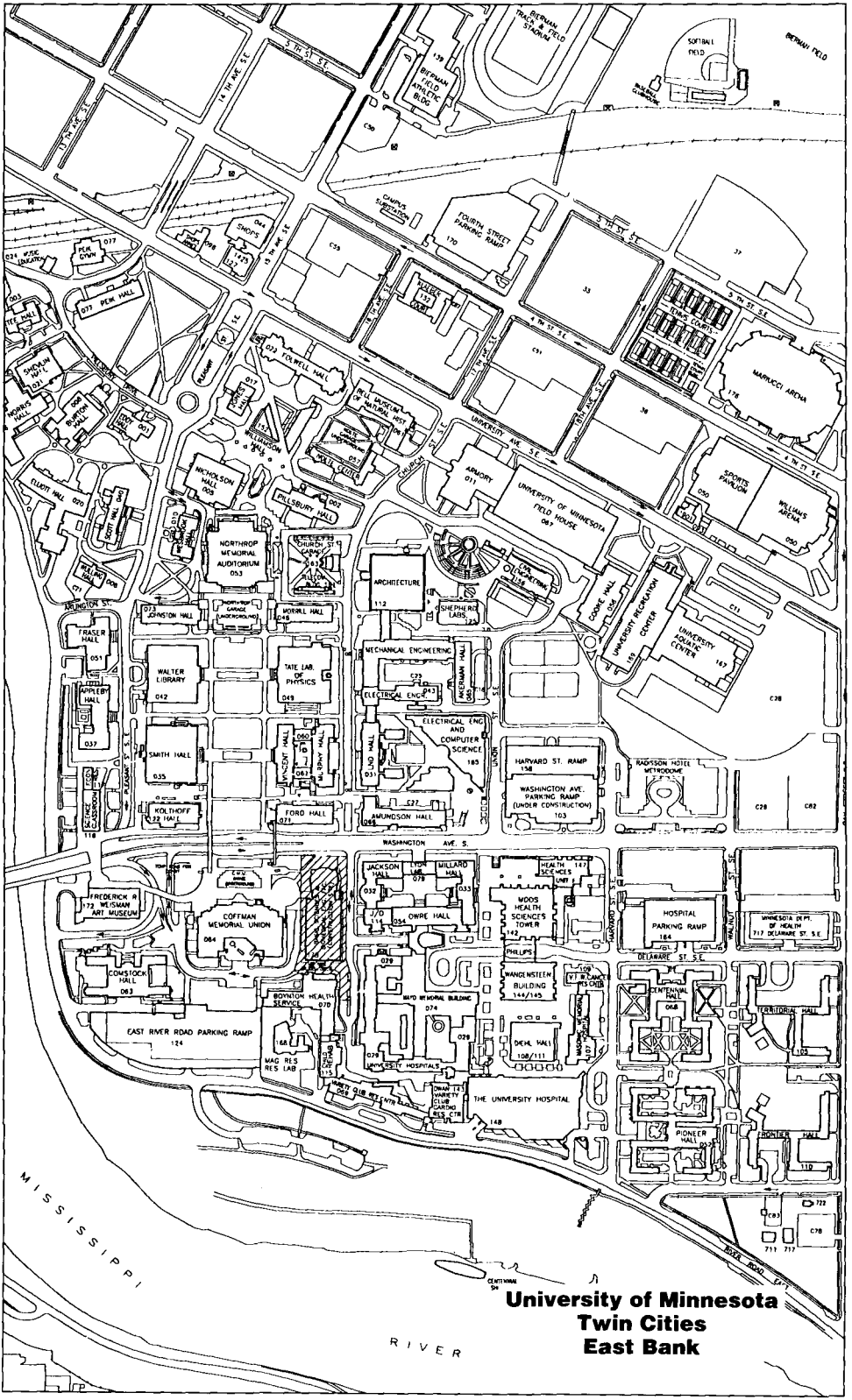
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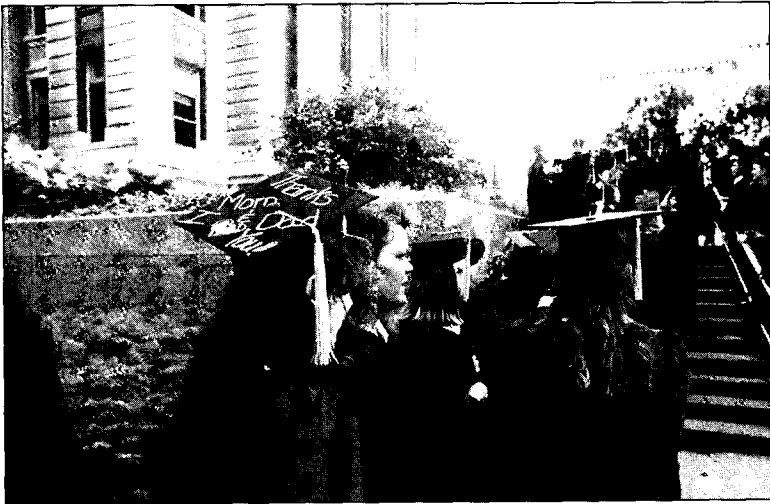




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## Postal Statement

Volume 97, Number 10  
August 12, 1994

University of Minnesota  
(USPS 651-720)



Published by the University of Minnesota, Office of the Vice President for Student Affairs, Communications & Publications, 110 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455-0213; once in March, September, October, and November; twice in April and July; three times in February; and five times in

August. Second-class postage paid at Minneapolis, Minnesota. POSTMASTER: Send address changes to University of Minnesota, 110 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455-0213.



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