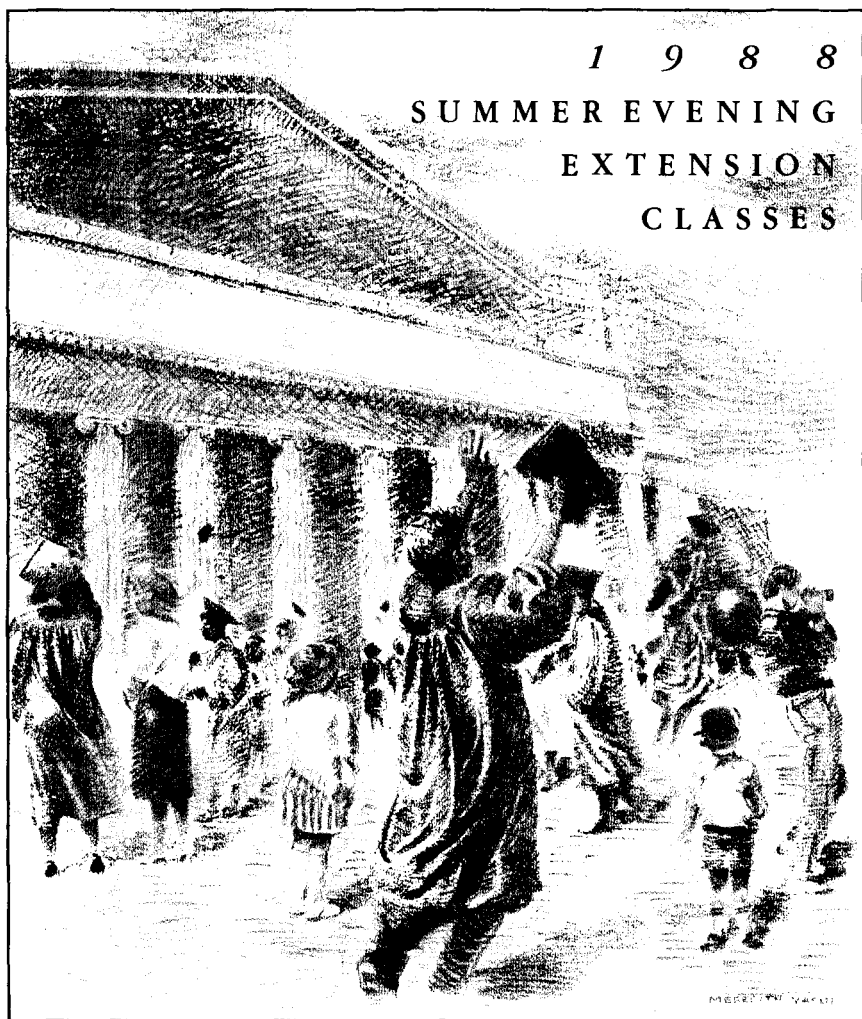


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SUMMER EVENING
EXTENSION
CLASSES



1988 Summer Evening Extension Classes

First 5-week term June 13 to July 18
10-week term June 13 to August 24
Second 5-week term July 21 to August 24

Register by mail or in person

Registration Dates

For limited- and nonlimited-enrollment classes

I. Mail Registration (call 624-2388 for registration forms)

Ten-week term *May 9 to June 1*
First 5-week term *May 9 to June 1*
Second 5-week term *May 9 to July 6*

II. In-Person Registration (See Office Hours, page 9)

Ten-week term *May 24 to June 1*
First 5-week term *May 24 to June 1*
Second 5-week term *May 24 to July 6*

Volume 91, Number 5

April 6, 1988

UNIVERSITY OF MINNESOTA BULLETIN

(USPS 651-720)

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Bulletin Use

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

Contents

When and How to Register	5
Registration dates	6
Registration procedures	5
Alternate choice forms	8
Closed classes	8
Early registration permission	8
Reopening day	8
Late registration and additions	9
Office Hours	9
Enrollment Information	10
Tuition and fees	10
Financial aids and loans	10
Military information	14
Prerequisites	17
Grades	17
Grade reports and transcripts	18
Student identification card	19
Credit and No-Credit Registrations	19
Credits	19
Recording credits	20
Graduate School credit	20
Continuing Education Unit	21
Credits without class attendance	21
Auditors (no credit)	23
Reduced-tuition plans (no credit)	23
Continuing Education for Women	24
Persons 62 and older	24
Bookstores	25
Rules, Regulations, and Policies	26
Fee statements	26
Changes in course information	26
Class attendance	26
Transferring classes	26
Transfers	27
Access to student educational records	27
Cancellations	27
Refunds	28
Course Numbering	30
Symbols	30

(continued next page)

Credit Course Offerings	31
Accounting	31
Adult and Teacher Education	32
American Studies	33
Anthropology	33
Architecture	34
Art History	35
Arts, Studio	36
Split Rock Arts Program	39
Biology	40
Botany	40
Business, Government, and Society	40
Business Law	41
Child Psychology	42
Classical Studies	42
Composition	43
Computer Science	44
Decision Sciences	45
Design	45
Early Childhood Studies	47
East Asian Studies	47
Economics	48
English	49
Family Social Science	51
Finance	54
Financial Planning	54
French	55
French and Italian	56
General College courses	56
Geography	61
German	61
History	63
Humanities	64
Industrial Engineering/Operations Research	65
Industrial Relations	65
Insurance	66
Journalism and Mass Communication	67
Landscape Architecture	67
Latin	68
Learning and Academic Skills	69
Linguistics	69
Logistics Management	69
MBA Program	70
Management	70
Management Information Systems	71
Management Sciences	73

(continued next page)

Marketing	74
Mathematics	74
Mechanical Engineering	76
Middle Eastern and South Asian Studies	76
Music	77
Operations Management	78
Philosophy	78
Physical Education	79
Political Science	79
Psychology	80
Public Health	82
Rhetoric	82
Russian and East European Studies	83
Scandinavian	84
Social and Philosophical Foundations of Education	84
Social Work	85
Sociology	85
Spanish and Portuguese	86
Speech-Communication	88
Statistics	88
Textiles and Clothing	88
Vocational-Technical Education	89
Women's Studies	90
Noncredit Course Offerings	91
Architecture (noncredit)	34
Compleat Scholar Courses	92
Study and Travel Adventures	106
Research Explorations	109
Elderhostel	116
General Information	117
Degrees and Certificates	121
Departments	122
Campus Buildings	122
Maps	123-127
Index	129
MacPhail Center	133
Extension Classes Study Abroad	Inside back cover

Extension Classes Bulletin

For complete information about Extension Classes, consult the current **1987-88 Extension Classes Bulletin**. For a copy, telephone 624-2388. **The 1988-89 Bulletin will be available August 1, 1988.**

Equal Opportunity

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

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

Registration and General Information

101 Wesbrook Hall
University of Minnesota
77 Pleasant Street S.E.
Minneapolis, MN 55455
625-3333

Extension Counseling and Program Advising

314 Nolte Center
University of Minnesota
315 Pillsbury Drive S.E.
Minneapolis, MN 55455
625-2500

Extension Classes

Continuing Education and Extension

UNIVERSITY OF MINNESOTA

Steven J. Vite, Charles R. Cheesebrough, Editors

When and How to Register

Register by Mail or In Person

These are registration procedures for limited-enrollment classes and nonlimited-enrollment classes.

Read through these procedures carefully before you register! Correct registration is the student's responsibility. If you have questions after reading the information on registration procedures, call 625-3333. Most of the questions students ask are answered on these pages.

Registration procedures differ for limited-enrollment classes and nonlimited-enrollment classes. Limited enrollment classes have specified limits on the number of students who will be permitted into the class. These courses are starred and the course number and title are printed in red in this bulletin. The limit is given with the course description in most cases. Early registration by mail is the best way to obtain space in limited-enrollment classes. For complete details see the instructions for **Registration by Mail**.

Courses without enrollment limits have numbers and titles printed in black ink in this bulletin. Early registration is recommended even for nonlimited-enrollment classes to allow sufficient time for processing and return of fee statements. In rare cases, it may be necessary to place enrollment limits on nonlimited classes.

General Registration Instructions

- 1. Obtain official registration forms at an Extension Classes registration office at any time during office hours; or call 624-2388 to request that registration forms be sent to you.** Forms for athletic facility use, the health service plan, and veterans benefits certification can be requested at this telephone number also (see the index at the end of this bulletin for page numbers where these services are explained).

Regular registration offices are at 101 Westbrook Hall on the Minneapolis campus (east bank) of the University of Minnesota and at the MacPhail Center in downtown Minneapolis at 1128 LaSalle Avenue. In-person registration is offered on the St. Paul campus, 130 Coffey Hall, for limited classes only. See maps near the end of this bulletin.

- 2. Complete the registration form giving all the requested information.** A sample registration form is shown on the following page.

- a.** Each course description in this bulletin provides information necessary in completing the registration form. Courses are listed under departmental or subject heading (alphabetically arranged). Complete the spaces on the form that request information about the course; if there have been any changes to the room, day, or time you will be notified of those changes.

If you do not have a University student I.D. number, leave that space blank.

For information about grade base option, see pages 17 and 18.

Nontranscript registrations are those that apply to noncredit students (other than auditors) and certain noncredit courses; they are explained on pages 23 and 24.

Be sure to complete the enrollment period section giving the appropriate summer term and year. If your course is offered on a special term, fill in the start and end dates in the space provided.

Birth dates and social security numbers are required for coding purposes.

The following information requested on your registration form is defined as private data under state and/or federal laws: birth date, sex, social security number, and University of Minnesota identification (I.D.) number. In general, this information may not be released to others without your consent or a court order. The intended use of the

requested information is to identify you in relation to other students' records. Disclosure of this information is voluntary. There is no consequence to you if you fail to identify your sex or University I.D. number on the registration form.

NOTE: Failure to provide your birth date or social security number may lead to identification errors in your records.

- b. Please type or use ballpoint pen and press hard so all five copies of the registration form are legible. If all copies are not legible, fee statements cannot always be returned to students who register by mail, or record of enrollment may not be properly made on University files.

Keep the registration form intact. Do not remove carbons or receipts.

- 3. You are not registered until your tuition and fees are paid.** Checks must be for the full amount of the tuition and fees and made payable to the University of Minnesota. Be sure to include special fees, course fees, and late fees, when applicable.

Students are urged to pay fees by personal check or money order. Change is not always available at in-person registration locations.

- 4. You may register for classes during the following registration periods.**

	10-Week Term	First 5-week term	Second 5-week term
Registration by mail	May 9 to June 1	May 9 to June 1	May 9 to July 6
In-person registration	May 24 to June 1	May 24 to June 1	May 24 to July 6
Last day to register without a late fee	June 1, 1988	June 1, 1988	July 6, 1988
(Reserved class space will be forfeited after June 1, 1988)			
Reopening day	June 10, 1988	June 10, 1988	June 10, 1988

Enrollment is limited in courses or sections marked with a star (★) and printed in red in this bulletin.

Students who complete one course which is part of a two- or three-part sequence are not automatically assured of space in the next course in the sequence. Early registration is the best opportunity to obtain space in these courses.

Sample Registration Form

Continuing Education and Extension UNIVERSITY OF MINNESOTA				Department of Extension Classes REGISTRATION FORM			
DEPARTMENT	COURSE NO.	SECTION	CREDIT	AF	SN	AUD	GRADUATE CREDIT REQUESTED
Arts	5710	2	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DAY	HOUR	LOCATION	ROOM	COURSE TITLE AS APPEARS IN BULLETIN		PAGE NO.	NON-TRANSCRIPT REGISTRATION
TTh	6-9:45	ArtB	120	Photography		40	19 PRICE <input type="checkbox"/> OVER 20 UNDER 18 <input type="checkbox"/> OTHER <input type="checkbox"/>
TUITION	COURSE FEES	SPECIAL FEES	LATE FEE	COURSE TOTAL			
\$132.75	\$25	\$5	---	\$162.75			
U OF M STUDENT I.D. #	FIRST		MIDDLE	BIRTH DATE (BASE NUMERICS)		ENROLLMENT PERIOD 19 88	
9200203	Klack		Wendy	Ann	MONTH 6 / DAY 28 / YEAR 52	FALL QTR <input type="checkbox"/> (1) FALL SEM <input type="checkbox"/> (2) WIN QTR <input type="checkbox"/> (3) SPR SEM <input type="checkbox"/> (4) SPR QTR <input type="checkbox"/> (5)	
NAME LAST	LOCAL STREET ADDRESS (INCLUDING APT. NO. IF APPROPRIATE)			SOCIAL SECURITY NO.		1ST SUMMER TERM <input type="checkbox"/> (7) 2ND SUMMER TERM <input checked="" type="checkbox"/> (8)	
	56 Knollways Circle South			303-04-0101		10 WEEK SUMMER TERM <input type="checkbox"/> (6)	
CITY	STATE ABBREV.	ZIP CODE	HOME PHONE	SEX	SPECIAL TERM <input type="checkbox"/> (9)		
Hopkins	MN	55343	829-9417	<input checked="" type="checkbox"/> M <input type="checkbox"/> F	START DATE _____ MONTH / DAY / YEAR		
OCCUPATION	BUSINESS PHONE		EXT.	END DATE _____ MONTH / DAY / YEAR			
Architect							

Registration by Mail

1. Follow the steps outlined above in general registration instructions.
2. Make out a separate check to pay your tuition and fees for each limited class you register for by mail. If one check is used to pay for two or more classes and one class is closed, the registrations cannot be processed and must be returned to you. Nonlimited-enrollment class registrations may be paid for by writing one check only. Do not send cash.
3. If there are classes or sections of classes that are acceptable alternatives to your first choice, list those on an alternate choice form (available by calling 624-2388). If your first choice is closed, the registration office will select the first available choice listed and process the registration.
4. Mail in your registration forms, alternate choice forms (optional), and tuition check(s) made payable to the University of Minnesota. (A separate tuition check is required for each limited-enrollment class.) The address is:

Department of Extension Classes
University of Minnesota
101 Wesbrook Hall
77 Pleasant Street S.E.
Minneapolis, MN 55455

Registrations received in the Extension registration office will be processed on a daily basis beginning with registration dates specified here and continuing through the registration period. Spaces in limited-enrollment classes will be filled daily. **Registrations received in the registration office before the first date of mail registration will be returned to the sender.**

Registrations received during the mail-only registration period will receive priority in processing. However, once in-person registration begins, space in limited-enrollment classes also will be assigned to students who register in person.

Students whose tuition and fees are to be billed to a company, governmental agency (including foreign governments), institution, scholarship, or the military may register by mail. See the section on **Financial Aids and Loans**, pages 12, 13, and 14.

Students registering with **Regents' Scholarships** should read the section on page 13.

Persons registering with G. I. Bill assistance must include the G. I. Bill Information Sheet with their registration. See the section on **Veterans**, page 14, for further information and instructions.

Checks or money orders for late registrations (postmarked after midnight of the last day of the registration period) must include the late fee specified under **Late Registrations and Additions**. Checks must be for the exact amount of tuition and fees. (Refunds for overpayments will not be made until checks clear banks.)

Students who have not received fee statements three weeks after mailing in registration forms and tuition payment should call 624-4145 to check whether the registration was received and processed. Students should assume they are registered unless notified otherwise. Registrations that cannot be processed for some reason are returned immediately (except for illegible copies).

In-person Registration

1. Follow the steps outlined above in General Registration Instructions.
2. In-person registration dates for each term are given below. Office hours are on page 9.

10-week term	May 24—June 1
First 5-week term	May 24—June 1
Second 5-week term	May 24—July 6
3. Bring your completed registration form to the tally clerk at an Extension registration office during the in-person registration period. See locations below. For limited-enrollment classes, the clerk will tell you whether there is still space in the class. Students

who register at the Minneapolis campus registration office at 101 Wesbrook Hall may check the closed-class board before bringing their registration to the tally clerk. For non-limited classes, the clerk will check your registration form to make sure it is completed properly.

4. **Pay the Extension cashier for the full amount of tuition and fees. You are not registered until your tuition and fees are paid.** Students are urged to pay tuition with a personal check or money order.
5. **If you reserve space in a limited class (for any term), you must pay tuition by June 1; otherwise, you forfeit your space in class.**
6. **Registration Offices (see maps near the end of this bulletin)**

Minneapolis Campus
Extension Classes
101 Wesbrook Hall
Minneapolis Campus

Minneapolis (downtown)
MacPhail Center
1128 LaSalle Ave.
Downtown Minneapolis

St. Paul Campus
St. Paul Campus Admissions
and Records
130 Coffey Hall
St. Paul Campus

All registration offices are closed weekends.

Classes may close at any time before or during in-person registration. Students who wait to register in person for limited-enrollment classes may expect to stand in line at registration offices but have no assurance of obtaining space in classes they desire.

Students are urged to register early by mail.

Alternate Choice Forms

Students who are registering by mail for limited-enrollment classes are urged to submit an alternate choice form (available by calling 624-2388). If the class the student is trying to register for is closed, the Extension registration office will select the first available choice listed on the alternate choice form and process the registration. (Include registration forms and tuition *only* for your first choice.)

Closed Classes

Limited-enrollment classes for which there is heavy demand will often reach the maximum limit and close. The reasons for establishing limits on enrollment vary. Normally class limits cannot be exceeded.

No waiting lists are kept for Extension classes. If students have unusual and compelling reasons to be admitted to a closed class, they may state their case to the instructor of the class. **Written** permission of the instructor is required for admission to any closed class (no late fee through the first week of the term for classes closed before late fees have gone into effect). Starting the second week of the term, late registrations will be assessed the appropriate late fee. Registrations mailed in are effective the date of the postmark.

Some departments, including Accounting, have a strict policy against exceeding class limits.

Early Registration Permission

Students who are nearing the completion of their degree or certificate program at the University and are having difficulty getting registration space in a required course may obtain special permission to register early.

Submit a written request, along with transcripts of all work taken, to Extension Counseling, University of Minnesota, 314 Nolte Center, 315 Pillsbury Drive S.E., Minneapolis, Minnesota 55455. This request must be made at least three weeks prior to the start of mail registration for the term in which the student wishes to register. The student will be notified by mail regarding the action taken on such requests.

Reopening Day

When a class limit is reached, the class is closed and registrations received after that point are returned to students. Sometimes, space becomes available in closed classes

because students cancel classes before the term begins or because they do not pay tuition or complete registration by the required date—June 1, 1988 (for all summer terms). After registration periods end and registrations are processed, classes that closed will be reopened to registration if space is available. For all summer terms, reopening day is June 10, 1988. Registration on reopening day is on a first-come, first-served basis in person at 101 Wesbrook Hall only.

Late Registration and Additions

All registrations, whether initial or added, received either in person or by mail (effective the date of the postmark) after the close of the official registration period, will be considered late registrations and will be subject to a late fee: \$5 (if accepted) through the first week of classes; \$10 (if accepted) through the second week of classes. Registrations accepted during the third week of any term and thereafter will be subject to a \$20 late fee.

After the second class meeting, no registration will be accepted without the **written** permission of the instructor.

After the term midpoint, registration is not permitted without scholastic approval. No registration allowed after the end of any term.

There are no late fees for persons registering on the **Plus-62 Plan** or the **Youth Plan** (see page 24).

Office Hours

Campus Office (Minneapolis Campus)

101 Wesbrook Hall, University of Minnesota
77 Pleasant Street S.E.

Minneapolis, MN 55455 (telephone 625-3333)

Through June 10:	Mon. through Thurs.	8 a.m.-8 p.m.
	Fridays	8 a.m.-4:30 p.m.
May 30 (Holiday):	All offices closed	
June 13-July 29:	Mon. through Thurs.	8 a.m.-6:30 p.m.
	Fridays	8 a.m.-4:30 p.m.
July 4 (Holiday):	All offices closed	
Aug. 1-26:	Weekdays	8 a.m.-4:30 p.m.

St. Paul Campus

130 Coffey Hall

In-person registration only (limited classes)

May 24-June 1:	Mon. through Fri.	9 a.m.-4 p.m.
May 30 (Holiday):	All offices closed	

MacPhail Center Office (Downtown Minneapolis)

1128 LaSalle Avenue

Minneapolis, MN 55403 (telephone 627-4020)

May 31-June 3:	Mon. through Thurs.	8:30 a.m.-7 p.m.
	Friday	9 a.m.-4:30 p.m.
May 30 (Holiday):	All offices closed	
July 4 (Holiday):	All offices closed	
June 6-Aug. 26:	Mon. through Fri.	8:30 a.m.-4:30 p.m.

Counseling Department (Minneapolis Campus)

314 Nolte Center (telephone 625-2500)

Monday through Friday office hours	8 a.m.-4:30 p.m.
Evenings (Monday through Thursday)	call for an appointment

Enrollment Information

Anyone with a desire to learn may register for Extension classes. There are no admission or entrance requirements; a high school diploma is not required.

Registration in specific programs or classes may require prerequisite courses or experience (see **Prerequisites** page 17). Students wishing to register for graduate credit, refer to page 20.

Day school students who wish to register in Extension classes are urged to consult first with their day school adviser or college office. Day school students must pay Extension classes tuition to attend Extension classes.

Students who have been dropped from any unit of the University or who have been placed on probation should clear with their college before registering for Extension classes; otherwise, there is no assurance that the credits will be accepted by the college from which they wish to earn a degree.

Tuition and Fees

(Tuition and fees are subject to change without notice.)

The 1988 summer tuition for Extension Classes is as follows:

\$41.75 a credit:	For 1000-level courses Certificate courses Entrance credit courses Noncredit courses (does not necessarily apply to reduced-tuition courses)
\$42 to \$80 a credit:	For 3000-level courses and 5000-level courses; per credit rate depends on tuition of the college offering the credit
\$100.75 a credit:	For 8000-level courses (open only to students admitted to the University of Minnesota Graduate School): see Graduate Credit , page 20.

A student who concurrently takes day classes and Extension courses during summer terms must register on separate forms and pay both day and Extension fees.

The full amount of the tuition and other fees is payable at the time of registration. Additional fees may be assessed for use of a laboratory, extra materials, or audio-visual equipment. Tuition charges and fees do not cover books.

Checks or money orders must be drawn for the exact amount due and made payable to the University of Minnesota.

A \$10 handling fee is charged for all checks returned by a bank. Students should contact the cashier at 138 Wesbrook (624-6354) if they have received notification from their banks that a check has been returned to Extension Classes. No arrangements for partial payment can be made. Students in need of financial assistance should see **Financial Aids and Loans** below. Students who are not residents of the state of Minnesota pay the same fees in Extension Classes as do residents of the state.

Students are not registered until their tuition and fees are paid. After fees are paid, retain the pink copy of the registration form. It serves as official identification as an Extension student and must be presented in order to obtain books from University libraries or to purchase student tickets. Present the white copy to the course instructor at the first class meeting.

Financial Aid and Loans

Registering with an Authorization for Payment

All students who plan to register under the authority or with the assistance of (1) an institution, company, or scholarship; (2) federal or state agency, including military service; or

(3) foreign government or agency, may register by mail or in person in 101 Wesbrook Hall, telephone 624-5577, on the Minneapolis campus. Authorizations must include the following:

1. **Proper address:** Department of Extension Classes, University of Minnesota, 101 Wesbrook Hall, 77 Pleasant St. S.E., Minneapolis, MN 55455
2. **Student's name**
3. **Correct amount of tuition and fees** for specific classes
4. **Specific authorization to bill for a late fee** (when applicable), or the student must include a check to pay late fees.
5. **Term or dates of eligibility**
6. **Authorizing signature** or stamp required
7. **Complete address of agency to be billed** for tuition

To register, follow the procedures outlined under **When and How to Register**. Include your authorization (in place of your check) with your registration forms.

Registration forms and authorizations must accompany each other. If your authorization is already on file, you must include a note with your registration indicating the source of your authorization or your registration will be returned.

All materials should be sent to Extension Classes, University of Minnesota, 101 Wesbrook Hall, 77 Pleasant Street S.E., Minneapolis, MN 55455.

Registration forms must be properly filled out.

Delayed Payments (Tuition Deferments)

Only students receiving financial aid through the University of Minnesota will be considered for delayed payment of tuition. To receive a delayed payment, your record at the University of Minnesota must indicate that you are eligible for financial aid through the Office of Student Financial Aid for the current academic year and that you do not have any holds on your record.

Students are responsible for completing all necessary financial aid procedures prior to requesting a delayed payment. If you have questions regarding the criteria for granting a delayed payment, contact the Extension Counseling Office at 314 Nolte Center (625-4334) or go to the Financial Aid office at 210 Fraser Hall.

Eligible students request delayed payment at the time of registration at 101 Wesbrook Hall (delayed payments are not issued after the second week of the term).

Students registering by mail should:

1. Follow regular mail registration procedures outlined in this bulletin. Be sure to include your social security number and University I.D. number, if you have one, in the space provided on the registration form.
2. In lieu of payment with a check, include a note requesting a delayed payment. Your name will be checked by computer for eligibility.
3. If you have completed all eligibility requirements, expect your delayed payment fee statements in the mail. If you have not completed all eligibility requirements, your registration forms will be returned to you and you will **not** be registered.

Students registering in person should:

1. Fill out registration forms following the instructions outlined in this bulletin. Be sure to include your social security number and University I.D. number, if you have one, in the space provided on the registration form.
2. Have your registration forms tallied at the registration desk.
3. Instead of paying at the cashier's office, take your tallied registration forms to the financial aid desk in 101 Wesbrook Hall. Your registration forms will be checked by computer for eligibility.

4. If you have completed all eligibility requirements, your tuition will be deferred. If you have not completed all eligibility requirements, your registration forms will be returned to you and you will **not** be registered for classes.

Students requesting delayed payment should register during regular registration periods to avoid late fees.

Students with delayed payment are responsible for tuition and fees once they receive this tuition deferment. A student who never attends class or stops going to classes (1) must officially cancel at 101 Wesbrook Hall, and (2) must pay that part of the tuition and fees that would not be refundable based on the refund policies described on page xx. Students are urged to cancel officially as soon as they decide to drop the course. In most cases, without official cancellation, students are responsible for the total course costs after the fourth class meeting regardless of whether they have been attending class or intended to cancel.

Programs

Minnesota Part-Time Student Grant Program—The MPTSGP provides funds primarily for students enrolled for five credits or fewer during the summer period from June 13 to August 24. Students enrolled for six to eleven credits will be considered for summer if they were **not** enrolled at the University of Minnesota or any other educational institution during the 1987-88 academic year from summer 1987 through spring quarter 1988.

Eligibility requirements are: U.S. citizen or permanent resident of the United States, Minnesota residency; enrollment in undergraduate course work applicable to a degree or certificate program and maintenance of satisfactory academic progress; no prior bachelor's degree; and demonstration of financial need. Tuition and fees, books and supplies, transportation and child care will be considered. Awards are contingent upon state funding. Applications will be accepted until all funds for each term have been committed. Information is available at Extension Counseling, 314 Nolte Center (625-4334).

Eligibility for the first five-week term and ten-week term is based on 1986 income. Eligibility for the second five-week term is based on 1987 income. Under some circumstances, estimated 1988 income may be allowed. Applicant's total federally adjusted gross income and nontaxable income must not exceed the following levels:

One-person family \$10,650
Two-person family \$14,250
Three-person family \$17,700
Four-person family \$21,950
Five-person family \$23,575

Six-person family \$25,350
Seven-person family \$27,775
Eight-person family \$29,100
Nine or more \$31,200

Awards can be used for tuition and fees, books and supplies, transportation, and child care costs incurred while students are involved in classes. The grant may supplement other aid, including Pell Grants, scholarships, and employer tuition reimbursement.

Applications will be accepted until all funds for each term have been committed. Information is available from Extension Counseling, 314 Nolte Center, 315 Pillsbury Drive S.E., Minneapolis, MN 55455 (625-4334).

Loans—Loans may be available for summer. Contact the Office of Student Financial Aid, 210 Fraser Hall (624-1665), for information about Guaranteed Student Loans, Supplemental or Parents' Loans, and SELF loans.

Business Firms—Many business firms are willing to help subsidize the education of their employees. Before registering, students are urged to talk with a company personnel officer about possible tuition payment that may be available for Extension classes.

Financial aid for students with disabilities—In addition to the financial aid programs listed in this section, students with disabilities may contact the offices listed below about additional financial aid options and services.

Division of Rehabilitation Services: Some financial aid help may be available through the Minnesota Division of Rehabilitation Services. For information, contact the Office for Students with Disabilities, DRS Liaison, 12 Johnston Hall, 624-4037 (voice or TTY/TDD), or the Division of Rehabilitation Services office in your area outside the Twin Cities can also supply you with information.

Blind Students may call the Extension registration office (624-5777) concerning tuition exemption for Extension classes. Counseling regarding other financial assistance is available through the Minnesota State Services for the Blind and Visually Handicapped, 1745 University Avenue, St. Paul, MN 55104 (296-6090). Tape and braille materials also are available from the Communication Center of State Services for the Blind, telephone 296-6723.

Special Funds: Students with special needs may contact the Office for Students with Disabilities in 12 Johnston Hall, 624-4037 (626-1346, TTY/TDD), to discuss other possible financial aid opportunities and types of assistance. (Special funds are limited.)

Veterans with service-connected disabilities may be eligible for vocational rehabilitation services through the Veterans Administration. Write or call the Veterans Assistance Center, Room 181 Federal Building, Fort Snelling, St. Paul, MN 55111 (726-1454).

Bank loans—Most banks in the Twin Cities area offer a "line of credit" service to handle small, intermittent loan needs. Plans vary among banks, but the borrower usually must have an account with the bank and a line of credit for a fixed dollar amount. Students should contact a bank for further information.

Regents' Scholarships—The Regents' Scholarship program provides an opportunity for eligible University of Minnesota Civil Service and union-represented employees to take University classes tuition-free (graduate student course work subject to taxation). Tuition is waived. Normally, required student services fees do not have to be paid unless you want to purchase and use the service. Regents' Scholarships do not cover retroactive tuition, late fees, course fees, lab fees, books, deposits, records fee for establishing new student files, orientation fees, CEE special fees, or Boynton Health Service fees.

A wide range of courses are approved for Regents' Scholarships, both in day school and Continuing Education and Extension, but note the exceptions listed in the guidelines on the Regents' Scholarship application form.

A separate application must be completed for each course. The applicant's signature as well as the signatures of both the supervisor and department head are required (both signatory spaces must be completed). Applications should be sent to University Personnel, Room 220, Administrative Services Center, 1919 University Ave., St. Paul, MN 55104.

Applications are processed within 48 hours and returned by campus or U.S. mail. There are no exceptions to the processing time and mailing policies; please plan accordingly to avoid late fees. Check with your supervisor for special departmental policies concerning Regents' Scholarships. If you have questions or need additional application forms, please call 624-7054.

For registration information, see **When and How to Register**. Be sure to include the approved Regents' Scholarship form, completed registration form, and a check made payable to the University of Minnesota for special, course, or late fees (if any) when completing registration by mail.

For classes without enrollment limits, registrations with Regents' Scholarship forms will be accepted during the regular registration periods. For classes with limits on enrollment, do not submit registration materials until the second week of mail registration.

No refunds will be given to students wishing to apply Regents' Scholarships toward limited-enrollment classes for which they have already registered and paid fees.

University employees who wish to take noncredit Compleat Scholar classes must pay one-half the regular tuition plus all course fees and special fees given with a course. You must submit a letter from your department head verifying employment when you register. For limited-enrollment classes, you may register starting the second week of mail registration. For nonlimited classes, you may register during regular registration periods.

Regents' Scholarships are not accepted for MacPhail Center Courses, Professional Improvement Courses and Seminars, Study and Travel Adventures, Research Explorations, and certain other courses listed on the Regents' Scholarship application form.

Graduate Assistant Tuition Fellowship Program—Graduate students and professional trainees who hold appointments as teaching assistants, research assistants, administrative fellows, and certain other professional school student positions may receive tuition

fellowships for credit classes in Extension. Graduate tuition benefits are subject to taxation. For eligibility information, contact the Graduate Assistants Office, 411 Johnston Hall, 626-1310.

Academic Staff Tuition Benefit—Faculty and professional administrative employees holding faculty appointments of 75-percent or more may register tuition-free in Extension credit classes in which space is available. Approval and employment verification from the faculty member's department head is required. Only tuition is waived; late fees, course and special fees, books, laboratory fees, and other costs must be paid by the faculty member. Graduate tuition benefits are subject to taxation. Certification forms and eligibility and registration information are available from department heads.

Farm Family Scholarship Program—The Regents' Farm Family Scholarship Program permits operators of Minnesota family farms (and their immediate family members) to apply for tuition waivers for up to six credits a quarter in classes in which space is available. Eligibility includes pending foreclosure or imminent loss of the farm operation, as verified through the Minnesota Extension Service in a financial analysis (this analysis must have been determined after Jan. 1, 1986). Only tuition is waived. The program does not cover retroactive tuition, course fees, special fees, late fees, books, records fees, and other costs. A wide range of courses are approved for this program. However, many noncredit classes, independent study courses, mini courses, professional seminars, and other user-supported classes and programs are not included. For information, contact the local county extension agent or Extension Classes, University of Minnesota, 101 Wesbrook Hall, 77 Pleasant Street S.E., Minneapolis, MN 55455; (612) 625-3333 (for Twin Cities campus extension registration only).

Other financial aids—See the Extension Classes Bulletin, 1987-88 edition, for more information, pages 34-40.

For additional information—Contact Extension Counseling, 314 Nolte Center (624-4334). Financial aid workshops for Extension students will be offered throughout the summer. Call for time, dates, and locations.

Military Information

Personnel

All military personnel are urged to familiarize themselves with the registration procedures and information section of this Bulletin. University regulations and procedures apply to all students unless stated otherwise.

All branches of the armed services now provide Off-Duty Academic Instruction or Tuition Assistance Programs for military personnel on active duty. There are no application forms necessary for admission to the Department of Extension Classes. Under these programs, eligible military personnel may be entitled to tuition assistance of up to 90% a quarter credit hour for approved classes. (All classes in the Extension Classes Summer Bulletin are quarter credit whether designated five weeks or ten weeks in length.) The remaining tuition and all fees must be paid by military personnel. Interested members of the armed services are urged to contact the educational officer or commanding officer of their command for proper authorization to participate in these programs. Written authorization designating classes and amount of tuition to be paid by Army, Navy, Air Force, or Marine Corps should be presented at time of registration, at which time payment of remainder of tuition must be made. Military personnel who do not have the necessary authorization at the time of registration will be required to pay in full for their registration. When the government authorization is received, a refund for the authorized amount should be requested. Registration must be made by mail or in person at 101 Wesbrook Hall, Minneapolis campus.

Veterans

To satisfy Veterans Administration requirements, veterans using VA educational benefits must enroll in courses that are applicable to degrees, certificates, or other educational

objectives approved by the VA. Veterans must see a counselor at the Extension Counseling Office before registering if they have not previously reviewed educational plans and transcripts of all previous college work with a counselor and received a letter verifying the evaluation. The letter is sent by the veteran or the counselor to the Department of Extension Classes, 101 Westbrook Hall. Call 625-2500 to arrange for a day or evening appointment.

Cold War Veterans (Chapter 34, Title 38, U.S. Code)—A G.I. bill providing educational benefits for eligible veterans became effective June 1, 1966. Eligibility is based on active military service on or after February 1, 1955. Maximum period of training is 45 months; but this period is reduced by training under other Veterans Administration programs.

Application for training under this bill may be made by requesting VA Form 22-1990. The application form must be completed and submitted to 101 Westbrook with a certified copy or original copy of DD 214 (discharge papers) and information sheet when registering for Extension classes. In-person registration is encouraged for those veterans registering for the first time under the G.I. Bill.

VEAP (Chapter 32, the Post-Vietnam Era Veterans' Educational Assistance Program), provides benefits to individuals who initially entered active duty after December 31, 1976. While serving on active duty, the servicemember may voluntarily contribute to an educational assistance fund. Maximum entitlement is 35 months. Application for training under this program may be made by requesting VA form 22-1990. That application form must be completed and submitted to 101 Westbrook Hall with a certified copy or original copy of DD-214 and information sheet when registering for Extension classes. Payments for veterans using VEAP Chapter 32 benefits is determined by the amount of participants' contributions, DOD "kicker" if any, and number of months the veteran contributed. No payments are made for dependents.

Selected Reserve Educational Assistance Program (Chapter 106 of title 10, U.S.C.). Public Law 98-525 enacted Oct. 19, 1984, revised the existing Chapter 106 program effective July 1, 1985, and transferred program administration responsibility to the VA. The reserve components in this program include the Army Reserve, Naval Reserve, Air Force Reserve, Marine Corps Reserve, Army National Guard, and Air National Guard, which are under the Department of Defense, and the Coast Guard Reserve, which is under the Department of Transportation, when it is not operating as a service in the Navy.

Eligibility is based on enlistment in selected reserves for six years between July 1, 1985, and June 30, 1988, having a high school diploma or equivalent before completing Initial Active Duty for Training, having completed 180 days of service either before or after July 1, 1985, and satisfactory participation in required reserve training.

Entitlement is 36 months of full-time training or the equivalent part-time. Benefits are only payable for full-time (\$140 monthly); three-fourths time (\$105 monthly); and one-half time (\$70 monthly). No benefits are payable for less than one-half time, and no allowance for dependents is made.

Reservists apply by completing form 22-1990 and DD Form 2384, Notice of Basic Eligibility (NOBE), obtained from the reservist's unit. These forms are then submitted with the information sheet to 101 Westbrook Hall.

New G.I. Bill (Chapter 30)—To determine eligibility and for more information on this program (signed into law June 1, 1987) call the Veterans Administration at 726-1454.

Tuition and fees—Veterans must pay at the time of registration. They will be reimbursed later or paid a monthly allowance.

Registration—Before registering, please read **When and How to Register**, page 5. Each time a veteran registers for Extension classes and wishes certification to the Veterans Administration, a G.I. Bill information sheet must be completed. Please complete **only one** information sheet for each registration period.

If the student registers by mail for limited-enrollment classes and any of these classes have closed, the G.I. information sheet will be returned and must be revised.

Veterans who wish to add classes to their registration should return the corrected information sheet along with the additional registration forms and payment. Those who do not

wish to add classes to their registration should return the corrected information sheet to 101 Wesbrook Hall along with a note indicating that registration is completed and certification to the Veterans Administration should be made. **In either case, if the veteran does not return the information sheet, no certification will be made to the Veterans Administration.**

Submit all forms at the same time: a completed G.I. information sheet (just one listing all classes the student is registering for that term); registration forms (one per class); and a check for tuition plus any additional fees (write a separate check to pay tuition for each limited-enrollment class).

Cancellation and transfer—When veterans cancel or transfer classes, they must notify the Extension Veterans Office. This is especially important when it affects the total credit load. Transfers to or from day school must be noted with a form A19a, which is obtained from the unit the veteran is leaving. In-person registration is encouraged for those veterans registering for the first time under the G.I. Bill.

Payments—For nonstandard terms, payments vary according to the credits, the amount of class meeting time per week, as well as the Chapter under which the veteran is collecting benefits. Please contact either of the following for more information:

Extension Classes G.I. certification	624-3341
Veterans Administration	726-1454

Certification for Certificate Programs—Effective January 1, 1984, federal regulations have changed regarding student veterans claiming benefits under a certificate program. Two new requirements affecting certification of enrollment and payment are:

1. **Attendance**—Instructors must sign a weekly University form to attest to daily attendance and absences.
2. **Clock hours per week**—Payments are based on the number of clock hours and not by the number of credits. Clock hours are determined by the total hours of class enrollment as listed for each course in the Extension bulletin. Courses with times "arranged" must be documented in a letter from the instructor stating the hours the student was in attendance in the class. The letter must be submitted with the attendance form in order for the student to be certified. Minimum clock hours per week required for full-time certification are 22; for three-fourths time, 16 hours; for one-half time, 11 hours. For classes meeting 10 hours or fewer per week, only tuition and fees will be paid.

Extension Classes can issue the necessary forms on request at 101 Wesbrook Hall or by calling 624-3341.

For information about tutorial assistance, vocational rehabilitation, and the State of Minnesota Department of Veterans Affairs, see the 1987-88 Extension Classes Bulletin, page 43.

Advance Pay—Veterans registering for at least one-half time benefits and who have been out of school for at least one full calendar month are eligible for advance pay. This can be requested by filling out an **Advance Payment Request Form** obtained by writing or calling the Veterans Office, 101 Wesbrook Hall, University of Minnesota, 77 Pleasant Street S.E., Minneapolis, MN 55455, or by filing in person at this office. Request cannot be made later than 30 days prior to the start of classes, nor earlier than 120 days before classes begin. Students who are registering for classes by mail and are submitting a request for advance pay must send all forms in before May 2 for the first 5-week term and 10-week term and before May 31 for the second 5-week term.

- Application for advance pay **will not** be accepted later than the following dates:
- First 5-week term—May 6
 - 10-week term—May 6
 - Second 5-week term—June 10

No certification can be sent to the VA earlier than the beginning of each term, regardless of when a veteran registers.

Satisfactory Academic Progress—In the past, VA regulations have changed often and without advance notice. The information in this section was correct when this **Bulletin**

went to press, but is subject to change without notice.

The VA has established these guidelines:

1. Any grade of "N" will be reported to the VA. The VA will adjust benefits retroactive to the beginning date of the term, resulting in an overpayment.
2. A grade of "W" will be reported to the VA if the veteran cancels a class 30 days after the beginning date of that term. The VA will adjust benefits back to the beginning date of that term, resulting in an overpayment.

If the veteran cancels the class within 30 days of the beginning of the term, the VA will adjust the award effective the first of the month following the change in the credit load.

3. Any grade of "I" will be reported to the VA if it is not made up by the end of the term in which the veteran is enrolled. The VA will adjust benefits back to the beginning date of the term in which the "I" was assigned, resulting in an overpayment.

It is the veteran's responsibility to keep informed regarding current VA rules. Students who have questions should call the appropriate number listed below:

Extension Classes G.I. Certification	624-3341
Day School G.I. Certification	625-8076
Independent Study G.I. Certification	624-0000
Program Counseling	625-2500
<i>(necessary course work—degree planning)</i>	
Unsatisfactory Progress Problems	625-8076

Prerequisites

A prerequisite indicates competence needed to enter a course. It may be a preliminary course, experience, or approval required before a course may be taken. Students will find a course prerequisite (if any) listed at the end of a course description. Usually there is no prerequisite for beginning courses. However, courses with two or more parts must be taken in sequence unless otherwise specified. Most advanced courses do have prerequisites and should not be attempted unless the student has had the stated previous course or its equivalent.

Occasionally, students who have had the equivalent study, training, or experience related to the course desired may be exempted from the prerequisite by the instructor.

If an instructor decides that a student is not qualified once the class has begun, the student may be permitted to transfer to another course without penalty or cancel with a full refund (minus a \$5 cancellation fee) under the following conditions. The student must obtain from the instructor a written statement explaining that the student does not have the necessary background or prerequisites to complete the course. This statement must be obtained by the fourth class of the term. To transfer to another class, the student must also have written permission from the instructor of the class he or she is entering if the class has met two or more times. Transfers should only be considered very early in the term. To receive a full refund (minus a \$5 cancellation fee), the student must officially cancel by mail or in person using a cancellation form available from the Extension Classes registration office, 101 Westbrook Hall. Cancellation should be done as early in the term as possible and must be completed by the fourth class of the term. Cancellation after the midpoint of any term may encounter grade recording delays. See **Refunds in Rules, Regulations, and Policies**.

A prerequisite course may not usually be taken for credit after the advanced course has been satisfactorily completed.

Course numbers beginning with the numeral "8" are open only to students **admitted to the University of Minnesota Graduate School**.

Grades

A-F Grading System—Five grades, A (highest), B, C, and D (lowest), indicate completion of a course. The grade of F represents performance that fails to meet basic course re-

quirements and is unworthy of credit. A student who cancels officially or drops out of class after the midpoint of any summer term and who is not doing passing work at the time will receive an F.

S-N Grading System—The S-N system represents an alternative to the A-F system. S represents achievement that is satisfactory to the instructor for the class in which the student is registered. (The standards for S may vary from one class to another.) The symbol N, which stands for no credit, is assigned when the student does not earn an S and is not assigned an incomplete (I).

Students wishing to take courses under the S-N grading system should be aware of the limitations placed on the system by the college in which they intend to earn a degree. Each college determines to what extent and under what conditions each system may be available to its students. Any college may specify what course or what proportion of courses taken by its students or by prospective students must be on which grading system. The A-F and S-N grading systems cannot be combined in a single course by a student. Students may receive grades only from the grading system under which they are registered.

Choice of A-F or S-N grading system must be indicated for each course listed on the registration form at the time of registration, and **may not be changed after the second week of any summer term** (there is no fee for changing). For 8000-level courses only, students may change grading systems at any time with instructor's permission. Changes can be made only in person or by writing the Department of Extension Classes, University of Minnesota, 101 Wesbrook Hall, 77 Pleasant Street S.E., Minneapolis, MN 55455. **If the student does not indicate the grading system desired on the registration form, the A-F system will apply.**

A symbol of I (incomplete) will be assigned when, in the opinion of the instructor, there is a reasonable expectation that the student can complete successfully the work of the course. Student and instructor should arrive at a clear understanding in advance as to whether the student may receive an I and what the conditions will be. An I that is not made up by the end of one year becomes an F under the A-F grading system or an N under the S-N grading system. When an I is changed to a permanent grade (within the one-year period), the I is removed from the student's record. Veterans are advised to read information under **Satisfactory Academic Progress**, page 16.

The symbol X (not to be confused with registration for extra credit) may be reported in continuation courses in which a grade cannot be determined until the sequence is completed. Upon completion, a separate grade is substituted for each X.

The symbol W indicates official cancellation without grade. It is assigned in all cases of official cancellation through the midpoint of any summer term, regardless of the student's standing. After that time, the symbol W is assigned only if the student is doing passing work at the time of cancellation. If he or she is not doing passing work, the instructor will assign the grade of F or N depending on the grading system under which the course was taken. It is advisable, therefore, that any student considering cancellation of a class after the midpoint of any summer term, discuss the matter with the instructor.

The symbol V (visitor) indicates registration as an auditor or visitor (see **Auditors**, page 23).

Grade-Point Average—For purposes of determining grade-point average, grade points are assigned to the permanent grades as follows: for each credit of A, 4 grade points; B, 3 grade points; C, 2 grade points; D, 1 grade point; F, 0 grade points. A student's grade-point average is determined by dividing the sum of grade points by the sum of credits attempted, and passed. Credits taken on the S-N grading system are not included in determining grade-point average.

Grade Reports, Transcripts

Two types of service are available to obtain *official* transcripts: regular service and rush service. (Official transcripts are certified and embossed with the University's seal.) Regular service is available for \$2 a copy. Processing time for regular service is two to three work-days; after processing, your copies will be mailed to the places you have specified. Rush

service on your official transcript requests is available for \$6 a copy. Rush service guarantees your transcript will be issued to you in person or put in the mail on the same day it is requested. You must have a picture I.D. (student identification card or driver's license) to receive over-the-counter rush service.

Official transcripts can be requested by mail. Requests can also be dropped off at the locations below. No telephone requests are accepted. Requests should include your full name, social security number, date of birth, dates of enrollment, and complete address(es) for mailing the transcripts. Send your requests to the Certifications Unit, 155 Williamson Hall, 231 Pillsbury Drive S.E., Minneapolis, MN 55455. Your request must include a check or money order payable to the University of Minnesota for \$2 or \$6 a transcript.

You may pick up an unofficial copy of your record by presenting your request (picture I.D. required) at the quick-service window in 155 Williamson Hall. There is no charge for the quick-service request; however, there is a limit of one copy per day.

Extension grades are not automatically recorded on college (day school) transcripts. Grades and credits earned in Extension are entered initially on an Extension record. Students must request that the grades be transferred. To do this, you must complete a "Request to Transfer" form at the 101 Westbrook Hall Extension Classes registration office, or at the Student Relations unit, 150 Williamson Hall (625-5333).

Official quarterly reports of students' grades are released only by the University's Office of Registration, Student Records, and Scheduling and cannot be furnished by the Extension offices. Grades for each term are mailed from the Records Office. You should allow six to eight weeks from the close of a term for your grades to arrive in the mail and to be posted to your Extension records. Students who need grades sooner may leave self-addressed postcards with their instructors, who will mail grades to them immediately following the end of the term.

Student Identification Card (I.D.)

An Extension student *admitted* to a college of the University of Minnesota is eligible for a University student identification card. A student who *is not admitted* to a degree program *is not* eligible for the I.D. card. For further information, telephone Extension Counseling (625-2500).

Credit and No Credit Registrations

Credits

All credits listed in Course Offerings are quarter credits. All credits are clearly labeled as to use. Each credit usually requires, on the average, a total of three hours a week of a student's time, counting both in-class and out-of-class time.

1. **Degree credit** means that a course so designated may be used on a degree program. A student who seeks a degree should be aware that all degree credits attempted in Extension Classes must be submitted at time of admission to the college from which the degree is sought.

A few Extension courses carry a number of credits different from the number of credits carried by the same course offered in day classes. If a course carries the same course number as a day course, it usually will satisfy the same prerequisite, distribution, minor and major requirements met by the day course.

Residence—Credits earned in undergraduate Extension classes are residence credits; however, until students have been formally admitted to the college from which they expect to obtain a degree, these credits are not considered to meet the residence requirements of most colleges of the University.

2. **Certificate credit** means that the course so marked may be used in appropriate Extension certificate programs. Certificate credit courses are University-level courses but do not carry degree credit. See page 583 in the 1987-88 **Extension Classes Bulletin** for further information.

3. **Entrance credit** designates a course which may be used to meet University admission requirements.
4. **No credit** means that no credit is given for the course, although grades may be assigned (except for students registered on any reduced, no-credit tuition plan).

Recording Credits—Credits earned in Extension are entered initially on an Extension record. See **Grade Reports and Transcripts**, page 18.

Use at Other Institutions—The applicability of credits earned in Extension, as in day classes, toward a degree at another institution is determined by that institution.

Graduate School Credit

A course numbered with an initial digit of "5" may be taken for graduate credit by qualified students **if the course description includes a statement indicating that graduate credit is available.**

Courses beginning with the numeral "8" are open only to students admitted to the University of Minnesota Graduate School.

Students planning to apply credits earned through Continuing Education and Extension toward graduate degrees must apply for admission to the Graduate School. Applications must be submitted complete in every detail—one official transcript from each college attended, the application fee, and test results if required—by the application deadline dates published on the application for admission form. In addition to being familiar with the instructions in this bulletin, students should be familiar with the contents of the Graduate School Bulletin. For information regarding application for admission to the Graduate School, write to the Graduate School, 309 Johnston Hall, 101 Pleasant Street S.E., University of Minnesota, Minneapolis, MN 55455; 625-3014.

Students registering for graduate credit in 5000-level Extension classes usually pay undergraduate CEE tuition rates. However, when the course work is transferred to a University of Minnesota Graduate School record, the student must pay the difference between CEE and Graduate School tuition for credits accepted on the graduate program. The tuition difference to be charged will be the difference between the rates in effect at the time the credits are transferred (regardless of when the student took the courses or registered for the courses).

Students registering for graduate credit may elect to pay the Graduate School tuition rate **when they register** for credits they intend to apply to a University graduate program. Check at the registration office, 101 Westbrook Hall, for procedures and for the Graduate School tuition rate (625-3333).

Planning a University of Minnesota Graduate Program—Students intending to use courses taken through CEE toward a graduate degree are responsible for planning a coherent and relevant program. They are expected to review plans with the Director of Graduate Studies or with a qualified faculty adviser in their approved major field.

Procedures—At the time of registration the student wishing graduate credit must indicate this on the registration form. The instructor is thereby notified, and on the student's completion of the course, the instructor indicates on the grade report whether or not the work was done at the graduate level. The entry is then made on the student's CEE transcript. When and if the student applies for and is admitted to the Graduate School and submits a graduate program, he or she also submits the CEE transcript, which constitutes petition to use the courses selected from that transcript.

The inclusion on a CEE transcript of courses taken at the graduate level does not guarantee either admission to the Graduate School or acceptance of courses on a graduate program.

The Master of Arts in English and the Master of Business Taxation (Graduate School programs) may be completed entirely through Extension. The Master of Agriculture in Food Technology (administered through the College of Agriculture) may be completed almost entirely through Extension.

In other graduate programs (administered through the Graduate School), graduate stu-

dents are required to have registered through the Graduate School for at least 60% of the course work on their official master's degree programs.

1. Up to 40% of the course work on the official master's degree program may be completed as an adult special, summer special, or Continuing Education and Extension registrant at the University of Minnesota; or the work may be transferred from other accredited graduate schools (any combination of course work, up to 40% of the program, is acceptable from the sources listed above).
2. Course work being transferred must have been taken for graduate credit and taught by faculty members authorized to teach graduate courses.

Such requests for transfers are subject to early review and recommendation of the student's graduate adviser and by the Director of Graduate Studies at the University of Minnesota. *Individual graduate programs may, at the department's option, specify more rigorous requirements.*

All requirements for the master's degree must be completed in seven years. The seven-year time limit begins with the oldest work included on the official degree program, once it is accepted by the Graduate School.

Doctoral students should consult the Graduate School Bulletin for the current policy on transfers.

Use of Graduate-Level Work Elsewhere—Students intending to use CEE course work at the graduate level for other than a University of Minnesota graduate degree must indicate on their registration forms that they are taking a course for graduate credit. The CEE transcript will show whether or not they took a course for graduate credit. The use of a course so marked is the prerogative of the student and the institution to which he or she then submits a transcript and is not the responsibility of either CEE or the Graduate School of the University of Minnesota.

In order to change from undergraduate credit to graduate credit (or the reverse), students must write or go to the Extension Classes Registration Office, 101 Wesbrook Hall, University of Minnesota, 77 Pleasant Street S.E., Minneapolis, MN 55455 (telephone calls are **not** acceptable).

Fees—A student who concurrently takes summer day courses and Extension classes during summer terms must register on separate forms and pay both day and Extension fees.

Continuing Education Unit

The continuing education unit (CEU) is a nationally recognized unit of measurement awarded to participants in a qualifying noncredit continuing education program. One CEU is ten contact hours of participation under responsible sponsorship, capable direction, and qualified instruction. CEUs can become part of your permanent University record. For a descriptive brochure, contact the Department of Professional Development and Conference Services, 131 Nolte Center, on the Minneapolis campus; telephone 625-6616.

Credits Without Class Attendance

If through personal experience or occupation students have gained knowledge which they believe should qualify them for University credit, or if they wish to work on their own to earn credit for a project, several options are available. Students may obtain information on these alternatives by calling the Continuing Education and Extension Counseling Department, 625-2500. Following is a summary of the various options available.

Independent Study "Y"

Many degree credit courses have been identified by academic departments as courses in which students may study independently (designated as a "Y" registration) without attending class sessions. In some instances, written instructions are available; in others, direct consultation with the instructor is necessary for planning the student's work. Regular fees are charged for independent study "Y" registration.

Independent study can be arranged for any course so identified by an academic department, whether it is offered in day or evening hours. Department and instructor approval is necessary and a special form for that purpose, with the appropriate signatures, must be presented at time of registration. Registration is then completed in the usual manner but with a capital "Y" added after the course number. For the special permission form and for further assistance in making "Y" registration, consult the Counseling Department, 314 Nolte Center, 625-2500.

Extra Credit "X"

Students may register in a degree credit course for one, two, or three extra credits (beyond those a course carries) provided the course instructor approves. Fees are based on the course level, number of credits, and the college in which the credit is earned. The student works independently, meeting requirements set by the instructor. Extra credit study allows for more intensive study of a course topic or study in a related topic in which no regular course is offered. Department and instructor approval is necessary and a special form for that purpose with the appropriate signatures must be presented at time of registration. Registration is then completed in the usual manner but with a capital "X" after the course number. For the special permission form and for further assistance in making an "X" registration, consult the Counseling Department, 314 Nolte Center, 625-2500.

Directed Studies/Directed Research

A wide range of opportunities is available to Extension students for earning college credit for individually designed study or research projects. These projects may be organized around their job activities, their involvement in the community, or around special interests that students have in a particular topic. A student wishing credit in Directed Studies or Directed Research should contact a faculty member in the particular area in which he or she is interested, determine if the department lists specific course numbers and titles for such registration, and obtain faculty and department approval. A special form for that purpose, with the appropriate signatures, must be presented at time of registration. Registration is then completed in the usual manner with the correct Directed Studies or Directed Research number of the department. For the special permission form and assistance in making Directed Studies or Directed Research registration, consult the Counseling Department, 314 Nolte Center, 625-2500.

Special Examination

Students who, through independent study, experience, or study at a noncollegiate institution, have gained knowledge which is equivalent to that covered by a particular University course, may earn credit for it by passing a special examination on the subject matter covered by the course. They must obtain approval from the department offering the course. There is a \$30 fee. Contact the Counseling Department, 314 Nolte Center, 625-2500.

College Level Examination Program

The College Level Examination Program (CLEP) has been established by the College Entrance Examination Board to enable individuals who have acquired their education in nontraditional ways to demonstrate their academic achievement. CLEP examinations in five areas—English, mathematics, natural sciences, social science/history, and humanities—are available for a fee to Extension students who may be considering entering certain degree programs. Students will receive credit upon passing one or more tests, provided they have a satisfactory score and have not yet completed requirements in the appropriate area. Since the various colleges use different criteria in accepting CLEP results, students should contact the Counseling Department, 314 Nolte Center (625-2500) for details.

University College Independent Study

University College provides an undergraduate independent study course listing (UC 3075) available to students who wish to pursue projects which go beyond the scope of any

single department or college of the University. Projects are interdisciplinary in nature or are done in departments that do not have an undergraduate independent study course for non-majors. Students will be asked to select an appropriate faculty monitor and to complete the UC 3075 independent study contract prior to registering. Students may take 3 to 15 credits of UC 3075. Further information may be obtained from the Inter-College Program Office of University College, 206 Temporary North of Appleby, 624-2004.

Independent Study Through Correspondence

The Department of Independent Study offers a wide variety of courses. Courses marked in this Bulletin with **(IS)** following course titles are also taught through Independent Study. Independent Study courses can be used toward fulfilling distribution requirements in most University undergraduate degree programs, and all Extension certificate programs accept such credits. Credits earned through the Department of Independent Study may be used to satisfy residence requirements. Interested degree students should check with their college offices for confirmation. Visa or Mastercard may be used for payment of tuition, fees, or materials. The Independent Study Bulletin is available from the Department of Independent Study, University of Minnesota, 45 Wesbrook Hall, 77 Pleasant Street S.E., Minneapolis, MN 55455; 624-0000.

Auditors

A student who wants to attend classes, but does not wish to do all the required work, may register as an auditor by placing an "X" in the appropriate box on the registration form. **An auditor is expected to attend class.** Non-attendance may result in an "N" grade recorded on the student's transcript. Auditor status carries no credit. One may not later take for credit a course which has been audited; exceptions to this rule may be allowed upon consultation with an adviser in the college or school concerned. Auditors pay the same tuition and fees as other students.

Requests for change from credit registration to audit registration are made in person or by writing the Department of Extension Classes, University of Minnesota, 101 Wesbrook Hall, 77 Pleasant Street S.E., Minneapolis, MN 55455; 625-3333.

After the midpoint of a summer class, requests for change must be approved by the instructor; approval is granted only if the student is doing passing work at the time of the request. The grade-base form (changing from credit to audit) with the instructor's signature must be received before the official start of final exam week for that term. Starting final exam week, it is up to the student to have the instructor place a "V" grade on the grade report. No student whose tuition and fees are paid in whole or in part by military, Veterans Administration, company or scholarship funds may register as an auditor.

Changes from audit to credit will not be allowed after the second week of any summer term.

Courses audited are officially recorded on the student's University record and transcript. (See also **Reduced-Tuition Plans** below.)

Reduced-Tuition Plans

Regular Extension credit courses marked with a diamond (◆) symbol after the course title are open for no-credit registration at reduced tuition.

Registration dates and procedures for ◆ courses are no different than for any nonlimited-enrollment credit class.

No-credit participants may keep up with readings and participate in class discussions, but may not submit work for evaluation or take examinations (no transcript record is maintained).

◆ **One-half price plan**—Any class marked with a ◆ may be taken for no credit at one-half the regular tuition (plus any course fees, special fees, or late fees).

Students will have to pay the regular transfer fee when transferring from one-half price to full price. Students may not transfer from one-half price to full price or full price to one-half price after the first two weeks of class.

◆ **Youth plan**—A young adult, age 12 to 16, may register for \$3 (not refundable), plus any course or special fees, if accompanied by an adult registered for credit or no credit in the same class marked with a ◆. The adult must present a current registration receipt at the time the youth registers, and must assume the responsibility for judging the appropriateness of the class sessions for the young guest. Only unusually mature and genuinely interested young persons who can benefit from college-level lectures and discussions designed for adults should be invited to attend. There are no late fees for students registering on the youth plan.

Youth may register in most Compleat Scholar courses for \$3 only on a space-available basis (after full-tuition students have registered and paid fees). Course fees or special fees must be paid in full.

Advanced high school students who want to take Extension classes for credit are asked to contact an adviser in the Advanced High School Student Services Office, 337 Nolte Center, 626-1666.

Continuing Education for Women

Continuing Education for Women offers credit and noncredit classes in time formats and locations designed to accommodate student needs. Most credit classes meet once or twice a week during the day at off-campus locations. Noncredit classes are offered as part of the Compleat Scholar curriculum and provide participants with an opportunity to continue learning in a wide variety of areas without grades, exams, or extensive homework. See "The Compleat Scholar" section of this bulletin for a list of course titles and complete descriptions.

The Continuing Education for Women Mucke/Roff Scholarship Fund was established especially for students registering for Continuing Education for Women courses. Awards are made on the basis of scholastic ability, motivation, previous achievement, financial need, and realistic plans. Information is available from the Extension Counseling Office, 625-2500.

Persons 62 and Older

Minnesota state law allows persons 62 and older to register in credit classes at reduced cost (credit registration) or no cost (no-credit registration) on a space-available basis. Only tuition is reduced or waived; course fees and special fees, if any, must be paid.

Credit course registration—Credit courses may be taken for University credit for only \$6 a degree, certificate, or entrance credit hour plus any fees. Or these courses may be taken free for no credit (no transcript record is kept). For classes with limited enrollment (those courses with titles printed in red), registrations will be accepted starting the second week of mail registration.

When registering by mail, students should be sure to include the completed registration forms and a check made payable to the University of Minnesota for special fees or course fees. If registering for credit, be sure to include \$6 a credit plus any fees. A separate check is required for each limited-enrollment class a student wishes to take. For nonlimited-enrollment classes, students may register during regular registration periods by mail or in person.

Compleat Scholar noncredit classes—Persons 62 and older may register in certain noncredit Compleat Scholar classes and receive a \$10 discount on tuition. The tuition cost for persons 62 and older is listed in parentheses after the regular tuition in each course description. (Some courses may not be open to discounted registration.) For classes with limited enrollment, registrations will be accepted starting the second week of mail registration. For nonlimited-enrollment classes, students may register during the regular registration periods.

Late fees—There are no late fees for persons 62 and older registering under the reduced-tuition option.

For general information, telephone 625-3333.

Also see the description of *Elderhostel*, 116.

Bookstores

The evening schedule has been established by University bookstores. Note that bookstores are not open every night.

Pick up books before class. Textbooks may be purchased before the first class at campus bookstores. Lists of course offerings and required books are in the bookstores.

Book refunds: If a course is canceled or if the student drops the class, books may be returned for a full refund through the first week of classes provided the student has a sales receipt for the books and has not written in them.

Resale of books: University bookstores will buy back books that will be used in courses in the fall. This sale is conducted throughout the summer.

Summer Hours First Week of Each Term

June 13-16:	8 a.m. to 6 p.m.
June 17:	8 a.m. to 4:30 p.m.
July 21, 25, 26, 27:	8 a.m. to 6 p.m.
July 22:	8 a.m. to 4:30 p.m.

Regular summer hours are 8 a.m. to 4:30 p.m., Monday-Friday.

The Minnesota Book Center, Williamson Hall (telephone 625-6000).

This bookstore (231 Pillsbury Drive S.E.) sells books for courses in the College of Liberal Arts, Education, General College, and the Institute of Technology (*except for those CLA departments listed below in the Harold Smith West Bank campus bookstore*).

Harold D. Smith Bookstore, West Bank (telephone 625-3000).

Located next to Anderson Hall, the West Bank Bookstore sells books for courses in the School of Management, as well as for these College of Liberal Arts departments: history, political science, geography, sociology, Afro-American and African studies, theatre arts, studio arts, economics, public affairs, urban studies, music, music education; and for family social science courses taught on the West Bank campus.

Other Bookstores

Books Underground (624-9200), the St. Paul campus bookstore (enter through the student center), and Health Sciences Bookstore (625-8600) at 2-554 Unit A, are also open during the summer. Telephone them for their hours and supplies.

Rules, Regulations, and Policies

Fee Statements

After registration forms are receipted (cashier), the fifth copy (pink) is a student's fee statement. The fourth copy (white) is to be presented to the instructor the first class session.

Students are urged to save and carry their fee statements, which are required as proof of enrollment and identification for a number of University activities and services.

Students must be sure all copies of their registration forms are legible. If the fee statement is not legible, it cannot be returned to students who register by mail.

A duplicate fee statement may be obtained at 101 Wesbrook Hall in the event the first one is lost or illegible.

Changes in Courses

All changes occurring after the publication of the Bulletin are posted in the desk copy bulletin at each of the registration locations.

Class Attendance

Students (including auditors) are responsible for attending classes in which they are registered. (See also **Credits Without Class Attendance**, page 21.) A student who cannot attend a class session should arrange with the instructor—in advance, if possible—to make up the work.

Transferring Classes

Students who wish to transfer classes or class sections, after being officially registered, can do so either in person at 101 Wesbrook Hall, or by mail (call 625-3333 for transfer forms) if space is available. No transfer by mail will be done for reduced-tuition classes.

Students who wish to transfer after an initial registration will be subject to the following transfer fees and conditions: Prior to and during the first week of classes—none; during the second week of classes—\$5, if accepted; during or after the third week of classes—\$10, if accepted.

Students may not transfer from the first 5-week session or the 10-week session to the second 5-week session after June 10.

Students who wish to transfer after the first week of classes must meet the following conditions:

Transfer during the second week or after—After the second class meeting, no transfer will be accepted without written permission of the instructor.

Transfers after the midpoint of the term require scholastic approval.

There will be no transfer fee if: (1) University requests transfer be made; (2) transfer is required by an unacceptable grade in a prerequisite course (see **Grades**, page 17); (3) transfer is required because of University cancellation of course in which previously registered, provided such transfer is made within one week from date of cancellation of class; or (4) transfer is between sections of a course with the same course number.

Students will have to pay the regular transfer fee when transferring from noncredit one-half price registration to full-price credit registration. Students may not transfer from non-credit to credit registration, or vice versa, after the first two weeks of class.

Note: Those wishing to take a University Extension class for no credit, but who need a transcript and a record of their registration, must register as auditors and pay full tuition.

Students unable to pay full tuition for credit courses may be eligible for tuition assistance (see **Financial Aids and Loans**).

Students are requested to present their fee statements at the time of transfer.

Veterans—Any veteran registered under the G.I. Bill must notify the Extension Veterans Office, 101 Wesbrook Hall (624-3341), when transferring classes. This is essential when it changes the credit load.

Transfers

A student may take Extension classes without going through formal admissions or transfer procedures. However, if students plan to complete a degree program through Extension classes, they should consult the Counseling Department, 314 Nolte Center (625-2500).

Access to Student Educational Records

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

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

Students are notified annually of their right to review their educational records. The regents' policy, including a directory of student records, is available for review at the Information Center in 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.

Cancellations

How to Drop a Course

Students who wish to cancel a class or classes must do so officially, either in person or by writing to the Department of Extension Classes, University of Minnesota, 101 Wesbrook Hall, 77 Pleasant Street S.E., Minneapolis, MN 55455. Cancellations are **not** accepted by telephone. By so doing, they will, if eligible, receive a refund (see **Refunds**, page xx), and will insure entry of the appropriate symbol on their grade report. If students officially cancel the first two weeks of a term, the course they cancel will not appear on a transcript. If students officially cancel from a class before the midpoint of any summer term, they will automatically receive a "W" (withdrawal) on the grade report. This symbol means "official cancellation without grade." Cancellations after above-stated periods are permitted only under unusual circumstances and with scholastic approval. Students should obtain a petition form from the registration office in 101 Wesbrook Hall. Instructor verification that the student is doing passing work is required. Completed cancellation forms, the petition form, and instructor's verification must be received by the Extension Classes registration office before the course final exam for that summer term. Students will be notified by mail of the scholastic committee decision.

Cancellation forms are available at the Extension Classes registration office, 101 Wesbrook Hall. Completed cancellation forms, with the instructor's signature, must be received by the Extension Classes registration office before the end of the term.

No instructor is authorized to accept cancellation of any registration.

The effective date of cancellation will be the day on which the cancellation is received in the Extension Classes office, regardless of the date of the student's last attendance. (Cancellations by mail are effective the date of postmark.) It is important, therefore, that whenever students stop attending a class, they should officially cancel by filling out the appropriate forms at the Extension Classes office.

Students who simply stop attending class (and do not officially cancel) may receive an "F."

Do not stop payment on a check. If a stop payment is issued on a check (for any reason) submitted as payment of tuition:

1. It is considered to be a cancellation of the classes registered for
2. A hold will be placed on the student's record until:
 - a. a \$10 check-handling fee is paid, and
 - b. the tuition normally held in accordance with the refund policy is paid.

Veterans—Any veteran registered under the G.I. Bill must notify the Extension Veterans Office, 101 Wesbrook Hall (624-3341), when canceling a class. This is essential when it changes the credit load.

Financial Aid—Students receiving financial aid through the University of Minnesota may not receive refunds for eight to twelve weeks because of credit load changes (refunds in some cases revert to the financial aid office, not the student). Call 624-8077 with questions.

Cancellation by Extension Classes

While the Extension staff sincerely regrets to do so, it is sometimes necessary to cancel classes with insufficient enrollment. The department reserves the right to cancel, postpone, limit enrollment, split, or combine classes, and to change instructors or locations of classes.

Refunds for Summer Classes

Students who wish to cancel a class or classes must do so officially, either in person or by writing to the Department of Extension Classes.

When students cancel classes, they may be eligible for: (1) a full refund under the conditions outlined in item 1 below; (2) a refund of tuition and any course or special fees less a \$5 cancellation fee (and any late fees or transfer fees), under the conditions outlined in item 2 below; or (3) a refund of part of the tuition and any course fees and special fees after the class has begun, provided that the student cancels and requests a refund within the time limits outlined in the refund percentage schedules given below in items 3 and 4.

Students who wish to cancel a class and add another class should read the section on transferring classes, page 26.

1. Full refund of all tuition and fees will be made when a class is canceled by Extension Classes or when the hour or day of the class is changed by Extension Classes after a student has registered in it.
2. A refund of all tuition and fees **minus a \$5 cancellation fee** will be made:
 - A. When a student cancels before the first class meeting in any summer or special term.
 - B. When a student is ill or hospitalized and, in the opinion of a doctor, is unable to continue for medical reasons. The doctor's signed statement on the doctor's letterhead is required and must be submitted by the end of the term.
 - C. To any student who has been recalled to or enlisted in military service upon presentation of military orders, provided the student would not be entitled to an appropriate grade at such time.
 - D. When, in the opinion of the instructor, the student does not have the necessary prerequisites, or the student has already had the equivalent material in another course. Students seeking refunds under these conditions must:
 1. Ask the instructor for a note explaining that the student does not have the necessary prerequisites. Bring in the note, a fee statement, and a completed cancellation form to 101 Wesbrook Hall or submit the note and a cancellation letter by mail. It is the student's responsibility to obtain the note and submit all documents at one time before the fourth class meeting.

2. Present a transcript noting equivalent course(s), along with a fee statement and completed cancellation form, in person at 101 Westbrook Hall or by mail. Documents must be submitted at the same time before the fourth class meeting.
3. For classes that meet once a week for the 10-week term or twice a week on a 5-week term, refunds of tuition and fees for cancellation of classes after the first class meeting will be made as follows:
 - a. Refund before second class 75%
 - b. Refund before third class 50%
 - c. Refund before fourth class 25%
 - d. Refund after fourth class none
4. For classes that meet twice a week for the 10-week term, refunds of tuition and fees for cancellation of classes after the first class meeting will be made as follows:
 - a. Refund before the third class 75%
 - b. Refund before the fifth class 50%
 - c. Refund before the seventh class 25%
 - d. Refund after the seventh class none

These refund schedules refer to the number of times the class has met, not the number of times the student has attended. The refund schedule differs for fall, winter, and spring classes, and is explained in the academic year bulletin.

Refunds for special term courses are based on above percentages in relation to the length of the term.

5. Late fees and transfer fees are not refundable in any case.

Cancellations by mail are effective the date of postmark.

For convenience, this information is also printed on the student's copy of the registration form (pink fee statement).

Refunds are paid by check only and are mailed to the student. A minimum of four weeks is required for processing a refund.

Course Numbering

All University courses carry course numbers of four-digit numerals. The first digit indicates the credit level of the course. See sample below:

0000C-0999C	Certificate course
0000-0999	No credit course
1000-1999	Degree credit course primarily for freshmen and sophomores
3000-3999	Degree credit course, primarily for juniors and seniors. Also open to other students with at least C averages overall and in all prerequisite work
5000-5999	Degree credit course primarily for juniors, seniors, and graduate-level students
8000-8999	Degree credit course open only to students who have been admitted to the University of Minnesota Graduate School

To take a course beginning with the numeral 5 (indicating a degree credit course intended primarily for juniors, seniors, and graduate students) or beginning with the numeral 8 (indicating a course intended only for students **admitted** to the University of Minnesota Graduate School) for graduate credit, see **Graduate Credit**, page 20.

Symbols

-	A hyphen between numbers indicates a sequence course, the units of which must be taken in order, unless otherwise indicated.
★	Enrollment space limited. See instructions on registration in limited-enrollment classes and sections on page 5.
†	All courses listed before this symbol must be completed before credit may be received.
§	No credit is given if credit has been received for equivalent course listed after this symbol.
¶	Concurrent registration is allowed (or required) in courses listed after this symbol.
#	Consent of instructor.
(IS)	Course also available through Department of Extension Independent Study (by correspondence).
◆	Regular credit course open for registration on a noncredit, reduced-tuition plan (see page 23).
⊙	A joint Day/Extension class
▲	Consent of unit offering course is required.
cr	Credit
CEU	Continuing Education Unit (10 contact hours of noncredit learning); see page 21.
Qtr	Quarter
Sem	Semester
Spec	Special Term
S/N	Satisfactory/No credit grading system. See page 18.
A/F	Letter grading system. See page 17.
Prereq	Prerequisite. See page 17.
Lect	Lecture
Rec	Recitation
Sec	Section

Credit Course Offerings

(Noncredit courses are listed beginning on page 91. See Buildings and Maps, pages 123-127; Course Numbering, page 30)

Accounting

(645 Management/Economics: 624-6506)

School of Management

Summer Accounting courses are offered for seven weeks, although for registration purposes the 10-week term designator is used below. This format applies to both day and evening classes.

The intermediate and cost accounting courses offered through Extension are numbered identically to those taught in day school. Acct 3105-3106-3107 have been replaced by Acct 3101-3102; Acct 3220-3221 have been replaced by Acct 3201.

★Acct 1024 PRINCIPLES OF FINANCIAL ACCOUNTING I.

3 degree credits, \$1050, \$125.25 plus \$1 special fee. Total \$126.25. (IS)

Introduction to basic concepts, definitions, and relationships employed in the recording and reporting of business events. **Must be taken A-F.** (No prereq. Limited to 40)

Ten wk, Sec 31, TTh, 6-7:55, AkerH 313

Ten wk, Sec 32, TTh, 6-7:55, AkerH 215

Ten wk, Sec 33, TTh, 6-7:55, AkerH 225

Ten wk, Sec 34, TTh, 6-7:55, AkerH 211

★Acct 1025 PRINCIPLES OF FINANCIAL ACCOUNTING II.

3 degree credits, \$1050, \$125.25 plus \$1 special fee. Total \$126.25. (IS)

Introduction to the effects of generally accepted valuations and measurements upon financial statements. **Must be taken A-F.** (Prereq 1024. Limited to 40)

Ten wk, Sec 17, TTh, 6-7:55, BlegH 110

Ten wk, Sec 18, TTh, 6-7:55, BlegH 125

★Acct 3001 (replaces 1051) MANAGERIAL ACCOUNTING.

4 degree credits, \$1051, \$205.

Accounting analysis and reports for management and investor decision making. Emphasis on planning and control reporting. **Must be taken A-F.** (Prereq 1025 or 1050 and at least 90 cr completed or in progress. Limited to 40)

Ten wk, Sec 8, TTh, 6-8:30, BlegH 230

★Acct 3102 ACCOUNTING THEORY AND PRACTICE II.

4 degree credits, \$205.

Concepts and problems in accounting for specific assets and equities. **Must be taken A-F.** (Prereq 3101 and at least 90 cr completed or in progress. Limited to 40)

Ten wk, Sec 4, TTh, 6-8:30, BlegH 145

★Limited enrollment class. See page 5.

★ **Acct 3201 COST ACCOUNTING** (replaces Acct 3220-3221).

4 degree credits, \$205.

Process and standard costs, behavior of costs under varying conditions, cost allocations, variance analysis, capital budgeting. **Must be taken A-F.** (Prereq 1025, DSci 3055. Limited to 40)

Ten wk, Sec 3, TTh, 6-8:30, BlegH 420

★ **Acct 5125 AUDITING PRINCIPLES AND PROCEDURES.**

4 degree credits, \$205.

The auditor's role and function. Includes audit standards, ethics, procedures, and legal responsibilities. **Must be taken A-F.** (Prereq 3107 or 3102, 3201 and at least 90 cr completed or in progress. Limited to 40. **May not be taken for graduate credit**)

Ten wk, Sec 3, TTh, 6-8:30, BlegH 135

★ **Acct 5135 INCOME TAX ACCOUNTING.**

4 degree credits, 10130C-0131C, \$205. (IS)

Individual, partnership, and corporation taxation; emphasizing tax planning. **Must be taken A-F.** (Prereq 1025 and at least 90 cr completed or in progress. Limited to 40. **May not be taken for graduate credit**)

Ten wk, Sec 4, TTh, 6-8:30, BlegH 440

★ **Acct 5180 ADVANCED ACCOUNTING.**

4 degree credits, \$205.

Consolidated statements, fiduciary accounting, partnerships, and foreign exchange. **Must be taken A-F.** (Prereq 3107 or 3102, and at least 90 cr completed or in progress. Limited to 40. **May not be taken for graduate credit**)

Ten wk, Sec 3, TTh, 6-8:30, BlegH 415

Adult and Teacher Education

(125 Peik Hall: 625-6372)

College of Education

★ Limited enrollment class. See page 5.

American Studies

(104 Scott Hall: 624-4190)

College of Liberal Arts

AmSt 1003 AMERICAN CULTURE III: 1920s TO THE PRESENT.

4 degree credits, \$167 (♦ \$83.50)

How Americans have viewed the world and interpreted their experience as revealed in novels, films, paintings, popular music, and architecture. American ideas and feelings about several recurrent themes: God's relation to man and society; nature and technological progress; individual fulfillment and the claims of society; changing ethical norms; and evolving male and female roles at work and in the family. Typical topics: *Unit I*: The Culture of the Age of Franklin Roosevelt (the Great Depression, the New Deal, and the emergence of the welfare state; Steinbeck and the literature of protest; protest and entertainment in the popular arts; the totalitarian threat and the coming of World War II). *Unit II*: Literary and Artistic Responses to Conflicting Ideals in Contemporary America (religion in a secular society; the "Me Decade"—individualism in an organizational society; sexual roles, work, and the family in an era of changing ethical standards; environmental concerns and the post-industrial age). (No prereq)

First 5 wk, Sec 2, TTh, 6-8:30, BlegH 155, William H. Agee

Anthropology

(215 Ford Hall: 625-3400)

College of Liberal Arts

Anth 1101 HUMAN ORIGINS.

5 degree credits, §1001, \$208.75 (♦ \$104.50) (IS)

World prehistory as investigated by anthropologists. Methods and concepts used by anthropologists to study prehistoric human biological and cultural development. (No prereq)

First 5 wk, Sec 3, MW, 6-9:20, FordH 120, Frederick Lorey

Anth 1102 INTRODUCTION TO SOCIAL AND CULTURAL ANTHROPOLOGY.

5 degree credits, §1002, \$208.75 (♦ \$104.50) (IS)

Varieties and range of human behavior as revealed through comparative study of cultures in all parts of the world. (No prereq)

Second 5 wk, Sec 5, MW, 6-9:20, FordH 120, John Ingham

Anth 5910 TOPICS IN ANTHROPOLOGY: ANTHROPOLOGY OF AIDS.

4 degree credits, \$177. (♦ \$88.50)

Analysis of Acquired Immune Deficiency Syndrome (AIDS) phenomena in its cultural, social, economic, medical, and psychological dimensions. (No prereq. Qualified students may register for graduate credit at the University of Minnesota)

First 5 wk, Sec 2, MW, 6-9, FordH 150, William Rowe

★Limited enrollment class. See page 5.

Architecture

(110 Architecture: 624-7866)

Institute of Technology

Noncredit Workshops

Arch 0013 EXPLORING ARCHITECTURE: A CAREER DISCOVERY WORKSHOP.

No credit, \$125.25.

Intended for those who are interested in exploring architecture as a possible career path. The course is organized as a seminar workshop, meeting mornings, for a two-week period. Instruction will be an interactive hands-on series of experiences, within a variety of areas of vital interest to the discipline of architecture, including history, theory, skills, and practices. (No prereq)

Spec Term, Sec 1, MTWThF, 9 a.m.-12, July 25-29, Aug. 1-5, Arch 20, Peter Carlsen

★Arch 0014 CONSTRUCTION PROCESS: A JOB SITE VISITATION SEMINAR.

No credit, \$83.50.

Intended for architectural professionals interested in acquiring a first-hand knowledge of the construction process and the what and how of the trades role in that process. There will be 10 meetings (4 hours each) during which scheduled and coordinated visits will be made to various construction sites to observe and discuss all of the major phases, processes, and techniques from beginning to end. Offered in cooperation with the Minnesota Society, American Institute of Architects, and Associated General Contractors. (No prereq. Limited to 30)

Spec Term, Sec 1, W, 8 a.m.-12, July 6-13, Zoology 102; July 20-Sept. 7, Arch 15

No late fee through June 29.

Arch 3061-3062 BUILDING SYSTEMS.

4 degree credits each term. \$214 plus \$5 course fee each term. Total \$219 each term.

Building systems, subsystems, and components; principles of structural theory; materials and methods used in building; new and developing technologies. (Prereq Arch major or adult special, 3081 or 13081 or #)

First 5 wk, 3061, Sec 2, TTh, 6:10-9:20, Arch 25, 35, Stephen Weeks

Second 5 wk, 3062, Sec 3, TTh, 6:10-9:20, Arch 25, 35, Stephen Weeks

Arch 5850 TOPICS IN THEORY: ADOLF LOOS'S RAUMPLAN HOUSES.

2 degree credits, \$107.

An investigation, using graphic analysis, models, diagrams and drawings, of the design strategies of Adolf Loos's *Raumplan* houses (the Rufer House in Vienna, the Moeller House in Vienna, the Müller House in Prague, and the project for a villa on the Venice Lido) dating from 1922 to 1930. Readings, discussions, and slide presentation. (Prereq 5111 or #. Qualified students may register for graduate credit at the University of Minnesota)

Second 5 wk, Sec 1, TTh, 6-8, Arch 15, Cynthia Jara

★Limited enrollment class. See page 5.

Arch 5950 TOPICS IN ARCHITECTURE: ARCHITECTURE FOR EDUCATORS.

3 degree credits, \$160.50, plus \$5 course fee. Total \$165.50.

Intended for classroom teachers, grades 4 through 12, and others in education. Objective: to introduce educators to how we learn, perceive, and make decisions about our built environment. "Hands-on" activities to help teachers to use the environment as an approach to education. (Prereq teaching experience, 3093 or #. Qualified students may register for graduate credit at the University of Minnesota.)

Spec Term, Sec 3, Sa, 9 a.m.-12, June 18, 25;

W, 6:30-9:30, June 15, 22, 29, Arch 30, James Lammers

Art History

(107 Jones Hall: 624-4500)

College of Liberal Arts

★Arth 1001 INTRODUCTION TO THE VISUAL ARTS.

4 degree credits, §3001, \$167 plus \$4 course fee. Total \$171. (◆ \$83.50 plus \$4 course fee. Total \$87.50). (IS)

Basic problems of art. Major visual arts examples as a basis for study of the nature of art, problems of design, materials and techniques, presented topically rather than chronologically. (No prereq. Meets concurrently with 3001. Limited to a combined total of 50)

First 5 wk, Sec 2, TTh, 6:20-8:50, JonesH 207B, Shella McNally

Arth 1008 CONCEPTS IN ANCIENT ART.

4 degree credits, §3008, §Clas 3008, \$167 plus \$4 course fee. Total \$171 (◆ \$83.50 plus \$4 course fee. Total \$87.50)

The art of Egypt, Mesopotamia, Greece, and Rome. Visual analysis, problems of style as a cultural phenomenon, and methods and standards of criticism. (No prereq. Meets concurrently with 3008, Clas 3008)

First 5 wk, Sec 1, MW, 6:20-8:50, JonesH 207B, Shella McNally

★Arth 3001 PRINCIPLES OF THE VISUAL ARTS.

4 degree credits, §1001, \$177 plus \$4 course fee. Total \$181.

See course description for Arth 1001. Similar to 1001 but with expanded reading and contact with works of art. (No prereq. Meets concurrently with 1001. Limited to a combined total of 50)

First 5 wk, Sec 2, TTh, 6:20-8:50, JonesH 207B, Shella McNally

Arth 3008 HISTORY OF ANCIENT ART.

4 degree credits, §1008, §Clas 3008, \$177 plus \$4 course fee. Total \$181.

Architecture, sculpture, and painting of selected early cultures; stress on influences contributing to the development of Western art. (No prereq. Meets concurrently with 1008, Clas 3008)

First 5 wk, Sec 2, MW, 6:20-8:50, JonesH 207B, Shella McNally

★Limited enrollment class. See page 5.

Arts, Studio

(208 Art Building: 625-8096)

College of Liberal Arts

For information about the Summer Arts Study Center (Split Rock Arts Program), see page 39.

RESTRICTIONS IN STUDIO ARTS CLASSES

1. Registration in any studio arts class after the first class meeting must be accompanied by the instructor's **written permission**.
2. Students who do not attend the first class session may lose their place in the course (at the instructor's discretion). A student who cannot attend the first class should call the instructor in advance or call 625-8096 to make arrangements to hold a place in class. A student who does not make these arrangements and has to cancel the course must obtain a written verification of non-attendance (from the instructor) to be given a 100% tuition refund. Student must turn in this verification at 101 Westbrook Hall by the end of the third week of the term.

Most studio arts courses require the student to spend a minimum of one hour per week in the studio for each hour spent in class.

Because Extension funds its own classes, and since the subject matter of studio arts courses requires that enrollments be limited to small numbers of students, it has become necessary for Extension Classes to add a \$5 special fee to most classes in order for the classes to be held.

Some studio arts courses require additional fees which cover part of the cost of expendable materials, models, breakage, and special facilities. In addition, some courses may also require the purchase of special tools or supplies not included in the tuition or course fees printed below with each offering.

★ Arts 1101 BASIC DRAWING.

3 degree credits, \$125.25 plus \$3 course fee and \$5 special fee. Total \$133.25.

An introduction to basic drawing methods; exploration of contemporary and traditional methods, various drawing media, work from nature and still life. (No prereq. Limited to 25)

First 5 wk, Sec 16, MW, 6-9:45, ArtB 150, Myers

Second 5 wk, Sec 17, TTh, 6-9:45, ArtB 140

Ten wk, Sec 18, Th, 6-9:45, ArtB 160

★ Arts 1301 BASIC SCULPTURE.

3 degree credits, \$125.25 plus \$30 course fee and \$5 special fee. Total \$160.25.

Beginning course in metal construction; intensive study of structure with emphasis on form and space. (No prereq. See **Restrictions**, top page 36. Limited to 20)

First 5 wk, Sec 3, MW, 6-9:45, ArtB 65, Guy Baldwin

★ Arts 1420 VIDEO PRODUCTION I.

3 degree credits, \$125.25 plus \$75 course fee. Total \$200.25.

The use of video cameras, microphones, and video recorders, techniques of lighting, sound recording, and editing will be explored through lecture, demonstration, and hands-on experience. Work of video artists will be viewed and discussed in terms of video theory and technique. Students will work in groups to plan, shoot, and edit a short videotape. (No prereq. Limited to 17)

Ten wk, Sec 4, M, 6-9:45, Intermedia Arts, 425 Ontario

★ Limited enrollment class. See page 5.

★ArtS 1510 PRINTMAKING: INTAGLIO.

3 degree credits each term (maximum 6 cr), \$125.25 plus \$35 course fee and \$5 special fee. Total \$165.25.

Introduction to various techniques of etching and engraving employed in working on metal plates, as well as collagraphic techniques in creative context. (No prereq. Meets concurrently with 3510, 5510. Limited to a combined total of 20)

Second 5 wk, Sec 3, MW, 6-9:45, ArtB 170, Karl Bethke

★ArtS 1701 INTRODUCTION TO PHOTO MEDIUM.

3 degree credits, \$125.25 plus \$25 course fee and \$5 special fee. Total \$155.25.

A course in black and white photography for beginners with little or no experience. Lectures on contemporary and historical use of photography. The course will cover techniques in the use of the camera, film development and enlargements. Emphasis on the creative process. Student must have camera. Any 35mm camera is acceptable. If you wish to use a camera other than 35mm and are uncertain whether it will be acceptable, you may check with the Studio Arts department, 625-9532. (No prereq. Limited to 20)

First 5 wk, Sec 15, TTh, 6-9:45, ArtB 120

First 5 wk, Sec 16, MW, 6-9:45, ArtB 120

Second 5 wk, Sec 17, MW, 6-9:45, ArtB 120

★ArtS 1811 CERAMICS.

3 degree credits, \$125.25 plus \$35 course fee and \$5 special fee. Total \$165.25.

Introduction to handbuilding techniques in clay for individual creative expression. (No prereq. Limited to 25)

First 5 wk, Sec 4, MW, 6-9:45, ArtB 10, Curtis Hoard

★ArtS 1812 CERAMICS.

3 degree credits, \$125.25 plus \$35 course fee and \$5 special fee. Total \$165.25.

Introduction to wheel throwing techniques for individual creative expression. (No prereq. Limited to 25)

Second 5 wk, Sec 4, MW, 6-9:45, ArtB 10, Tom Lane

★ArtS 3105 PAINTING.

3 degree credits, \$132.75 plus \$5 special fee. Total \$137.75.

Introduction to studio work in painting explores the fundamentals of visual art making via the paint media. Emphasis is on the visual language: volume, texture, color, line, space, light, compositions. Proper attention will focus on concepts and technique and philosophies of painting. (Prereq 1101, 1401, 1404 or #. Limited to 25)

First 5 wk, Sec 3, MW, 6-9:45, ArtB 161

★ArtS 3120 PAINTING.

3 degree credits each term (maximum 12 cr), \$132.75 plus \$5 special fee. Total \$137.75.

Continuation of media development and individual problems. (Prereq 1401, 3105. Meets concurrently with 5120. Limited to a combined total of 25)

First 5 wk, Sec 4, MW, 6-9:45, ArtB 151

★Limited enrollment class. See page 5.

★Arts 3160 WATERCOLOR.

3 degree credits (maximum 12 cr), \$132.75 plus \$5 special fee. Total \$137.75. Introduction to transparent watercolor. Figure, still life, landscape, and individual directions. (Prereq 1101, 1404, 1401 or #. Meets concurrently with 5160. See **Restrictions**, page 36. Limited to a combined total of 25)

First 5 wk, Sec 5, TTh, 6-9:45, ArtB 141, Malcolm Myers

★Arts 3410 ART AND COMPUTERS.

3 degree credits (maximum 12 cr), \$132.75 plus \$70 course fee and \$5 special fee. Total \$207.75.

An introductory-level course focusing on the creative use of the Amiga and various other microcomputers. This computer graphics course requires no prior experience. Students are introduced to the BASIC programming language and to software packages from which they generate images of their own design to be captured on videotape. (No prereq. Meets concurrently with 5410. Limited to a combined total of 17)

Ten wk, Sec 3, T, 6-9:45, Intermedia Arts, 425 Ontario

Ten wk, Sec 4, Th, 6-9:45, Intermedia Arts, 425 Ontario

★Arts 3510 PRINTMAKING: INTAGLIO.

3 degree credits each term (maximum 12 cr), \$132.75 plus \$40 course fee and \$5 special fee. Total \$177.75.

A print class for students who have had experience in drawing composition. All techniques of fine printing will be taught and color printing will be demonstrated in engraving and etching. (Prereq 1401, 4 cr of 1510 or #. Meets concurrently with 1510, 5510. Limited to a combined total of 20)

Second 5 wk, Sec 3, MW, 6-9:45, ArtB 170, Karl Bethke

★Arts 3710 INTERMEDIATE PHOTOGRAPHY.

3 degree credits (maximum 12 cr), \$132.75 plus \$25 course fee and \$5 special fee. Total \$162.75.

Continued work in photographic controls and processes. Introduction to related photosensitive media. Emphasis on creative process with attention to individual interests and requirements. (Prereq 1401, 1701 or #. Meets concurrently with 5710. Limited to a combined total of 20)

Second 5 wk, Sec 8, TTh, 6-9:45, ArtB 120

★Arts 5120 PAINTING.

3 degree credits each term (maximum 12 cr), \$132.75 plus \$5 special fee. Total \$137.75.

An advanced course in acrylic and oil painting with emphasis on individual directions as they reflect current and traditional trends in art. (Prereq 12 cr of 3120. Meets concurrently with 3120. Qualified students may register for graduate credit at the University of Minnesota. Limited to a combined total of 25)

First 5 wk, Sec 4, MW, 6-9:45, ArtB 151

★Arts 5160 WATERCOLOR.

3 degree credits (maximum 15 cr), \$132.75 plus \$5 special fee. Total \$137.75. Advanced watercolor techniques, aesthetic directions. Continued development of concepts and individual direction. (Prereq 12 cr of 3160 or #. Meets concurrently with 3160. See **Restrictions**, page 36. Qualified students may register for graduate credit at the University of Minnesota. Limited to a combined total of 25)

First 5 wk, Sec 5, TTh, 6-9:45, ArtB 141, Malcolm Myers

★Limited enrollment class. See page 5.

★ArtS 5410 ART AND COMPUTERS.

3 degree credits (maximum 12 cr), \$132.75 plus \$70 course fee. Total \$202.75. See course description for ArtS 3410. (Prereq 12 cr of 3410 or #. Meets concurrently with 3410. May not be taken for graduate credit. Limited to a combined total of 17)

Ten wk, Sec 3, T, 6-9:45, Intermedia Arts, 425 Ontario
Ten wk, Sec 4, Th, 6-9:45, Intermedia Arts, 425 Ontario

★ArtS 5510 PRINTMAKING: ADVANCED INTAGLIO.

3 degree credits each term (maximum 15 cr), \$132.75 plus \$40 course fee and \$5 special fee. Total \$177.75.

An advanced course in etching, aquatint, mezzatint, and all related techniques in the execution of intaglio prints. Color printing will be taught in conjunction with the above material. (Prereq 12 cr of 3510 or #. Meets concurrently with 1510, 3510. Qualified students may register for graduate credit at the University of Minnesota. Limited to a combined total of 20)

Second 5 wk, Sec 3, MW, 6-9:45, ArtB 170, Karl Bethke

★ArtS 5710 PHOTOGRAPHY.

3 degree credits (maximum 12 cr), \$132.75 plus \$25 course fee and \$5 special fee. Total \$162.75.

Advanced problems in photography. (Prereq 12 cr of 3710 or #. May not be taken for graduate credit. Meets concurrently with 3710. Limited to a combined total of 20).

Second 5 wk, Sec 2, TTh, 6-9:45, ArtB 120



SPLIT ROCK arts program

Duluth, Minnesota

Week-long workshops in the arts at the University's Duluth campus on the hilltops overlooking Lake Superior. Work with nationally recognized artists in a supportive community where you can choose from 35 workshops in a variety of arts areas. Create original prints under the guidance of master printers, work with a paper-casting artist from India or a watercolor artist from China, create self-portraits, explore the nature and applications of creativity, make nontraditional baskets from natural materials, write a poem, a short story, a novel or an essay, photograph nature along the North Shore, create a visual or written journal, handbuild pots and learn fresh ways to decorate them, write and illustrate a children's story, paint on fabric, discover how artmaking can be an act of healing, and more.

★Limited enrollment class. See page 5.

Split Rock is a place of true recreation—refreshment and renewal through experiencing an art form intensively.

Low cost, comfortable apartments and excellent food service are available on campus. Come early or stay on to see Minnesota's favorite summer city and travel the rugged and beautiful North Shore.

Split Rock opens July 3 and new workshops begin each Sunday for six weeks. Graduate or undergraduate credit is available, or you may take any workshop for no credit or grade at reduced cost.

For complete information and your copy of the 1988 Split Rock Arts Program catalog, call 624-6800 or write Split Rock Arts Program, 320 Westbrook Hall, 77 Pleasant Street S.E., University of Minnesota, Minneapolis, MN 55455.

Biology

(223 Snyder Hall: 624-9717)

College of Biological Sciences

★Biol 1009 GENERAL BIOLOGY.

5 degree credits, \$208.75 plus \$10 course fee. Total \$218.75. (IS)

An introduction to the principles of biology. The cell, metabolism, heredity, reproduction, ecology and evolution. Students must attend lectures on both Tuesday and Thursday and laboratory sessions on both Tuesday and Thursday. (No prereq. High school algebra, chemistry recommended. Limited to 75)

Ten wk, Sec 3, Lect TTh, 6-7:10, MoosT 2-650, Pelfer; Lab TTh, 7:20-9, KolH S160

Botany

(220 Biological Sciences: 625-1234)

College of Biological Sciences

★Bot 1009 MINNESOTA PLANT LIFE.

4 degree credits, \$167 plus \$5.50 special fee. Total \$172.50.

Identification of the more characteristic and conspicuous Minnesota plants including many lower forms, with discussion of basic distinctions, life cycles, habitat requirements, distribution, vegetation types, and ecological relations. Four Saturday (8 a.m.-12) field trips will replace four evening sessions. (No prereq. Limited to 45)

Ten wk, Sec 1, MW, 6:10-8:55, BioSci 12, 192, 198, StP Campus

Business, Government, and Society

(835 Management/Economics: 624-5232)

School of Management

★BGS 3002 BUSINESS AND SOCIETY.

4 degree credits, \$205 plus \$10 course fee. Total \$215.

Examines the strategic and dynamic relations of business and society in a goal-oriented and problem-solving context. Focuses on the interfaces of business institutions with the

★Limited enrollment class. See page 5.

physical environment, the social milieu, the political process and economic activity. Gives specific attention to the on-going debate regarding national priorities and the respective roles of the private and public sectors concerning the challenges confronting U.S. society. Includes assessment of the concept, determinants, and indicators of the "quality of life" and the social responsibilities of business. (Prereq at least jr standing for business degree students. **May not be taken S-N.** Limited to 40)

First 5 wk, Sec 7, MW, 5:30-8:15, BlegH 235, Gordon Rands

★BGS 3004 INTERNATIONAL BUSINESS.

4 degree credits, \$205 plus \$10 course fee. Total \$215.

World business with emphasis on the global economy, international concepts, global business structures, comparative cultures and environments, global business strategies, multinational corporations and technology, personnel and operations in the host nations. Resource (including energy) questions in their global contexts: quantities, demands, distribution of resources. (Prereq at least 90 cr completed or in progress. **May not be taken S-N.** Limited to 40)

First 5 wk, Sec 3, MW, 5:30-8:15, BlegH 130, Barbara Stromer

Business Law

(1235 Management/Economics: 624-5055)

School of Management

★BLaw 3058 INTRODUCTION TO LAW, AND THE LAW OF CONTRACTS AND SALES CONTRACTS.

4 degree credits, \$8158, \$205 plus \$10 course fee. Total \$215. (IS)

Study of the origin of law, its place in and effect upon society; the history and development of law; the system of courts; and legal procedure. An extensive study of the law of contracts as the basic law affecting business transactions; and law affecting the sales of goods contracts. (Prereq Econ 1002 or equivalent and at least jr standing for business degree students. **May not be taken S-N.** Limited to 50)

First 5 wk, Sec 11, MW, 6-8:30, BlegH 215, Donald G. Campbell

Ten wk, Sec 12, Th, 6-8:30, BlegH 215, Daniel Blomquist

Second 5 wk, Sec 13, MW, 6-8:30, BlegH 215, Donald G. Campbell

★BLaw 3078 LAW: AGENCY, PARTNERSHIPS, CORPORATIONS, AND COMMERCIAL PAPER.

4 degree credits, \$8278, \$205 plus \$10 course fee. Total \$215. (IS)

A study of law affecting the relationship between principal and agent, master and servant, and employer and employee. Includes the study of the partnership and corporate forms of business entities, including the methods of creating the relationships, and the law developed to regulate and control these organizations and their members and contracts referred to as commercial papers (negotiable instruments), with emphasis on effect of the Uniform Commercial Code. (Prereq 3058. Limited to 30)

Second 5 wk, Sec 3, MW, 6-8:30, BlegH 130, Thomas Lovett

★Limited enrollment class. See page 5.

Child Psychology

(104 Child Development: 624-2396)

College of Education

Institute of Child Development

CPsy 1301 INTRODUCTORY CHILD PSYCHOLOGY.

4 degree credits, §3309, §5301, \$167. (IS)

Introduction to the science of child behavior; review of theories and research. (Prereq 5 or introductory psychology. Meets concurrently with 3309)

Ten wk, Sec 4, T, 6-8:30, BuH 120, James Morgan

CPsy 3309 INTRODUCTORY CHILD PSYCHOLOGY FOR THE SOCIAL SCIENCES.

4 degree credits, §1301, §5301, \$218.

Science of child behavior; review of theory and research; designed for majors in psychology, sociology, and related disciplines; not suggested for child psychology majors. (Prereq Psy 1001. Meets concurrently with 1301)

Ten wk, Sec 4, T, 6-8:30, BuH 120, James Morgan

Classics

(310 Folwell Hall: 625-5353)

Classical and Near Eastern Studies

College of Liberal Arts

Clas 1042 GREEK AND ROMAN MYTHOLOGY.

4 degree credits, \$167 (♦ \$83.50).

The heroes, gods and goddesses of ancient Greece and Rome. The stories of the myths and the stories behind the myths. (No prereq)

Second 5 wk, Sec 3, MW, 6:20-8:50, FolH 105, Gerald Erickson

Clas 3008 HISTORY OF ANCIENT ART.

4 degree credits, §ArH 1008, 3008, \$177 plus \$4 course fee. Total \$181 (♦ \$88.50 plus \$4 course fee. Total \$92.50).

Architecture, sculpture, and painting of selected early cultures; stress on influences contributing to the development of Western art. (No prereq. Meets concurrently with ArH 1008, 3008)

First 5 wk, Sec 2, MW, 6:20-8:50, JonesH 207B, Sheila McNally

The Compleat Scholar

(See page 91)

★Limited enrollment class. See page 5.

Composition and Communication

(209 Lind Hall: 625-2888)

College of Liberal Arts

(See also writing courses in English)

You must attend the first class meeting in order to keep your place in the class, unless you obtain approval from the instructor.

★Comp 1011 WRITING PRACTICE I.

5 degree credits, \$208.75. (IS)

Provides guided practice in solving writers' problems through recitation, in-class workshops, and individual conferences. Writing assignments focus on defining purpose, organizing and developing content, analyzing audiences, drafting the whole essay and its parts, and revising and editing so as to master the fundamentals of expository structure and style. After first day of class, consent of instructor is required. (No prereq. Limited to 25)

The Writing Practice requirement is fulfilled by successful completion of Comp 1011. Students whose work does not meet an acceptable standard in 1011 will receive a continuation grade ("X"), and will take Comp 1013 to complete the requirement. Comp 1013 will be taught Fall Quarter 1988.

Ten wk, Sec 29, M, 6-8:50, KolH S134

Ten wk, Sec 30, T, 6-8:50, KolH S134

Ten wk, Sec 31, W, 6-8:50, KolH S134

Ten wk, Sec 32, Th, 6-8:50, KolH S134

★Comp 1027 INTERMEDIATE EXPOSITORY WRITING.

4 degree credits, \$167. (IS)

Principles of mature style and effective organization, with special emphasis on revising and editing, and on sustaining a distinctive authorial voice which is appropriate to various audiences and writing situations. Recommended for students who have had previous writing experience. It is not an upper division course. (Prereq completion of the Writing Practice requirement, or Comp 1001 or Comm 1001; soph standing is recommended. Limited to 25)

Ten wk, Sec 12, M, 6-8:30, HHCtr 60

Ten wk, Sec 13, W, 6-8:30, HHCtr 60

★Comp 3014 WRITING FOR THE QUANTITATIVE SOCIAL SCIENCES.

4 degree credits, \$177. (IS)

Developing strategies for expressing quantitative and statistical information in clear prose, and exercises in effective ways to describe individual case histories. Major papers will include the analysis of complex situations and institutions. (Prereq jr standing, the Writing Practice requirement, or equivalent. Limited to 20)

Ten wk, Sec 5, T, 6-8:30, BlegH 245

Ten wk, Sec 6, W, 6-8:30, BlegH 245

★Comp 3027 ADVANCED EXPOSITORY WRITING.

4 degree credits, \$177. (IS)

General introduction to narration, description, proof, and persuasion; proper framing of arguments and analysis; use and evaluation of sources for longer papers. (Prereq jr standing, the Writing Practice requirement or equivalent. Limited to 20)

Ten wk, Sec 15, T, 6-8:30, BlegH 225

Ten wk, Sec 16, W, 6-8:30, BlegH 155

Ten wk, Sec 17, Th, 6-8:30, BlegH 225

Ten wk, Sec 18, Th, 6-8:30, BlegH 245

★Limited enrollment class. See page 5.

★Comp 3031 TECHNICAL WRITING FOR ENGINEERS.

4 degree credits, \$177. (IS)

Focus on the form and style of engineering writing in reports, documentation and correspondence. Exercises and frequent practical examples, tied as much as possible to students' major fields. (Prereq jr standing, the Writing Practice requirement, or equivalent. Limited to 20)

Ten wk, Sec 8, T, 6-8:30, HHHctr 60

Ten wk, Sec 9, T, 6-8:30, BlegH 255

Ten wk, Sec 10, W, 6-8:30, BlegH 350

Ten wk, Sec 11, Th, 6-8:30, HHHctr 60

Ten wk, Sec 12, Th, 6-8:30, BlegH 350

★Comp 3032 PRE-PROFESSIONAL WRITING FOR BUSINESS.

4 degree credits, \$177. (IS)

Focus on the rhetoric, form and style of business writing in reports, case studies, and correspondence. Exercises and frequent practical examples, tied as much as possible to students' major fields. This course fulfills senior business writing requirement for the School of Management. (Prereq jr standing, the Writing Practice requirement or equivalent. Limited to 20)

Ten wk, Sec 12, T, 6-8:30, BlegH 260

Ten wk, Sec 13, Th, 6-8:30, BlegH 260

Ten wk, Sec 14, Th, 6-8:30, BlegH 255

Comp 3080 SPECIAL PROJECTS IN ADVANCED COMPOSITION.

2 degree credits (6 or maximum), \$88.50 plus \$40 special fee. Total \$128.50.

Weekly individual writing conferences scheduled at student's and instructor's convenience. Interested students should contact the Composition Office (209 Lind Hall, 625-2888), preferably with a brief written outline of the project, before registering for the class. (Prereq the Writing Practice requirement or equivalent)

Ten wk, Sec 4, Arr

Computer Science

(136 Lind Hall: 625-4002)

Institute of Technology

CSci 3101 A FORTRAN INTRODUCTION TO COMPUTER PROGRAMMING.

4 degree credits, §1100-1101, \$214 plus \$6 special fee. Total \$220. (IS)

Basic FORTRAN computer language with extensions. Programming applications and techniques. The binary number system and elements of computer organization and machine language. Integral laboratory. (Prereq Math 1111 or 1201 or equivalent or #)

First 5 wk, Sec 10, MW, 6-8:40, MoosT 2-690

Second 5 wk, Sec 11, TTh, 6-8:40, MoosT 2-690

CSci 3104 INTRODUCTION TO PROGRAMMING AND PROBLEM SOLVING.

5 degree credits, \$267.50 plus \$6 special fee. Total \$273.50.

Problem-solving techniques, stepwise refinement, modularization. Algorithms, introduction to evaluation criteria, representation of algorithms, flow charts, meta languages. The PASCAL language. Elements of programming style, program checking. Design of test data. Documentation. Comparison of PASCAL/FORTRAN. (Prereq Math 1211 or equivalent or #)

First 5 wk, Sec 10, TTh, 6-8:40, MoosT 2-690

Second 5 wk, Sec 11, MW, 6-8:40, MoosT 2-690

★Limited enrollment class. See page 5.

Continuing Education for Women (CEW)

(See page 91)

Decision Sciences

(395 Humphrey Center: 624-8030)

School of Management

Business degree students must take Decision Sciences courses A-F.

★DScI 1050 (formerly QA 1050) ELEMENTARY MANAGERIAL STATISTICS.

4 degree credits, \$167 plus \$8.50 course fee and \$6 special fee. Total \$181.50.

Introduction to quantitative decision making. Probabilistic and statistical techniques for decision making and data analysis, e.g., laws of probability, sampling, estimation, hypothesis testing, and regression. (Prereq Math 1111 or equivalent or Math 1131. Limited to 200)

Ten wk, Sec 6, Th, 6-9:20, AndH 310

★DScI 3055 (formerly QA 3055) INTRODUCTION TO MANAGEMENT SCIENCES.

4 degree credits, \$205 plus \$8.50 course fee and \$6 special fee. Total \$219.50.

Analytical approaches and quantitative reasoning in management problems, stressing problem formulation, analytical methods for solution, and use of computer models. Topics include: management science concepts, decision theory, simulation, linear programming, and implementation. (Prereq 1050, Math 1142 or equivalent and at least 90 cr completed or in progress. Open to nondegree students with equivalent experience. Limited to 50)

Ten wk, Sec 5, M, 6-9:20, BlegH 155

Design

(240 McNeal Hall: 624-9700)

College of Home Economics

Design, Housing, and Apparel

★Dsgn 1201 INTRODUCTION TO COMMERCIAL ART AND GRAPHIC DESIGN.

4 degree credits, \$167.

Overview of advertising communications process, history and contemporary practices. Emphasis on role of commercial artists (in relationship to the business community and the consumer). Terminology and technology of the field are introduced. Field trips. (No prereq. Limited to 28)

First 5 wk, Sec 8, TTh, 6-8, McNH 216, StP Campus, Fred Klein

★Dsgn 1203 DRAWING FOR DESIGN AND ILLUSTRATION.

4 degree credits, \$167.

Fundamentals of drawing for commercial design and illustration. Emphasis on human figure drawing, form, perspective, and shadows. Use of range of commercial art mediums. (Prereq 1521 or #. Limited to 24)

Second 5 wk, Sec 4, TTh, 6-9:55, McNH 258, StP Campus, Harold Hussung

★Limited enrollment class. See page 5.

★Dsgn 1525 DESIGN PROCESS: TWO-DIMENSIONAL DESIGN I.

4 degree credits, \$167.

Experiments with principles of two-dimensional design. (No prereq. Limited to 24)

First 5 wk, Sec 4, MW, 6-9:55, McNH 258, StP Campus

★Dsgn 1528 (formerly 1521) DESIGN PROCESS: COLOR.

4 degree credits, \$167 plus \$4 course fee. Total \$171.

Color concepts and their applications to design. **Students will also be required to purchase supplies for this class which will possibly exceed \$100.** (No prereq. Limited to 24)

Second 5 wk, Sec 6, TTh, 6-9:55 and arr, McNH 262, StP Campus

★Dsgn 1531 SURFACE-FABRIC DESIGN I.

4 degree credits, \$167 plus \$35 course fee. Total \$202.

Exploration of surface pattern and composition with varied media and materials: dyeing, resist, batik, stencil, block printing, and others. (Prereq 1521, 1523, 1525 or #. Limited to 18)

First 5 wk, Sec 3, MW, 6-9:55 and arr, McNH B9, StP Campus, Richard Abell

Second 5 wk, Sec 4, MW, 6-9:55 and arr, McNH B9, StP Campus, Richard Abell

★Dsgn 1550 DRAFTING—BASIC DRAFTING TECHNIQUES.

4 degree credits, \$167 plus \$15 course fee. Total \$182.

Architectural drafting instruction in the use of drafting instruments. Emphasis on plans, elevations, details, and architectural symbols and vocabulary as related to Interior Design. **Students will be required to purchase supplies for this class which will probably exceed \$125.** (No prereq. Limited to 20)

First 5 wk, Sec 8, MTh, 6-9:55 and arr, McNH 305, StP Campus, Ardis Hutchins

★Dsgn 3255 TYPOGRAPHIC DESIGN.

4 degree credits, \$229.

Theory and application of principles of typographic composition. Emphasis on typography history, type faces and letter forms, typesetting methods, terminology, type specification, and copyfitting. (Prereq 1220. Limited to 24)

First 5 wk, Sec 2, MW, 6-9:55, McNH 333, StP Campus, Janice Anderson

★Dsgn 3523 DESIGN PROCESS: VISUAL PRESENTATION II.

4 degree credits, \$229.

Continued development of drawing skills for the designer. (Prereq 1523. Limited to 24)

Second 5 wk, Sec 2, MW, 6-9:55, McNH 258, StP Campus

★Dsgn 3572 SPECIAL TOPICS IN DESIGN: LETTERFORMS FOR THE DESIGNER.

4 degree credits, \$229.

A study of letterforms, both hand lettered and typeset, will include historical background and studio experience using letterforms in two-dimensional design. (Prereq 1525. Limited to 24)

First 5 wk, Sec 7, TTh, 6-9:55, McNH 258, StP Campus, Barbara Martinson

★Limited enrollment class. See page 5.

★Dsgn 3572 SPECIAL TOPICS IN DESIGN: COMPUTER APPLICATIONS TO DESIGN PROBLEMS.

4 degree credits, \$229.

Solutions to the design process via the Amiga computer using Deluxe Paint Textcraft software programs. Gain experience with microcomputers, peripherals, and software. (Prereq 1521, 1525 or #. Limited to 12)

First 5 wk, Sec 8, MW, 6-9:55, McNH 69, StP Campus, Janet Cameron

Second 5 wk, Sec 9, MW, 6-9:55, McNH 69, StP Campus, Janet Cameron

★Dsgn 3572 SPECIAL TOPICS IN DESIGN: PATTERN GRADING WORKSHOP.

1 degree credit, \$57.25.

Laboratory experience in pattern grading from a basic sloper; principles involved in sizing. (Prereq TexC 3604. Limited to 20)

First 5 wk, Sec 10, W, 6-9, McNH 475, StP Campus

★Dsgn 3582 FIELD EXPERIENCE IN DESIGN.

3 degree credits, \$171.75.

Supervised 60 hours "on site" exhibition installation during August, 1988. Organizational meeting Sat., Aug. 6, 10:30 a.m. at the Creative Activities Building, Minnesota State Fairgrounds, St. Paul. (Limited to 14)

Spec Term, Sec 1, Arr, Richard Abell. No late fee through July 29.

Early Childhood Studies Program

(Department of Extension Classes, 201 Westbrook Hall: 625-1088)

Department of Extension Classes

Courses related to Early Childhood Studies can be found in this bulletin listed under Child Psychology and Family Social Science. For information regarding the Early Childhood field, contact Extension Counseling at 625-2500 or the Center for Early Education and Development at 624-3357. For Prekindergarten/Nursery School licensure, call Lynn Galle at 624-5283.

East Asian Studies

(113 Folwell Hall: 624-0007)

College of Liberal Arts

Chinese (Chn)

★Chn 1012-1013 BEGINNING CHINESE.

5 degree credits each term, \$208.75 each term.

Reading, writing, and speaking Chinese. Completion of 1013 prepares students for 3021. (Prereq 1011 or 1006 or # for 1012; 1012 or 1007 or # for 1013. Limited to 30)

First 5 wk, 1012, Sec 5, MTWThF, 6:30-8:30, KoRH S132

Second 5 wk, 1013, Sec 6, MTWThF, 6:30-8:30, KoRH S132

★Limited enrollment class. See page 5.

Japanese (Jpn)

★Jpn 1012-1013 BEGINNING JAPANESE.

5 degree credits each term, \$208.75 each term.

Reading, writing, and speaking Japanese. Completion of 1013 prepares students for 3021. (Prereq 1011 or 1006 or # for 1012; 1012 or 1007 or # for 1013. Limited to 30)

First 5 wk, 1012, Sec 5, MTWThF, 6:30-8:30, Arch 60

Second 5 wk, 1013, Sec 6, MTWThF, 6:30-8:30, Arch 60

Jpn 3021-3022-3023 INTERMEDIATE JAPANESE. 15 degree credits, \$663.75

Foundation for reading knowledge of Japanese. Review and pattern drill. *A concentrated program of study permitting students to earn 15 hours of credit, the equivalent of a full year's sequence in language. Students must enroll for all three courses and may not enroll in other summer courses. Students must complete three separate registration forms—one each for 3021, 3022, and 3023. Each form is for 5 credits, tuition \$221.25.* (Prereq 1013 or 1008 or #)

Ten wk, 3021, Sec 4, MTWThF, 8 a.m.-12:05, ClaOff B30, StP Campus

Ten wk, 3022, Sec 5, MTWThF, 8 a.m.-12:05, ClaOff B30, StP Campus

Ten wk, 3023, Sec 6, MTWThF, 8 a.m.-12:05, ClaOff B30, StP Campus

East Asian Studies (EAS)

EAS 3481 MODERN JAPANESE SOCIETY. 4 degree credits, §Soc 3481, \$177. (♦ \$88.50)

Japanese social institutions, including family, education, business and labor relations, government, and the status of women; ways these institutions differ from the West and affect Japanese economic success. (Prereq introductory sociology course or #. Meets concurrently with Soc 3481)

First 5 wk, Sec 1, MW, 6-8:30, BlegH 135, Jeffrey P. Broadbent

Economics

(1035 Management/Economics: 625-6353)

College of Liberal Arts

★Econ 1001, 1002 PRINCIPLES OF ECONOMICS.

4 degree credits each term, if no credit received for any other beginning economics course. \$167 each term. (IS)

Principles underlying economic activity and the way these principles work out through our economic institutions. **1001:** Macro-economics: national income, money and banking, economic growth. **1002:** Micro-economics: demand and supply, competition and monopoly, distribution of income, international trade, and current economic problems. (No prereq. Econ 1001 and 1002 may be taken in either order, or may be taken the same evening or the same term in order for the student to progress more rapidly to other courses. **Each section limited to 35**)

Ten wk, 1001, Sec 35, MW, 6-7:20, BlegH 205

Ten wk, 1001, Sec 36, MW, 7:30-8:50, BlegH 205

Ten wk, 1001, Sec 37, TTh, 6-7:20, BlegH 115

Ten wk, 1002, Sec 38, MW, 6-7:20, BlegH 115

Ten wk, 1002, Sec 39, MW, 7:30-8:50, BlegH 115

Ten wk, 1002, Sec 40, TTh, 7:30-8:50, BlegH 115

★Limited enrollment class. See page 5.

★Econ 3101 MICROECONOMIC THEORY.

4 degree credits, \$3105 or BGS 3001, \$177.

Behavior of households, firms and industries under competitive and monopolistic conditions. Factors influencing production, price and advertising decisions. **Must be taken A-F.** (Prereq 1001, 1002, Math 1111 or 1131 or #. Limited to 35)

Ten wk, Sec 4, TTh, 6-7:20, BlegH 220

English

(207 Lind Hall: 625-3363)

College of Liberal Arts

(See also writing courses in Composition)

Creative and Professional Writing courses

★Engl 1101 (formerly Comp 1101) INTRODUCTION TO FICTION WRITING.

4 degree credits, \$Comp 1101, 1113, \$167.

Structured approach for students who have done little writing. Development of techniques, definite assignments, principles of composition in the art of fiction. (Prereq fulfillment of writing practice requirement. Limited to 22)

Second 5 wk, Sec 6, TTh, 6-8:30, BlegH 210

★Engl 1104 (formerly Comp 1104) INTRODUCTION TO POETRY WRITING.

4 degree credits, \$Comp 1104, 1111, \$167.

Workshop for beginning students. Discussion of student poems, assignments, formal experiments. No manuscript prerequisite. (No prereq. Limited to 22)

First 5 wk, Sec 3, MW, 6-8:30, BlegH 260, Michael Dennis Browne

Literature courses

★Engl 1005 INTRODUCTION TO LITERATURE.

4 degree credits, \$167.

Understanding and enjoying literature. Readings of novels, short stories, poems, and plays. (No prereq. Limited to 36)

First 5 wk, Sec 5, MW, 6-8:30, BlegH 105

★Engl 1016 INTRODUCTION TO AMERICAN LITERATURE.

4 degree credits, \$167 (♦\$83.50).

Critical discussion of and writing about selected works of American literature. Typical authors: Poe, Hawthorne, Whitman, Dickinson, Twain, Frost, Fitzgerald. (No prereq. Limited to 36)

Second 5 wk, Sec 5, MW, 6-8:30, BlegH 440, Charles Sugnet

Engl 1018 INTRODUCTION TO MODERN FICTION.

4 degree credits, \$167 (♦\$83.50).

Critical discussion of and writing about selected modern novels and stories. Typical authors: Conrad, Lawrence, Joyce, Woolf, Hemingway, Faulkner, Nabokov. (No prereq)

First 5 wk, Sec 4, TTh, 6-8:30, BlegH 235, Joel Weinsheimer

★Limited enrollment class. See page 5.

Engl 1671 THE SHORT STORY.

4 degree credits, \$167 (♦ \$83.50).

Lecture introduction to short stories, with some emphasis on the history and diversity of the form. Typical authors: Poe, Chekhov, Lawrence, Joyce, Kafka, Welty, Faulkner. (No prereq)

Second 5 wk, Sec 5, MW, 6-8:30, BlegH 240, J. Lawrence Mitchell

Engl 3241 SHAKESPEARE.

4 degree credits, \$3243, \$177 (♦ \$88.50). (IS)

Plays from Shakespeare's early and middle periods. All sections read *A Midsummer Night's Dream*, *Hamlet*, a history play, and three or four others. (No prereq)

First 5 wk, Sec 3, MW, 6-8:30, BlegH 440, Edward Savage

★Engl 3242 SHAKESPEARE.

4 degree credits, \$3243, \$177 (♦ \$88.50). (IS)

Plays from the middle and late periods. *King Lear*, *Macbeth*, *The Tempest*, and two or three others. (No prereq. Limited to 36)

Second 5 wk, Sec 3, MW, 6-8:30, BlegH 105

★Engl 3455 AMERICAN SHORT STORY.

4 degree credits, \$177.

Typical authors: Irving, Poe, Hawthorne, Twain, Crane, Cather, Faulkner, Welty, Bellow. (No prereq. Limited to 45)

First 5 wk, Sec 2, MW, 9-11:30 a.m., MacP, Karl Winter

Offered through Continuing Education for Women

★Engl 3960 JUNIOR-SENIOR SEMINAR: SHAKESPEARE.

4 degree credits, \$177.

Intensive study of selected poems and plays by Shakespeare in their historical and social context. (Prereq English major or minor, jr or sr, or Δ. Limited to 17)

First 5 wk, Sec 2, TTh, 6-8:30, BlegH 340, David Haley

Engl 5671 THEORY OF THE NOVEL.

4 degree credits, \$177. (♦ \$88.50).

Readings in theoretical criticism of the novel with application to selected British and American fiction. (No prereq. Qualified students may register for graduate credit at the University of Minnesota)

Second 5 wk, Sec 1, TTh, 6-8:30, BlegH 150, Chester Anderson

Engl 5851 STRUCTURE OF MODERN ENGLISH.

4 degree credits, \$3851, \$177 (♦ 88.50).

Modern English grammar: phonology, syntax, and semantics; variations and change. (No prereq. Qualified students may register for graduate credit at the University of Minnesota)

First 5 wk, Sec 2, TTh, 6-8:30, BlegH 150, Genevieve Escure

★Limited enrollment class. See page 5.

Family Social Science

(290 McNeal Hall: 625-1900)

College of Home Economics

FSoS 1001 DYNAMICS OF FAMILY RELATIONSHIPS.

3 degree credits, \$1002, \$125.25 plus \$1 special fee. Total \$126.25 (♦ \$62.75 plus \$1 special fee. Total \$63.75). (IS)

Applications of behavioral sciences to mate selection, interaction in marriage, and other committed relationships, sex roles, maintaining, and ending of relationships. (No prereq)

Second 5 wk, Sec 2, TTh, 6-8:30, McNH 198, StP Campus, Christa Treichel

FSoS 1025 PARENTHOOD.

4 degree credits, \$167 (♦ \$83.50).

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. (No prereq)

First 5 wk, Sec 2, MW, 6-8:30, McNH 395, StP Campus, Terri Karls

FSoS 5230 INDEPENDENT STUDY IN FAMILY SOCIAL SCIENCE.

1-5 degree credits (maximum 16 cr), \$57.25 per credit.

Independent reading or research under faculty supervision. (Prereq written #. Qualified students may register for graduate credit at the University of Minnesota)

Ten wk, Sec 1, Arr.

Family Social Science Summer Study Abroad

June 24-July 14, 1988

FSoS 5240 SPECIAL TOPICS: THE FAMILY IN AUSTRALIA AND NEW ZEALAND.

5 degree credits, \$286.25 tuition (travel costs extra).

Instructor is Professor Richard Hey. Students will travel and study three weeks in New Zealand and Australia. Opportunities to meet with professionals in family studies and marriage and family social services will be arranged. Home stays with farm families in New Zealand are included. (No prereq. Qualified students may register for graduate credit at the University of Minnesota)

Registration must be completed by mid-April. There will be lectures and reading assignments required prior to departure. These sessions, dates and times, will be arranged. Content will focus on the family as an institution and system of relationships; and on Family Life Education in those countries.

For further information, costs, and registration procedures, telephone (612) 625-1900.

Alcohol and Drug Counseling Education Program

(396 McNeal Hall: 625-3778)

For information about the Alcohol and Drug Counseling Education Certificate, see the

1987-88 *Extension Classes Bulletin*, page 585. To receive a formal application for the certificate program, write Alcohol and Drug Counseling Education Program, Family Social Science, University of Minnesota, 396 McNeal Hall, 1985 Buford Ave., St. Paul, MN 55108. Or call the program office, 625-3778.

If you do not attend the entire first class session, your space in that class will be forfeited.

★FSoS 3029 COUNSELING SKILLS PRACTICUM I.

4 degree credits, \$229.

Dyadic role-playing and group exercises in the area of basic counseling skills. Topics include assessment of counselor needs and motivations, non-verbal communication, accurate empathy, self-disclosure, and questioning. Use of video tape to aid students in feedback. Certificate students must take this course A-F. (No prereq. Students interested in graduate credit should see 5029. Meets concurrently with 5029. Limited to a combined total of 20)

Spec Term, Sec 6, W, 6-10, June 15-July 20, McNH 274, StP Campus, and Sa, 9 a.m.-5, June 25, McNH 274, StP Campus, Constance Fabunmi.

★FSoS 3032 CHEMICAL ABUSE AND THE FAMILY: AN OVERVIEW.

4 degree credits, \$229.

Introduction to marriage and family counseling with particular application to the families in which alcohol or drug abuse is a problem. Certificate students must take this course A-F. (No prereq. Students interested in graduate credit should see 5032. Meets concurrently with 5032. Limited to a combined total of 40)

Spec Term, Sec 3, ThFSa, 9 a.m.-5, July 7-9, McNH 274, StP Campus; and Th, 6-10, July 14, McNH 274, StP Campus, Bruce Fischer, William Goodman. No late fee through June 30.

FSoS 3034 TOPICS IN ALCOHOL AND DRUG ABUSE.

1-5 degree credits, \$57.25 a credit. (IS)

Selected readings in alcohol and drug use and problems and evaluation of student's mastery of the assigned study. Requests for permission to register must be made to William J. Goodman, Alcohol and Drug Counseling Education Program, 396 McNeal Hall, 1985 Buford Ave., St. Paul, MN 55108, or call the program office, 625-3778. (Prereq written #. Students interested in graduate credit should see 5034)

Ten wk, Sec 4, Arr, Constance Fabunmi

Ten wk, Sec 5, Arr, William Goodman

FSoS 3035 CLINICAL INTERNSHIP IN CHEMICAL ABUSE PROBLEMS.

2-18 degree credits, \$57.25 a credit plus \$25 special fee for each placement.

Also required is a closed class permission slip, which is available by calling the program office at 625-3778. A six-month (1000-hour) rotating clinical internship experience designed to strengthen the student's competencies and skills in several areas of the alcohol and drug abuse continuum of care. Admissions requests must be made to the Internship Coordinator of the Alcohol and Drug Counseling Education Program. Must be taken S-N. (Prereq 3026, 3027, 3028, 3030, 3032, 3037 and written #)

Ten wk, Sec 4, Arr, Constance Fabunmi

★Limited enrollment class. See page 5.

★FSoS 3037 GROUP THERAPY: THEORY AND PRACTICE.

3 degree credits, \$171.75.

Lecture, small-group experience, and role playing aimed at providing an introduction to group therapy concepts. Topics include stages of group development, stages of affective development, Hill Interaction Matrix, leadership roles and functions. Certificate students must take this course A-F. (No prereq. Students interested in graduate credit should see 5037. Meets concurrently with 5037. Limited to a combined total of 24)

Spec Term, Sec 4, ThFSa, 9 a.m.-5, June 16-18, McNH 274, StP Campus, Bruce Fischer, William Goodman. No late fee through June 9.

FSoS 5008 INTROSPECTIVE WORKSHOP AND CLINICAL SUPERVISION.

1 or 2 degree credits, \$57.25 or \$114.50.

Special topics, nonregular program or course in Family Social Science for pre-service or in-service helping professionals. (Prereq 3035 or 5035. Qualified students may register for graduate credit at the University of Minnesota)

Ten wk, Sec 4, Arr, Constance Fabunmi

★FSoS 5029 COUNSELING SKILLS PRACTICUM I.

4 degree credits, \$229.

See course description and prerequisites for 3029. Certificate students must take this course A-F. (Qualified students may register for graduate credit at the University of Minnesota. Meets concurrently with 3029. Limited to a combined total of 20)

Spec Term, Sec 6, W, 6-10, June 15-July 20, McNH 274, StP Campus; and Sa, 9 a.m.-5, June 25, McNH 274, StP Campus, Constance Fabunmi.

★FSoS 5032 CHEMICAL ABUSE AND THE FAMILY: AN OVERVIEW.

4 degree credits, \$229.

See course description and prerequisites for 3032. Certificate students must take this course A-F. (Qualified students may register for graduate credit at the University of Minnesota. Meets concurrently with 3032. Limited to a combined total of 40)

Spec Term, Sec 3, ThFSa, 9 a.m.-5, July 7-9, McNH 274, StP Campus; and Th, 6-10, July 14, McNH 274, StP Campus, Bruce Fischer, William Goodman. No late fee through June 30.

FSoS 5034 TOPICS IN ALCOHOL AND DRUG ABUSE.

2-5 degree credits, \$57.25 a credit.

See course description and prerequisites for 3034. Requests for permission to register must be made to William J. Goodman, Alcohol and Drug Counseling Education Program, 396 McNeal Hall, 1985 Buford Ave., St. Paul, MN 55108, or call the program office, 625-3778. (Qualified students may register for graduate credit at the University of Minnesota)

Ten wk, Sec 4, Arr, Constance Fabunmi

Ten wk, Sec 5, Arr, William Goodman

FSoS 5035 CLINICAL INTERNSHIP IN CHEMICAL ABUSE PROBLEMS.

2-18 degree credits, \$57.25 a credit plus \$25 special fee for each placement.

See course description and prerequisites for 3035. Must be taken S-N. (Qualified students may register for graduate credit at the University of Minnesota)

Ten wk, Sec 4, Arr

★Limited enrollment class. See page 5.

★FSoS 5037 GROUP THERAPY: THEORY AND PRACTICE.

3 degree credits, \$171.75.

See course description and prerequisites for 3037. Certificate students must take this course A-F. (Qualified students may register for graduate credit at the University of Minnesota. Meets concurrently with 3037. Limited to a combined total of 24)

Spec Term, Sec 4, ThFSa, 9 a.m.-5, June 16-18, McNH 274, StP Campus, Bruce Fischer, William Goodman. No late fee through June 9.

Finance

(735 Management/Economics: 624-2888)

School of Management

For Personal Financial Management, see the Insurance section of this bulletin.

★BFin 3000 FINANCE FUNDAMENTALS.

4 degree credits, \$205 plus \$10 course fee. Total \$215. (IS)

Provides students with a comprehensive, analytical introduction to the principal concepts in finance. After considering the general business environment, the course examines valuation theory. Then financial management decisions concerning uses and sources of funds are presented, thus introducing students to capital budgeting. This course concludes by surveying the nation's financial markets. (Prereq Acct 1024-1025 and 1051 or 3001 and at least 90 cr completed or in progress. **May not be taken S-N.** Limited to 40)

First 5 wk, Sec 13, MW, 6-9, BlegH 150

Second 5 wk, Sec 14, MW, 6-9, BlegH 150

★BFin 3100 FINANCIAL MANAGEMENT.

4 degree credits, \$205 plus \$10 course fee. Total \$215.

A broad case-oriented course building on concepts introduced in 3000. The viewpoint of a corporation's principal financial officer is generally used. Case discussions, augmented by lectures and readings, enable students to apply finance principles in actual business situations. Experience in problem definition, specification of alternatives, analysis and decisions. Effective verbal and written communication stressed. *Rigorous analysis of the assigned case material prior to each class is expected as preparation for active student participation.* (Prereq 3000 and at least 90 cr completed or in progress. Limited to 40)

Second 5 wk, Sec 2, TTh, 5:30-8, BlegH 435

★BFin 3500 REAL ESTATE INVESTMENT ANALYSIS.

4 degree credits, \$205 plus \$10 course fee. Total \$215.

Analysis and economic aspects of investments in real property including: cash flows; accounting depreciation vs. market value depreciation or appreciation; financing methods and cost; sources of funds; measures of return on investment. (Prereq Econ 3000 and 1002 or equivalent, and at least 90 cr completed or in progress. Limited to 40)

First 5 wk, Sec 4, TTh, 5:30-8, BlegH 435

Certified Financial Planner (CFP)

The following courses are offered by the University of Minnesota as part of the course of studies leading to the Certified Financial Planner™ designation. To receive the designation, individuals must register with and pay tuition to the College for Financial Planning in Denver,

★Limited enrollment class. See page 5.

Colo., then pass six nationally administered examinations covering *Introduction to Financial Planning, Risk Management, Investments, Tax Planning and Management, Retirement Planning and Employee Benefits, and Estate Planning.*

Courses at the University of Minnesota are designed to help candidates pass the national examinations and to provide expert instruction in all areas of the CFP curriculum. Courses must be taken and passed in sequence, and University of Minnesota tuition is separate from and in addition to fees of the College for Financial Planning. If you have not completed the courses required for Courses III and VI, but wish to register for Course I beginning in the fall, call (612) 625-3322 for a descriptive catalog and registration information for the fall program.

CFP 0003C (III) INVESTMENTS.

4 certificate credits, \$167.

General overview of a wide variety of investment vehicles: the environment influences affecting investment vehicles; the fundamentals of investing including financial markets; sources or investment information and risks; tax considerations, and securities regulation. The case analysis section will ask you to identify a client's investment constraints, select asset categories and investment vehicles appropriate for a client's goals, and allocate resources based on time value of money principles. **Must be taken S-N.** (Prereq CFP 0001C, 0002C)

Spec Term, Sec 1, T, 6:30-9, July 5-Sept. 6 (10 meetings), BlegH 205. No late fee through June 28.

CFP 0006C (VI) ESTATE PLANNING.

4 certificate credits, \$167.

Introduction to various components of the estate planning process. Fundamentals of federal estate and federal gift taxation. Various estate planning techniques including exclusion and valuation techniques, deeds, forms of ownership, charitable transfers, and postmortem planning techniques. The case analysis requires you to calculate estate tax for a client, analyze the limiting factors in the case, and make recommendations that maximize the efficiency of transfer. **Must be taken S-N.** (Prereq CFP 0001C, 0002C, 0003C, 0004C, 0005C)

Spec Term, Sec 1, T, 6:30-9, July 5-Sept. 6 (10 meetings), AndH 310. No late fee through June 28.

French

(200 Folwell Hall: 624-4308)

College of Liberal Arts

Reading French. Fren 0001 is specifically designed for individuals who desire only a reading knowledge of the language. The French language requirements for a graduate degree may also be satisfied by successfully passing an examination given at the end of the course. Graduate students should check with their advisers for specific language requirements in their field of study.

Fren 0001 READING FRENCH.

No credit, \$167. (IS)

This course is designed solely to impart a basic reading knowledge of the French language; full time is devoted to intensive reading and translation of a variety of texts. Since this approach deals only with the reading aspect of the language, there are no sessions for oral-aural drills and composition, and great skill can be acquired in a short time. At the end of one quarter the student is given the Graduate Reading Examination in French. The department

will certify to the Graduate School a reading knowledge of French upon successful completion of this examination. (No prereq. **Must be taken S-N**)

First 5 wk, Sec 4, MTh, 6-8:30, CivMinE 213

Second 5 wk, Sec 5, MTh, 6-8:30, CivMinE 213

Fren 1104 INTERMEDIATE FRENCH.

5 degree credits, \$208.75.

Discussion of literary and cultural readings. Grammar review and development of writing skills. (Prereq 1103 or #)

First 5 wk, Sec 2, MTh, 6-8:50, Kolth S135

Fren 1105 INTERMEDIATE FRENCH.

5 degree credits, \$208.75.

Cultural and literary readings, progressively less structured discussion leading to free expression of ideas through speaking and writing. (Prereq 1104 or #)

Second 5 wk, Sec 2, MTh, 6-8:50, Kolth S135

French and Italian

(200 Folwell Hall: 624-4308)

College of Liberal Arts

★Frt 3608 NEW WAVE CINEMAS.

4 degree credits, \$177.

Film work of directors recasting classical traditions of Europe and America. Filmic theories of the Western, B-genre; political cinema: Godard, Resnais, Rivette, Pasolini, Antonioni, Bertolucci. Course varies in structure. Knowledge of French and Italian helpful but not necessary. (No prereq. Limited to 60)

First 5 wk, Sec 1, MW, 6-8:30, FolH 107, Tom Conley

General College courses

(106 Nicholson Hall: 625-6663)

PREPARATORY MATHEMATICS PROGRAM

Any student who has completed four years of high school mathematics, including solid geometry and trigonometry within the last two years with above-average grades, may register in Math 1211, Calculus I (see the Mathematics section of this Bulletin). However, if it has been more than two years since the last mathematics course in high school was completed, the student should register in Math 1201, Pre-calculus (see the Mathematics section of this Bulletin), or possibly GC 0631, Intermediate Algebra, which corresponds to second-year high school algebra.

The following rule usually applies: a student who has been out of high school five years or more, or who did not have second-year algebra in high school, should register for GC 0631. A student who knows very little about algebra should register for GC 0621, Elementary Algebra, which is the same as first-year high school algebra. A student who lacks background

★Limited enrollment class. See page 5.

in arithmetic or who suffers from a fear of mathematics should register for GC 0643. With the aid of an instructor, the student is able to progress through arithmetic or introductory algebra at a pace more suited to his or her learning style. Students with good arithmetic skills may want to register for GC 0611 (not offered summer).

Students will find assistance in the Mathematics Learning and Assessment Center, Appleby Hall 125 (summer hours will be posted outside the room). Tutorial assistance, placement testing in mathematics, and personal help in overcoming mathematics anxiety are available to students registered in any of the General College preparatory mathematics courses.

★GC 0621 ELEMENTARY ALGEBRA.

No credit, \$208.75.

For students with strong arithmetic background. Sets, properties, signed numbers, equations, word problems, inequalities, graphing, polynomials, factoring, fractions, radicals. (Prereq 0611 or 1434 or Math 0005. Entrance credit requirement for most colleges. Limited to 30)

Ten wk, Sec 10, TTh, 6-8:05, KottH S133

★GC 0625 ALGEBRA REVIEW.

No credit, \$208.75.

For students needing additional preparation in algebra before Intermediate Algebra. Sets, real numbers, linear equalities, linear inequalities, absolute values, polynomials, rational expressions, exponents, roots, quadratic equations, relations and functions, systems of equations, word problems. (Prereq 0621 or 1435 or Math 0006. Limited to 30)

Ten wk, Sec 3, MW, 6-8:05, KottH S133

GC 0631 INTERMEDIATE ALGEBRA.

No credit, \$208.75. (IS)

Basic knowledge of linear and quadratic equations and inequalities, exponents, factoring, roots, and radicals assumed. Rational expressions, radicals, roots, quadratic and rational equations, inequalities, determinants, matrix, conic sections, graphing functions and relations, exponential and logarithmic functions, sequences, series. (Prereq 0621 with grade of B+ or better or 0625 or 1445 or Math 0006)

Ten wk, Sec 22, MW, 6-8:05, KottH S137

Ten wk, Sec 23, TTh, 6-8:05, KottH S137

GC 0643 BASIC MATHEMATICS: PROGRAMMED STUDY.

No credit, \$167.

With aid of instructor, topics selected from following: whole numbers, fractions, decimals, percents, signed numbers, formulas, simple graphs, ratio and proportion, sets, properties, equations, inequalities, rectangular graphs, polynomials, factoring, rational expressions, radicals. Offered through Mathematics Learning and Assessment Center. May be repeated as needed. (Prereq 0611 or 0641)

Ten wk, Sec 4, M, 5-8, ApH 125, Laura Koch

GC 1076 CAREER PLANNING.

3 degree credits, \$1502, \$125.25.

Career workshop designed to assess a student's interests, abilities, needs, values, and personality through testing and subjective self-exploration. Occupational information provided

★Limited enrollment class. See page 5.

through computerized system and other printed materials. For students who are undecided about their future career choice and need to confirm tentative career choice. (No prereq)
Second 5 wk, Sec 3, TTh, 5:30-7:30, CivMinE 212, Gloria Wood

GC 1283 PSYCHOLOGY OF HUMAN DEVELOPMENT.

5 degree credits, \$167. (♦ \$83.50). (IS)

Focuses on growth and development of individual from conception through old age. Physical, motor, social, emotional, and psychological growth, and cognitive development. Integrated view of facets of development in order to understand human being as a complex organism functioning in a complex environment. The family as the main environmental factor in early development of individual. (No prereq)

Second 5 wk, Sec 2, MW, 5:30-8:45, NichH 207, Sander Latts

GC 1311 ART: GENERAL ARTS.

4 degree credits, §3311, \$167 (♦ \$83.50). (IS)

Examines representative works of art from genres of painting, sculpture, architecture, literature, and music to discover how and why art is created and to enable students to formulate and evaluate ideas and attitudes about it. (No prereq. Meets concurrently with GC 3311)

First 5 wk, Sec 4, TTh, 6:20-8:50, NichH 111, Richard Byrne

★GC 1421 WRITING LABORATORY: PERSONAL WRITING.

4 degree credits, \$167.

Students read and write descriptive narratives, characterizations, and autobiographical sketches. Personal help with individual writing problems. Emphasis on clear and effective written expression. (No prereq. Limited to 25)

First 5 wk, Sec 4, MW, 5-7:30, NichH 122, Geoffrey Sirc

★GC 1422 WRITING LABORATORY: COMMUNICATING IN SOCIETY.

4 degree credits, §1423, \$167.

Primarily through expository writing, but also through reading and discussion, students analyze how people communicate in society: how they perceive events and ideas, how they think and write about them. (Prereq 1421. Limited to 25)

Second 5 wk, Sec 3, MW, 6:20-8:50, NichH 216, Terence Collins

★GC 1513 PRINCIPLES OF SMALL BUSINESS OPERATIONS.

4 degree credits, \$167. (IS)

Environment and management of small business, problems of initiating the business, financial and administrative control, marketing policies, and legal and governmental relationships. Designed specifically for those who plan to own or operate some form of small business in marketing-related area. (No prereq. Limited to 40)

First 5 wk, Sec 5, TTh, 5-7:30, NichH 216, Mary K. Nelson

GC 1517 CO-OPERATIVE BUSINESS INTERNSHIPS.

4 degree credits, \$167.

For students who wish to explore work related to their area of study and gain first-hand knowledge of academic programs necessary for successful transition into careers. Emphasis on career selection and goal setting. **Must be taken S-N.** For further information, contact the Office of Cooperative Education, General College, Elliott Hall N69 (telephone 625-0585). (Prereq 1515 and written #. Meets concurrently with 3517)

Ten wk, Sec 4, W, 5-7:30, NichH 209A

★Limited enrollment class. See page 5.

★GC 1534 PRACTICAL LAW.

4 degree credits, \$167. (IS)

Common legal problems. Topics include definition and sources of law, formation and discharge of contracts, torts (personal injury and property damage suits), criminal law, bailments, nature and classification of real and personal property, and joint ownership and tenancy. (No prereq. Limited to 35)

Second 5 wk, Sec 3, TTh, 5:30-8, NichH 209A, Peter Kahn

★GC 1571 INTRODUCTION TO BASIC AND TO MICROCOMPUTERS.

5 degree credits, \$208.75 plus \$5 course fee. Total \$213.75. (IS)

Introduction to microcomputers, applications, and elementary programming using BASIC computer language. Topics include description of microcomputers (emphasis on IBM PC), writing simple BASIC programs, using word processor, spreadsheet, and data base manager. Computer assignments done outside of class. Lab arranged. (Prereq elementary algebra or GCPP Math Level D. Limited to 40)

Ten wk, Sec 4, T, 5-7:30, NichH 207, Douglas Robertson

★GC 1575 (formerly 1535) INTRODUCTION TO COMPUTERS.

4 degree credits, \$167 plus \$5 course fee. Total \$172.

Developing computer literacy. Historical development, hardware operating systems, data base management, systems development, economic and social impact, and applications. Students program representative problems in BASIC. Some work on computers outside of class required; terminals are available on campus at moderate charge. (No prereq. Limited to 40)

Ten wk, Sec 3, Th, 5:30-8, NichH 207, David Glese

★GC 1894 PLANNING A GENERAL COLLEGE BACHELOR OF GENERAL STUDIES PROGRAM.

1 degree credit, \$41.75.

For students whose goals fit what the college can offer and whose preparation meets the criteria for admission. Instructor explains program guidelines and, with help of study guide, instructs how to write personal statement and prepare degree plan for submission to Baccalaureate Admission Committee. **Must be taken S-N.** (Prereq written # [call 625-3339], 80 cr, admission to GC Fall 1985 or earlier, C7 NPA or 2.40 GPA overall, completion of freshman composition. Limited to 30)

First 5 wk, Sec 4, T, 5:30-7, NichH 209A, Caroline Gilbert

GC 3114 PERSONAL ENVIRONMENTAL HEALTH.

4 degree credits, \$168 (♦ \$84).

Health as a product of harmony between the individual and environment: biological, physical, social, and ideological. Content selected from following topics: personal health—interaction of mind and body, progress in medicine; environmental health—impact of new types of pollution, environment and personality, occupational health and industrial medicine, community health organizations and consumer costs, health in college community. (Prereq 1132)

First 5 wk, Sec 2, MW, 5-7:30, SciCB 125, Douglas Dearden

★Limited enrollment class. See page 5.

GC 3311 ART: GENERAL ARTS.

4 degree credits, §1311, \$168. (IS)

For description, see 1311. Final offering 1989. (No prereq. Meets concurrently with GC 1311).

First 5 wk, Sec 4, TTh, 6:20-8:50, NichH 111, Richard Byrne

★GC 3342 MORAL ISSUES IN BUSINESS.

4 degree credits, \$168.

Relationship of personal moral attitudes (egoism, hedonism) and general ethical systems (formalism, utilitarianism) to common practices in business. Issues involving conflict of interest, truth in advertising, preferential hiring, and concern for environment examined in context of concept of corporate social responsibility. (No prereq. Limited to 30)

First 5 wk, Sec 4, MW, 5:30-8, MechE 102, Canddo Zanolli

★GC 3374 FILM AND SOCIETY.

4 degree credits, \$168 plus \$10 course fee. Total \$178.

Ways in which film and society affect each other, social issues raised in films, public attitudes toward film, effect of film on attitudes and behaviors, and how film medium provides illumination and insight into area of society it portrays, such as urban living, minority stereotyping, ethical decisions, aging, marriage and family, politics, sexual mores. (No prereq; 1374 recommended. Limited to 35)

First 5 wk, Sec 2, TTh, 6:20-8:50, NichH 213, Robert Yahnke

★GC 3423 WRITING THE RESEARCH OR SURVEY REPORT.

4 degree credits, \$168.

Writing informal and formal survey or research reports; discovering information resources; developing multimedia techniques for securing, tabulating, and interpreting data; and organizing, illustrating, writing, and presenting final reports. Designed especially for students working toward baccalaureate degrees or preparing senior reports. Close and frequent liaison among student, supervisor or adviser in field of concentration, and professor teaching course. **S-N recommended.** (Prereq 1422. Limited to 20)

Ten wk, Sec 5, W, 6:20-8:50, NichH 254, Jill Gidmark

★GC 3425 WRITING FOR BUSINESS AND THE PROFESSIONS.

4 degree credits, §3531, \$168. (IS)

Students write letters, informal and formal reports, recommendations, proposals, summaries, memos—i.e., forms of writing used in business; in health, education, and welfare; and in legal professions. Content adapted to vocational needs of students enrolled. Form, clarity, economy of expression, and suitable tone stressed. *Typed final drafts required.* (Prereq 1422. Limited to 25)

Second 5 wk, Sec 4, TTh, 6:20-8:50, NichH 216, Alex Kurak

GC 3517 ADVANCED CO-OPERATIVE BUSINESS INTERNSHIP.

4 degree credits, \$168.

For baccalaureate students in above entry-level positions relevant to their chosen career and baccalaureate degree who have some supervisory responsibility. Emphasis on career advancement and job satisfaction. **Must be taken S-N.** For further information, contact the Office of Cooperative Education, General College, Elliott Hall N69 (telephone 625-0585). (Prereq 1515 and written #. Meets concurrently with 1517)

Ten wk, Sec 4, W, 5-7:30, NichH 209A

★Limited enrollment class. See page 5.

★GC 3560 PERSONNEL ADMINISTRATION.

4 degree credits, \$168. (IS)

For both generalists and business students in certificate and baccalaureate programs—paralegal administrators, small business entrepreneurs, and other future business employers. Covers employee selection, development, evaluation, and compensation. Provides opportunity for students to pursue new job and career openings and suggests ways to function more effectively as employers. (No prereq. Limited to 50)

First 5 wk, Sec 2, MW, 5:30-8, MechE 108, Patrick Kroll

★GC 3761 CONSUMER/BUYER BEHAVIOR.

4 degree credits, \$168.

Consumer behavior, relation to buying-decision process. Who the consumer is, environment in which he or she operates, internal and external influences. Perception, attitudes, learning, motivation, personality. (Prereq 1551 or #, and at least 75 cr completed or in progress. Limited to 40)

Second 5 wk, Sec 2, MW, 5-7:30, NichH 209, Shari Peterson

Geography

(414 Social Sciences: 625-6080)

College of Liberal Arts

Geog 5900 TOPICS IN GEOGRAPHY: ICELAND TODAY.

4 degree credits, §Scan 3670, §Scan 5670, \$177.

The role of geography in shaping the history and culture of Iceland. Physical geography and natural resources such as volcanic activity, geothermal power, land forms, geology, glaciers, rivers, hydroelectric power, climate and vegetation. Population and settlement—demographic characteristics, settlement patterns, and internal and external migration. History and culture—origin, language, social and political structure, and foreign relations. Economy—economic structure of the past and present, internal and external trade, industry, farming and fishing. Taught by Dr. Glyfi Már Gudbergsson, a visiting professor and the director of the Geological Research Institute at the University of Iceland in Reykjavik. (Prereq sr or grad student or #. Qualified students may register for graduate credit at the University of Minnesota. Meets concurrently with Scan 3670, Scan 5670)

First 5 wk, Sec 1, TTh, 6:30-8:30, AndH 270, Glyfi Már Gudbergsson

German

(219 Folwell Hall: 625-2080)

College of Liberal Arts

★Ger 1000 INDIVIDUALIZED GERMAN FOR NON-DEGREE CREDIT.

2-5 credits (maximum 5 cr), §1101, \$41.75 per credit.

Emphasis on proficiency according to the national ACTFL system. Reception (listening and reading) emphasized first, followed by production (speaking and writing). Each student earns credits at his/her own pace, working with book, computer, and tapes. Teacher available for consultation and testing. The continuation course is 1110 or 1102. (No prereq. Limited to 30)

Ten wk, Sec 4, W, 6-8:30, WaLib 15

★Limited enrollment class. See page 5.

★Ger 1103 BEGINNING GERMAN.

5 degree credits, §1110, \$208.75. (IS)

Third quarter of German language. Emphasis on proficiency according to the national ACTFL system. Reception (listening and reading) emphasized first, followed by production (speaking and writing). (Prereq 1102 or equivalent cr of 1110 or 2 years high school German. Limited to 25)

First 5 wk, Sec 10, MTh, 6-9:30, FolH 102

★Ger 1110 INDIVIDUALIZED BEGINNING GERMAN.

3-10 degree credits (maximum 10 cr), §1102-1103, \$125.25.

Emphasis on proficiency according to the national ACTFL system. Reception (listening and reading) emphasized first, followed by production (speaking and writing). Students work at own pace with book, computer, audio- and videotapes, earning credit as they progress through material. Teachers available for consultation and testing. Two weeks after the end of the session, students who have completed more than 3 credits during the session should go to the 101 Wesbrook Hall Registration Office to pay for the additional credits: \$38.50 per credit. The continuation course is 1104. (Prereq 1101, 5 cr 1000, or placement. Limited to 60)

Ten wk, Sec 4, W, 6-8:30, WaLib 15

Ger 3610 GERMAN TOPICS IN TRANSLATION: GERMAN-AMERICAN ETHNICITY.

4 degree credits, \$177 (◆\$88.50).

An examination of what it meant to be "German" in the United States between 1840 and 1918. Starting with patterns of immigration and settlement, the course investigates the development of German-American consciousness in politics, culture, language, and literature. "Texts" include local cultural artifacts as well as narratives written by and for German-Americans. (No prereq)

Second 5 wk, Sec 2, MW—6-8:30, FolH 303, Brent Peterson

Reading German. Ger 0221 and 0222 are specifically designed for individuals who desire only a reading knowledge of the language. The German language requirement for an advanced degree may also be satisfied by a program of study based on Ger 0221 and 0222. Students may take a final examination at the conclusion of Ger 0222. If the student achieves a grade of "B" or better in this examination and the course is taken on an A-F basis, the German Department will certify to the Graduate School a reading knowledge of German. Graduate students should check with their advisers for specific language requirements in their field of study.

Ger 0221 READING GERMAN.

No credit, \$167.

This course is designed to help students acquire a reading knowledge of basic German as rapidly as possible. Ger 0221 assumes no knowledge of German on the part of the student. Grammar is reduced to an essential minimum. The course progresses from intensive reading of simple, graded material to selections of moderate difficulty. Vocabulary building and analysis of compound words are emphasized. **Must be taken S-N.** (No prereq)

First 5 wk, Sec 2, MTh, 6-9:20, CivMinE 212, Wolfgang Taraba

★Limited enrollment class. See page 5.

Ger 0222 READING GERMAN.

No credit, \$167.

This course is designed to give students experience in intensive reading of German scholarly texts. This experience should enable graduate students to satisfy departmental requirements for an advanced degree. The German Department will certify to the Graduate School a reading knowledge of German for those taking the final examination and achieving a grade of "B" or better. **Must be taken A-F.** (Prereq 0221 or 2 quarters of beginning German or 2 years of high school German)

Second 5 wk, Sec 2, MTh, 6-9:20, FolH 50

History

(614 Social Sciences: 624-2800)

College of Liberal Arts

Hist 1003 INTRODUCTION TO MODERN EUROPEAN HISTORY SINCE THE MIDDLE AGES.

4 degree credits, §1003H, 3003, \$167 (♦ \$83.50). (IS)

1870 to recent times. (No prereq. Not open to jrs, srs. Meets concurrently with 3003)

First 5 wk, Sec 6, MW, 6-8:30, AndH 230, Richard Rudolph

Hist 1301 AMERICAN HISTORY.

4 degree credits, §1301H, \$167 (♦ \$83.50).

Colonial era and early national period from the Revolution through Civil War and Reconstruction. (No prereq)

First 5 wk, Sec 4, TTh, 6-8:30, AndH 230, David W. Noble

Hist 1302 AMERICAN HISTORY.

4 degree credits, §1302H, \$167 (♦ \$83.50). (IS)

Modern America from 1880 to the present. (No prereq)

Second 5 wk, Sec 5, MW, 6-8:30, AndH 350, George Green

Hist 3003 INTRODUCTION TO MODERN EUROPEAN HISTORY SINCE THE MIDDLE AGES.

4 degree credits, §1003, 1003H, \$177.

1870 to recent times. (No prereq. Meets concurrently with 1003)

First 5 wk, Sec 6, MW, 6-8:30, AndH 230, Richard Rudolph

Hist 3425 HISTORY OF MEXICO: THE 19TH AND 20TH CENTURIES.

4 degree credits, \$177 (♦ \$88.50).

The struggle for land and liberty from the Hidalgo revolt to the age of oil. (No prereq)

Second 5 wk, Sec 2, TTh, 6-8:30, BlegH 250, Robert McCaa

Hist 3633 HISTORY OF GERMANY: EMPIRE TO HITLER, 1848-1945.

4 degree credits, \$177 (♦ \$88.50).

Unification, political and economic development, growth of socialism, World War I and revolution, the Weimar years, the Nazi seizure of power. (No prereq)

Second 5 wk, Sec 2, MW, 6-8:30, BlegH 145, Richard Rudolph

Hist 3721 EUROPE IN THE ERA OF WORLD WAR I.

4 degree credits, \$177 (◆\$88.50).

Political, social and diplomatic background of Europe on eve of World War I; origins of conflict; impact of War and Revolution on European Society; the peace settlement. (No prereq)

First 5 wk, Sec 2, TTh, 6-8:30, AndH 350

Hist 3748 THE AUSTRIAN REPUBLIC FROM WORLD WAR I TO PRESENT.

4 degree credits, \$177 (◆\$88.50).

The First Republic; "the state no one wanted"; *Anschluss* and Hitler; World War II; decade of occupation; the new Austria. (No prereq)

Second 5 wk, Sec 1, TTh, 6-8:30, BlegH 335, William Wright

Hist 3821 UNITED STATES IN THE 20TH CENTURY: 1896-1932.

4 degree credits, \$177 (◆\$88.50).

The closing of the agricultural frontier and the growth of industrialism, the corporation and the city; populism and progressivism; the end of isolation and the growth of overseas empire; prohibition and women's suffrage. (No prereq)

Second 5 wk, Sec 2, TTh, 6-8:30, BlegH 235

Humanities

(314 Ford Hall: 624-5553)

College of Liberal Arts

Hum 1001 HUMANITIES IN THE MODERN WORLD I.

4 degree credits, \$3001, \$Rhet 1301, \$167 (◆\$83.50). (IS)

Eighteenth-century Europe. Old Regime through French Revolution and Napoleon; new science, Enlightenment, cult of sensibility; rococo, neoclassicism, incipient romanticism. Integrative study of works by creative figures such as Pope, Voltaire, Rousseau, Diderot, Goethe, Watteau, Boucher, Hogarth, David, Goya, Mozart, Haydn. (No prereq)

First 5 wk, Sec 2, TTh, 6-8:30, BlegH 250, Linda Erwin

Hum 1301 DISCOURSE AND SOCIETY: INTRODUCTION TO METHODS IN THE HUMANITIES.

4 degree credits, \$167 (◆\$83.50). (IS)

Nature of the humanities explored through interpretation of major works from literature, rhetoric, history, philosophy, the visual arts, music, and film. Humanities knowledge and its place in a liberal education. (No prereq)

Second 5 wk, Sec 4, MW, 6-8:30, FolH 110, Jackson Hershbell

Hum 3093 THE LATER NINETEENTH CENTURY: Aesthetics, Arts, and Society: France 1848-1900.

4 degree credits, \$177 (◆\$88.50).

Interdisciplinary consideration of specialized problems in later 19th-century art, thought, society, with attention to critical theory and method. Focuses on major movements in literature, painting, poetry, and music in France during the second half of the 19th century. The art and aesthetic and critical thought of representative artists will be examined with respect to their intrinsic content, historical antecedents, and their nature and function in relation to their historical, social, and cultural context. Representative artists will include the novelists Flaubert, Zola, and Huysmans; the poets Baudelaire, Verlaine, Rimbaud, and Mallarmé; the painters Millet, Courbet, Manet, Monet, Renoir, Seurat, Gauguin, Van Gogh, Puvis de Chavannes, Moreau, Redon. (Prereq 1003 or #)

First 5 wk, Sec 1, MW, 6-8:30, BlegH 145, George Kilger

Industrial Engineering/ Operations Research

(125 Mechanical Engineering: 625-0705)

Institute of Technology

IEOR 3000 (formerly IEO 5000) INTRODUCTION TO INDUSTRIAL ENGINEERING ANALYSIS.

4 degree credits, §IEOR 5000, \$214.

Scientific management, mathematical models, methods engineering, work measurement, worker satisfaction and participation, wage payment plans, break-even analysis, incremental costs, the time value of money and present value concept; cost quality and inventory control; production scheduling, plant locations, and layout; linear programming, PERT, and the systems approach to management problems. (Prereq Math 1231; ME 3900 recommended)

Second 5 wk, Sec 2, MW, 6-9, Arch 40, E. Barnett

Industrial Relations

(537 Management/Economics: 624-2500)

School of Management

IR 3002 PERSONNEL AND INDUSTRIAL RELATIONS.

4 degree credits, §8002, \$205. (IS)

An introduction to the human resource management function in organizations. Coverage includes the labor market, recruitment, selection, training, compensation, and labor relations. Topics to be covered are the changing nature of the world of work, emerging legal issues, discrimination in pay and employment, comparable worth, work performance and its assessment, and the effects of technological change on jobs and employment. The course involves lecture presentations, discussion, case studies, and simulation exercises. (Prereq Econ 1001, Econ 1002, Psy 1001; and at least 90 cr completed or in progress)

First 5 wk, Sec 6, MW, 6-8:30, BlegH 255

IR 3007 COLLECTIVE BARGAINING AND LABOR RELATIONS.

4 degree credits, \$205. (IS)

Analysis of the roles of unions and collective bargaining in contemporary American society. Topics covered include negotiations and related policies and practices of employers, employees, unions, legislative bodies, and the public in dealing with questions of worker representation in the private and public sectors. Coverage includes impact and transference of collective bargaining principles from the union sector to the non-union sector. The course involves lecture presentations, discussion, case studies, and bargaining simulations. (Prereq at least 90 cr completed or in progress)

First 5 wk, Sec 3, TTh, 6-8:30, BlegH 120

IR 3010 THE INDIVIDUAL IN THE ORGANIZATION.

4 degree credits, \$205.

An introduction to the human side of organizations, focusing on workers and how they enter and succeed in the work setting. Coverage includes theories and techniques of employment interviewing; training needs analysis; career planning; management development; turnover, out-placement, and retirement; understanding leadership roles and styles; work motivation, organization culture and job design; and planning for change. Course involves lecture presentations, discussion, case studies, and simulation exercises. (Prereq at least 90 cr completed or in progress)

Second 5 wk, Sec 5, MW, 6-8:30, BlegH 260

Insurance

(106 Lind Hall: 624-5091)

School of Management

(See also Finance)

Ins 3100 RISK MANAGEMENT AND INSURANCE.

4 degree credits, \$8100, \$205. (IS)

Recognition, measurement, and evaluation of property, liability, and personnel risks of firms and families. Tools of risk management; retention, loss prevention, transfer, and others with emphasis on insurance. Design and implementation of the optimal risk management program. Selection of insurers, insurance pricing methods, and preparation for loss adjustments. Public policy and risk management, particularly government regulation of insurance, social insurance, health and pension benefits, insurance affordability/availability, workers compensation, automobile compensation, professional and product injury/compensating systems. Offers insurance and real estate continuing education credit. **May be taken S-N only by non-management degree students.** (Prereq at least 90 cr completed or in progress. Meets concurrently with 8100)

First 5 wk, Sec 4, MTh, 5-7:30, AndH 330, Andrew Whitman

Ins 3200 PERSONAL FINANCIAL MANAGEMENT.

4 degree credits, \$8200, \$205. (IS)

The personal financial planning process, financial statements and cash flow analysis, time value of money, and financial functions. Insurance and risk management of liability, disability, life, medical, and property exposures. Investment principles and vehicles, investment companies, portfolio construction, and management. Taxes and tax management. Retirement planning, employee benefits, and funding vehicles, and estate planning principles and instruments. Professional ethics and government regulation of financial planners. Offers insurance and real estate continuing education credit. **May be taken S-N only by non-management degree students.** (Prereq at least 90 cr completed or in progress. Meets concurrently with 8200)

First 5 wk, Sec 2, MTh, 7:30-10, AndH 330, Andrew Whitman

Ins 8100 RISK MANAGEMENT AND INSURANCE.

4 degree credits, \$3100, \$403.

See description for 3100. **May be taken S-N only by students who do not have insurance/finance as a major interest area.** (No prereq. Open only to students admitted to the University of Minnesota Graduate School. Meets concurrently with 3100)

First 5 wk, Sec 4, MTh, 5-7:30, AndH 330, Andrew Whitman

Ins 8200 PERSONAL FINANCIAL MANAGEMENT.

4 degree credits, \$3200, \$403.

See description for Ins 3200. **May be taken S-N only by students who do not have insurance/finance as a major interest area.** (No prereq. Open only to students admitted to the University of Minnesota Graduate School. Meets concurrently with 3200)

First 5 wk, Sec 2, MTh, 7:30-10, AndH 330, Andrew Whitman

Journalism

(111 Murphy Hall: 625-9824)

College of Liberal Arts

Jour 1001 INTRODUCTION TO MASS COMMUNICATION.

2 degree credits, \$83.50 (♦ \$41.75). (IS)

Nature, functions, and responsibilities of communication media and agencies examined from point of view of professional journalist. News, opinion, entertainment, and persuasion functions; current trends. Specialized communication; aspects of advertising. **May not be taken S-N.** (No prereq)

Second 5 wk, Sec 5, TTh, 6:20-8:50, MurH 105

Jour 1002 VISUAL COMMUNICATION.

2 degree credits, \$83.50 (♦ \$41.75).

Study of form, content, and meaning in visual communication. Introduction to basic visual elements and techniques. Issues in perception, picture use, and the sources of visual conventions. Attention to the organization and production of visual media. Applications to photography, film, television, advertising, and documentary work. **May not be taken S-N.** (No prereq)

First 5 wk, Sec 3, MW, 6-9, MurH 105

Jour 3201 PRINCIPLES OF ADVERTISING.

4 degree credits, \$177. (♦ \$88.50).

Theory, principles, and functions of advertising; its role in economic, social, and marketing structure. Newspapers, magazines, radio, television as advertising media. **May not be taken S-N.** (No prereq)

Second 5 wk, Sec 2, MW, 6:20-8:50, MurH 105

★ Jour 5251 PSYCHOLOGY OF ADVERTISING.

4 degree credits, \$177 (♦ \$88.50).

Psychological principles, research techniques, and applications in advertising and selling. Consumer attitudes and behavior. Psychological mechanisms upon which effectiveness of advertisements and commercials depends. **May not be taken S-N.** (Prereq Psy 1001. Inquire about graduate credit at the time of registration. Limited to 50)

First 5 wk, Sec 2, TTh, 6:20-8:50, MechE 108

Landscape Architecture

(205 North Hall: 625-8285)

Institute of Technology

★ LA 3094 SKETCHING FOR DESIGNERS.

2 degree credits (sec 1 and 2), \$107. 4 degree credits (sec 3), \$214.

A studio course in analytical and representational sketching for landscape architecture students, architecture students, and environmental design professionals. Instruction and practice exercises will focus on basic drawing techniques, visual note taking, and freehand

★ Limited enrollment class. See page 5.

perspective. Class size allows for instruction to adjust to varied levels of experience with an emphasis on the needs of beginning students. (No prereq. Sec 1 meets concurrently with Sec 3; Sec 2 meets concurrently with Sec 3. Limited to a combined total of 15 students in Sec 1 and Sec 3 and in Sec 2 and Sec 3)

First 5 wk, Sec 1 (2 cr), T, 5:30-8:30, Arch 40, Stacy Moriarty

Second 5 wk, Sec 2 (2 cr), T, 5:30-8:30, Arch 40, Stacy Moriarty

Ten wk, Sec 3 (4 cr), T, 5:30-8:30, Arch 40, Stacy Moriarty

LA 5119 PLANTING DESIGN: ECOLOGICAL PRINCIPLES/LAND USE CONCEPTS AND IMPLEMENTATION.

4 degree credits, \$214.

Lectures, presentations, field trips, readings, and projects related to the principles and practices of using plants in an ecologically sound and environmentally sensitive manner. Principles derived from prairie, north woods, riverine, and wetland environments. Integration of naturalized materials within a range of environments. (No prereq. May not be taken for graduate credit)

First 5 wk, Sec 1, MWF, 5-9, NorthH 305, StP Campus, Bonnie Harper

Latin

(310 Folwell Hall: 625-5353)

College of Liberal Arts

Lat 1101-1102-1103 LATIN.

5 degree credits, \$208.75. (IS)

Fifteen college credits of Latin for all ages: junior high, senior high and college students, pre- and post-college adults, families—the learning community. Programmed texts and tapes for home study permit self-pacing. Knowledge is broken up into isolated bits, which students master bit by bit, returning to previous bits as necessary. 90% success rate. Weekly discussions motivate learning, provide community, and explore humanistic educational dimensions of Classical Latin traditions. Courses meet concurrently and with 1104. Students are divided into study groups, which meet two hours each week; one hour is arranged between 6 and 9 p.m. Monday, and the other between 6 and 9 p.m. Wednesday. The entire class will meet from 6 to 7 p.m. the first class of the term in FolH 303. (No prereq for 1101; 1101 or # for 1102; 1102 or # for 1103)

First 5 wk, 1101, Sec 10, MW, 6-9, FolH 204, 205, 207, Robert Sonkowsky

First 5 wk, 1102, Sec 11, MW, 6-9, FolH 204, 205, 207, Robert Sonkowsky

First 5 wk, 1103, Sec 12, MW, 6-9, FolH 204, 205, 207, Robert Sonkowsky

Lat 1104 LATIN READINGS: CAESAR.

5 degree credits, \$208.75. (IS)

Reading in Book 1 of Julius Caesar's masterpiece *The Gallic Wars*. One-hour study groups on Mondays and Wednesdays arranged between 6 and 9 p.m. The entire class will meet from 6 to 7 p.m. the first class of the term in FolH 303. Meets concurrently with 1101-1102-1103. (Prereq 1103 or #)

First 5 wk, Sec 4, MW, 6-9, FolH 204, 205, 207, Robert Sonkowsky

★ Limited enrollment class. See page 5.

Learning and Academic Skills

(102 Eddy Hall: 624-3323)

College of Liberal Arts

A student who does not attend the first class meeting of a LASK course will not be allowed to continue. A written verification of non-attendance must be obtained from the instructor for a student to receive a 100% tuition refund.

★LASK 1001 BECOMING A MASTER STUDENT.

2 degree credits. (Credits do not count toward a B.A. degree.) \$83.50 plus \$2 course fee and \$30 special fee. Total \$115.50. (IS)

Practical assistance to the student in developing efficient study habits, organizing materials, preparing for examinations, and improving the speed and comprehension of reading. Diagnosis and practice in basic skill areas such as reading, spelling, vocabulary, and elementary composition also are provided. (No prereq. Limited to 30)

Ten wk, Sec 2, T, 6-8:30, EddyH 102

Linguistics

(142 Klæber Court: 624-3528)

College of Liberal Arts

Ling 3001 INTRODUCTION TO LINGUISTICS.

5 degree credits, \$5001, \$221.25 (◆\$110.75).

Systematic survey of phonetics, phonology, morphology, syntax, semantics, and historical-comparative linguistics; language learning and psychology of language; linguistic universals; language in society. (No prereq. Meets concurrently with 5001)

Ten wk, Sec 4, T, 6:20-9:35, CivMinE 213

Ling 5001 INTRODUCTION TO LINGUISTICS.

5 degree credits, \$3001, \$221.25.

See description for Ling 3001. (No prereq. Qualified students may register for graduate credit at the University of Minnesota. Meets concurrently with 3001)

Ten wk, Sec 2, T, 6:20-9:35, CivMinE 213

Ling 5801 INTRODUCTION TO LANGUAGE LEARNING.

4 degree credits, \$177 (◆\$88.50).

Overview of first- and second-language learning. **Does not fulfill degree requirements for majors in linguistics or ESL.** (Prereq 3001 or 5001 or #. Qualified students may register for graduate credit at the University of Minnesota)

Ten wk, Sec 1, W, 6:20-8:50, CivMinE 213

Logistics Management (LM)

(395 Humphrey Center: 624-8030)

School of Management

★LM 3000 INTRODUCTION TO LOGISTICS MANAGEMENT.

4 degree credits, \$Tran 3064, \$Tran 8264, \$205 plus \$8.50 course fee. Total \$213.50.

Introduction to the management of the flow of physical products (physical supply and phys-

★Limited enrollment class. See page 5.

ical distribution) of the firm and the linkages between the process of controlling the physical flow of products and the major functions of the firm, i.e., finance, marketing, and operations. Includes coverage of logistics topics as well as analysis of the impact of logistics decisions on other functional areas. **May not be taken S-N.** (Prereq Econ 1002 or equivalent and at least 90 cr completed or in progress. **Open to nondegree students with equivalent experience.** Limited to 40)

Ten wk, Sec 4, T, 5:30-8, BlegH 215

MacPhail Center

(See page 133)

MBA Program

Students interested in the Master of Business Administration degree offered through the School of Management should contact the MBA Program office in room 295 of the Hubert H. Humphrey Center; telephone 624-1385 for information.

Management

(835 Management/Economics: 624-5232)

School of Management

★Mgmt 3001 FUNDAMENTALS OF MANAGEMENT.

4 degree credits, \$8001, \$205 plus \$10 course fee. Total \$215. (IS)

Leadership and management functions such as those required to establish goals, policies, procedures, and plans are studied. Motivation, planning, and control systems, and concepts of organizational structure and behavior are also reviewed. (Prereq at least 90 cr completed or in progress. **May not be taken S-N.** Limited to 40)

First 5 wk, Sec 18, TTh, 5:30-8:15, BlegH 105, Robert Wiseman

Second 5 wk, Sec 19, MW, 5:30-8:15, BlegH 225, Patrick Pak

Second 5 wk, Sec 20, TTh, 5:30-8:15, BlegH 105, Hyoung Koo Moon

★Mgmt 3002 PSYCHOLOGY IN MANAGEMENT.

4 degree credits, \$205 plus \$10 course fee. Total \$215.

Centers on development and application of behavior principles, methods, and skills which underlie managerial competence in preventing and solving problems within and between individuals and groups and aid in effective utilization of human resources. Various laboratory procedures are used to highlight concepts, methods and skills and furnish practice in applying them to management problems. (Prereq at least 90 cr completed or in progress. **May not be taken S-N.** Limited to 36)

First 5 wk, Sec 7, MW, 5:30-8:15, BlegH 225, B. Lawson

Second 5 wk, Sec 8, TTh, 5:30-8:15, BlegH 155, Robert Wiseman

★Mgmt 3004 BUSINESS POLICY: STRATEGY FORMULATION AND IMPLEMENTATION.

5 degree credits, \$256.25 plus \$10 course fee. Total \$266.25.

Undergraduate-level capstone course designed to develop skill in the general management functions of identifying and analyzing strategic issues and problems, establishing corporate

★Limited enrollment class. See page 5.

or divisional goals, and designing realistic programs of action. Case analysis and discussion in class. Students also meet in small groups to prepare cases and occasionally presentations to be made to the entire class. Concepts and approaches to strategic planning are taught in this course. These concepts as well as concepts, tools and theories previously presented in other courses are applied to solve goal selection and strategy implementation problems. Usually the viewpoint of the general line manager (department, division, or executive level) is taken. (Prereq sr and completion of business core courses or final core course. **May not be taken S-N.** Limited to 36)

First 5 wk, Sec 4, TTh, 5:30-8:15, HHCtr 35, W. Bruce Erickson

Management Information Systems

(395 Humphrey Center: 624-8030)

School of Management

School of Management degree students must take upper division (3xxx-5xxx) Management Information Systems courses A-F.

The use of computing software is fundamental to many courses in the School of Management. To acquire these skills, several courses are available. NOTE: There is an optional \$20 West Bank computer service fee for those students who do not have access to a micro, and who need to use this service. Registered students may pay this fee at any Bursar's office; the West Bank Bursar's office is in Anderson Hall (8 a.m. to 3:30 p.m.), telephone 625-1383. The fee may also be paid at the Extension Classes Cashier's office in 138 Westbrook Hall. This office is open until 8 p.m. most evenings early in the quarter. When it is not open in the evening, cards are available for purchase (payment by personal check required) at the Information Desk in the Extension Classes Registration office, 101 Westbrook Hall.

★MIS 1070 ORIENTATION TO COMPUTER SOFTWARE AND PROGRAMMING.

1 degree credit, \$41.75 plus \$8.50 course fee and \$21.50 special fee. Total \$71.75. Intended for School of Management students and persons seeking to learn to use computer software and program computer applications for business. Provides instruction on software alternatives and how to use software effectively. The course surveys software packages and computer languages as a gateway to the MIS 1071-1077 series. *Students who can demonstrate proficiency or otherwise evidence mastery of software and programming may waive this course and proceed into the MIS 1071-1077 series. **Must be taken S-N.*** (No prereq. Limited to 60)

Spec Term, Sec 4, W, 5:15-7:15, June 15-July 20, AndH 310

★MIS 1071 ELECTRONIC SPREADSHEETS.

1 degree credit, \$41.75 plus \$8.50 course fee and \$38.50 special fee. Total \$88.75. Focuses on concepts and uses of electronic spreadsheets, benefits and limitations, using examples applicable to accounting, finance, management, and marketing. Lotus 1-2-3 is used to illustrate spreadsheet practice. **Must be taken S-N.** (Prereq MIS 1070 or proficiency exam or waiver based upon equivalent experience. Limited to 30)

First 5 wk, Sec 7, Th, 5:15-8:15, BlegH 335

★Limited enrollment class. See page 5.

COURSE PROCEDURES: MIS 1075, 1076, 1077

In these programming courses (MIS 1075, 1076, 1077), students learn to program by writing programs guided by the systematic courseware. No regular lectures are conducted. The initial class meeting serves as orientation to the programming courses; students are provided text, courseware and procedures, to be used throughout the course. Help sessions are scheduled. The student is expected to complete and submit a course schedule during the first week. *Students must therefore attend their section at 5:30 p.m. during the first week of class to learn course procedures, assignments, and tasks.* Thereafter a student need attend sessions only (1) to take an exam, or (2) to seek assistance on a programming problem. Satisfactory completion of a programming module entails four programs and four exams. *After the first week of class, students may not register without the instructor's permission.* After the first class meeting, students may choose any of the scheduled sections, Monday through Thursday, for consultations and exams.

MIS 1075 ELEMENTARY COBOL.

2 degree credits, \$83.50 plus \$8.50 course fee and \$38.50 special fee. Total \$130.50. An introduction to programming in COBOL, a widely used business data processing language. In self-paced units, students complete a structured set of COBOL programs and tests. **See Course Procedures above. Must be taken S-N.** (Prereq MIS 1070 or proficiency exam or waiver based upon equivalent experience. Meets concurrently with 1076, 1077)

Spec Term, Sec 5, M, 5:30-7, June 27-Aug. 22, AndH 270. No late fee through June 20

MIS 1076 INTERMEDIATE COBOL.

2 degree credits, \$83.50 plus \$8.50 course fee and \$38.50 special fee. Total \$130.50. Advanced features of COBOL. Students complete a structured set of COBOL programs and tests on or before a scheduled date on a self-paced basis. **See Course Procedures above. Must be taken S-N.** (Prereq MIS 1075 or proficiency exam or waiver based upon equivalent experience. Meets concurrently with 1075, 1077)

Spec Term, Sec 5, M, 5:30-7, June 27-Aug. 22, AndH 270. No late fee through June 20

MIS 1077 ELEMENTARY FORTRAN.

2 degree credits, \$83.50 plus \$8.50 course fee and \$38.50 special fee. Total \$130.50. Introduction to programming in FORTRAN, a language used in programming analytic problems, in business contexts for computation, e.g., forecasting, optimization, and statistical analysis. Students use self-paced units to complete a structured set of FORTRAN programs. **See Course Procedures above. Must be taken S-N.** (Prereq MIS 1070 or proficiency exam or waiver based upon equivalent experience. Meets concurrently with 1075, 1076)

Spec Term, Sec 5, M, 5:30-7, June 27-Aug. 22, AndH 270. No late fee through June 20

Pre-Admission Requirements

Students seeking a Bachelor of Science in Business (Regular Program or Accounting Program) are advised of the following pre-management School of Management admission requirements and degree requirements. Pre-admission requires the student to complete satisfactorily MSci 1010 (Fundamentals of Computers and Information Technology) and MSci 1020 (Data Analysis and Statistical Inference for Managers). The Bachelor of Science in Business (Regular Program or Accounting Program) requires MSci 3030 (Information Systems and Information Management) as a core course. Students who satisfactorily have completed DSci 1050 (Elementary Managerial Statistics), MIS 3100 (Introduction to Computers and Computer Data Processing), and MIS 3101 (Introduction to Management Information Systems) prior to fall quarter 1986 will have met either pre-admission or degree requirements on the basis of prior degree requirements. All students who start college fall 1988, or who plan to apply for admission to the School of Management fall 1988, should contact either CEE Counseling, 314 Nolte Center (625-2500), or the Admissions Office, School of Management (624-3313) with questions concerning options for admissions and degree requirements.

★MIS 3100 COMPUTERS AND INFORMATION SYSTEMS FOR NON-COMPUTER PROFESSIONALS.

4 degree credits, \$205 plus \$8.50 course fee. Total \$213.50.

Introductory course is intended for managers and professionals for whom computing has become a part of the work environment. Topics: strategies for the effective use of computing resources, impacts of new technologies on traditional information systems, and overview of the information system development process. *Persons wishing to apply conceptual skills from this course with practical computer skills are strongly urged to enroll in MIS 1070, Orientation to Computer Software and Programming (1 degree credit), or other courses in the 1070 to 1074 computer skills sequence, either concurrently or in a subsequent registration.* (Prereq at least 90 cr completed or in progress. **Open to nondegree students with equivalent experience.** Limited to 50)

Ten wk, Sec 6, T, 6-9:20, BlegH 240

★MIS 3101 INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS.

4 degree credits, \$5101, \$205 plus \$8.50 course fee. Total \$213.50.

An overview of MIS. Conceptual foundations of MIS including: concepts of information, humans as information processors, system concepts and information systems, management and organizational concepts relevant to MIS, decision-making concepts and the value of information for decision making. The structure of an MIS and its development, organization, management and evaluation. Emphasis is placed on the user/system interface. (Prereq at least 90 cr completed or in progress and recommended prior course in MIS or equivalent experience. Limited to 50)

Ten wk, Sec 8, Th, 6-9:20, BlegH 240

Management Science

(395 Humphrey Center: 624-8030)

School of Management

★MSci 1010 FUNDAMENTALS OF INFORMATION DEVELOPMENT AND USE.

4 degree credits, \$167 plus \$8.50 course fee. Total \$175.50.

Understanding data, sources of data, organization and presentation of data. Elementary data analysis. Meeting the information needs of managers. Skill development in related software. (Prereq 45 cr, pre-management student, Math 1111 or ¶1111. Limited to 45)

Ten wk, Sec 8, M, 5:30-9:30, BlegH 5

Ten wk, Sec 9, W, 5:30-9:30, BlegH 5

MSci 1020 FORMAL DECISION-MAKING MODELS AND DATA ANALYSIS METHODS.

4 degree credits, \$167 plus \$8.50 course fee. Total \$175.50.

Introduction to probabilistic and statistical techniques for decision making, e.g., data analysis, sampling, estimation, and hypothesis testing. Using computer software and computer-store data in statistical analysis. Introduction to modeling using modeling software. (Prereq MSci 1010, pre-management student, Math 1111; Math 1131 recommended. **Open to nondegree students with equivalent experience**)

Ten wk, Sec 5, T, 5:30-9, BlegH 5

★Limited enrollment class. See page 5.

MSci 3030 INFORMATION SYSTEMS AND INFORMATION MANAGEMENT.

4 degree credits, \$205 plus \$8.50 course fee. Total \$213.50.

Defining information requirements. Developing information systems applications. Using information systems. Defining data structures and building and using databases. Formulating database retrievals. Building and using models and expert systems to support decision making. Obtaining external data to support model building and decision making. Evaluating information. Skill development in database software. (Prereq MSci 1020. **Open to nondegree students with equivalent experience**)

Ten wk, Sec 4, Th, 5:30-8:50, BlegH 5

Marketing

(1235 Management/Economics: 624-5055)

School of Management

★Mktg 3000 PRINCIPLES OF MARKETING.

4 degree credits, \$205 plus \$10 course fee. Total \$215. (IS)

Study of the basic policy and strategy issues in marketing and the environmental factors that affect these issues. Legal, behavioral, ethical, competitive, economic, and technological factors are examined as they affect product, pricing, promotion, and marketing channel decisions. (Prereq Econ 1002 or #, and at least 90 cr completed or in progress. **May not be taken S-N.** Limited to 50)

First 5 wk, Sec 16, MW, 6-8:30, BlegH 425

Second 5 wk, Sec 17, MW, 6-8:30, BlegH 250

★Mktg 3010 BUYER BEHAVIOR AND MARKETING ANALYSIS.

4 degree credits, \$3098, 3095, \$205 plus \$10 course fee. Total \$215.

Identifying and applying secondary and primary data to solve marketing problems. Special consideration is given to consumer and organizational buyer behavior. Topics include survey and experimental research techniques, market segmentation, data analysis, behavior concepts and processes, consumer and organizational decision-making models, and managerial applications of these models. (Prereq 3000, DSci 1050, and at least 90 cr completed or in progress. Limited to 40)

Second 5 wk, Sec 5, MW, 6-8:30, BlegH 235

(See also Jour 5251, Psychology of Advertising)

Mathematics

(127 Vincent Hall: 625-7575)

Institute of Technology

Students interested in noncredit introductory mathematics courses should see the General College section of this bulletin.

★Math 1005 INTRODUCTION TO ELEMENTARY MATHEMATICS.

4 degree credits, \$167.

For pre-elementary education students. Elementary computer programming (BASIC), progressions, financial mathematics, counting problems, other selected topics. (Prereq plane

★Limited enrollment class. See page 5.

geometry, 2 years high school algebra . . . or plane geometry, grade of C or better in 0009 or #. Limited to 35)

Ten wk, Sec 2, TTh, 6-7:40, KolH S138

★Math 1111 COLLEGE ALGEBRA AND ANALYTIC GEOMETRY.

5 degree credits, §1201, \$208.75. (IS)

Functions and graphs, quadratic equations, progressions, inequalities, complex numbers, theory of equations, permutations and combinations, probability, systems of equations, determinants, graphing of linear and quadratic equations, conics in standard position, logarithms. (Prereq plane geometry, 2 years high school algebra and mathematics placement score or plane geometry and 0009. Limited to 35)

Ten wk, Sec 19, MW, 6-8:05, KolH S139

Ten wk, Sec 20, TTh, 6-8:05, KolH S139

★Math 1142 SHORT CALCULUS.

5 degree credits, §1211, \$208.75. (IS)

(A second course of a two-quarter sequence for students in pre-business administration curriculum and for other students requiring college algebra and a minimal amount of calculus. Students who plan to take several quarters of calculus should not register for this course.) Derivatives, integrals, differential equations, maxima and minima, partial differentiation, applications. (Prereq 1111 or mathematics placement score. Limited to 35)

Ten wk, Sec 8, TTh, 6-8:05, KolH S136

★Math 1201 PRE-CALCULUS.

5 degree credits, §1111, \$208.75. (IS)

Inequalities, analytical geometry, complex numbers, binomial theorem, mathematical induction, functions and graphs, and trigonometric, exponential and logarithmic functions. (Prereq 0009 or high school higher algebra, trigonometry, and mathematics placement score. For students in both IT and CLA who need a quick review of high school higher algebra and trigonometry before taking the calculus sequence. Limited to 35)

Ten wk, Sec 12, MW, 6-8:05, KolH S136

★Math 1211 CALCULUS I.

5 degree credits, §1142, 1311, \$208.75. (IS)

Analytic geometry and calculus of functions of one variable, applications. Infinite series and sequences. (Prereq 1201 with grade of C or better, or 1111 and 1008 with grade of C or better, or 4 years of high school math and math placement score. Limited to 35)

Ten wk, Sec 15, MW, 6-8:05, VinH 1

★Math 1221 CALCULUS II.

5 degree credits, §1321, 1421, \$208.75. (IS)

A continuation of the course described under 1211. (Prereq grade of C or better in 1211. Limited to 35)

Ten wk, Sec 13, MW, 6-8:05, KolH S138

★Limited enrollment class. See page 5.

★Math 5090 CALCULUS REFRESHER.

5 degree credits, \$267.50.

A course designed for students who have already had calculus, but who have been away from it for a while and need a review. This course covers the topics of a standard course in calculus of one variable: differentiation of elementary functions, differentials, the definite integral, techniques of integrations, applications of integration, polar coordinates, infinite series, approximation. **May be taken S-N.** (Prereq 1 year calculus. Qualified students may register for graduate credit at the University of Minnesota, except for mathematics majors. Limited to 35)

Ten wk, Sec 5, MW, 6-8:05, KoH S140

Mechanical Engineering

(125 Mechanical Engineering: 625-0705)

Institute of Technology

ME 1025 ENGINEERING GRAPHICS.

4 degree credits, \$EG 1025, \$167. (IS)

Engineering representation in pictorial view and multiview; sketching techniques, size description, standard and simplified practices applied to graphical communication. Analysis of systems of projection; correlation of graphical, numerical, and computer solutions of space problems, intersections and development. Methods of computer-aided graphics. (Prereq Math 1211 or equivalent)

First 5 wk, Sec 3, TTh, 6-9, Arch 10

★ME 5254 DESIGN MORPHOLOGY WITH APPLICATIONS.

4 degree credits, \$214.

Detailed study of design problem formulation and the structure of the open-ended solution process based on design morphology. Case studies and student projects as instructional vehicles. (Prereq completion of sequences 3201-03-05, 3303-5342. Mechanical Engineering Upper Division. **May not be taken for graduate credit.** Limited to 30)

Ten wk, Sec 1, W, 6-9, MechE 321

Middle Eastern and South Asian Studies

(192 Klæber Court: 624-7030)

South and Southwest Asian Studies

College of Liberal Arts

South Asian Studies

SoAS 3413 BUDDHISM.

4 degree credits, \$177 (◆\$88.50).

Historical account of the Buddhist religion in terms of its rise, development, various schools and common philosophical concepts. Focuses on Indian Buddhism, compares it with Hinduism, and discusses its demise and revival on the Indian subcontinent. (No prereq)

First 5 wk, Sec 1, MW, 6:20-8:50, FolH 104, B. David Burke

★Limited enrollment class. See page 5.

Music

(100 Ferguson Hall: 624-5740)

College of Liberal Arts

(Also see MacPhail Center, page 133)

Mus 1001 FUNDAMENTALS OF MUSIC.

4 degree credits, \$167.

Basic musical elements, functional relationships and structures. Systems of musical notation and analysis. Musical practices of various times and styles. For non-music majors. (No prereq)

First 5 wk, Sec 7, TTh, 6:10-9:20, FergH 225, David Baldwin

Second 5 wk, Sec 8, MTh, 6:10-9:20, FergH 225, John Anderson

Mus 1002 FUNDAMENTALS OF MUSIC II.

4 degree credits, \$167.

Basic procedures for harmonizing melodies, including chord construction and succession, voice-leading, and stylistic considerations. Development of basic listening, singing, and keyboard facility. Rigorous review of music fundamentals. (Prereq 1001)

Ten wk, Sec 1, T, 6:10-9:20, FergH 105

★Mus 1051 PIANO CLASS FOR NON-MUSIC MAJORS.

2 degree credits, \$83.50.

Designed primarily for the person with no piano background. Basic keyboard skills of sight-reading, harmonization, transposition, and improvisation for non-music majors. (No prereq. Limited to 16)

Ten wk, Sec 4, T, 6:20-8:20, FergH 259

Mus 1513 EAR-TRAINING AND SIGHT-SINGING III.

1 degree credit, \$41.75.

Melodic, harmonic, and rhythmic dictation; sight-singing; clef-reading; musicianship drill. (Prereq 1512, 11533)

Ten wk, Sec 1, MTh, 6:20-7:05, FergH 105

Mus 1533 THEORY III: HARMONY AND VOICE LEADING.

3 degree credits, \$125.25.

Writing and analysis of diatonic and basic chromatic tonal structures. Binary and ternary form. (Prereq 1532, 11513)

Ten wk, Sec 1, MTh, 7:15-8:50, FergH 105

★Mus 5950 SPECIAL TOPICS WORKSHOP: CHORAL MUSIC OF SWEDEN.

2 degree credits, \$88.50.

Study and performance of Swedish choral literature and conducting techniques under Eric Ericson, Conductor Emeritus of the Swedish Radio Choir and Professor of Music at the Swedish National Conservatory of Music in Stockholm. Prereq advanced standing in Music. Qualified students may register for graduate credit at the University of Minnesota. Limited to 100)

Spec Term, Sec 1, Days and Time Arr, June 17-25, Highland Park Reserve, Bloomington, Ericson

★Limited enrollment class. See page 5.

Chinese Music: Shanghai Conservatory Study Tour

This is a 6-credit study tour (Mus 5950) offered through the Duluth Center of Continuing Education and Extension, July 5 to Aug. 16, 1988 (four weeks in Shanghai and a two-week tour preceding study). Chinese music studies at the Shanghai Conservatory of Music: music history, repertoire and theory; folk and art music; applied lessons with Chinese instruments; Chinese language, calligraphy, art, and drama.

Registration is only through the Duluth Center. For information, contact Terry Anderson, Program Coordinator, 403 Darland Administration Building, Duluth, MN 55812. Telephone (218) 726-8833

Operations Management

(395 Humphrey Center: 624-8030)

School of Management

Business degree students must take Operations Management courses A-F.

★OM 3000 INTRODUCTION TO OPERATIONS MANAGEMENT.

4 degree credits, \$205 plus \$8.50 course fee. Total \$213.50.

Concepts and principles related to the management of operations functions, taught from a managerial perspective. Examples from service industries, nonprofit organizations, and manufacturing are used. Relationships to the environment and other functional areas, such as marketing and finance are covered. Topics include operations strategy, forecasting, process selection, capacity management, scheduling, quality planning and control, inventory management, productivity and work standards. (Prereq at least 90 cr completed or in progress. **Open to nondegree students with equivalent experience.** Limited to 50)

Ten wk, Sec 9, T, 5:30-8:50, AndH 330

Ten wk, Sec 10, W, 5:30-8:50, BlegH 420

★OM 3041 PROJECT MANAGEMENT.

4 degree credits, \$205 plus \$8.50 course fee. Total \$213.50.

Principles and methods useful for planning and controlling a project. Topics include developing a project plan, resource planning and scheduling, and project monitoring and evaluation. Various computerized packages will be studied, including PERT and CPM. Examples of different types of projects from manufacturing and service industries are used. (Prereq 3000 and at least 90 cr completed or in progress. **Open to nondegree students with equivalent experience.** Limited to 50)

Ten wk, Sec 3, W, 5:30-8:50, BlegH 415

Philosophy

(355 Ford Hall: 625-6563)

College of Liberal Arts

Phil 1001 LOGIC.

5 degree credits, \$208.75 (♦\$104.50). (IS)

Application of formal techniques for evaluating arguments. (No prereq)

Second 5 wk, Sec 7, MW, 6:20-8:50, BlegH 120, C. Wade Savage

★Limited enrollment class. See page 5.

Phil 1002 INTRODUCTION TO PHILOSOPHY.

5 degree credits, \$208.75 (♦ \$104.50). (IS)

Problems, principal methods and schools of philosophy; historical and contemporary views. (No prereq)

First 5 wk, Sec 5, MW, 6:20-8:50, BlegH 120, Jasper Hopkins

Phil 3305 MEDICAL ETHICS.

5 degree credits, \$PubH 5623, \$221.25 (♦ \$110.75).

Moral problems confronting physicians, patients, and others concerned with medical treatment, research, and public health policy. The management of death, genetic engineering, confinement and mental illness, abortion, informed consent and truth telling in physician-patient relationships, and distributive justice in the allocation of scarce medical resources. Relationship between individual decision making and institutional policies. (No prereq)

Second 5 wk, Sec 1, TTh, 6:20-8:50, FordH 115, John Dolan

★Phil 5101 METAPHYSICS.

4 degree credits, \$177 (♦ \$88.50).

Philosophical theories concerning the nature of reality. (Prereq 1 qtr history of philosophy or #. Qualified students may register for graduate credit at the University of Minnesota)

First 5 wk, Sec 1, TTh, 6:20-8:50, FordH 115, C. Anthony Anderson

Physical Education

(224 Cooke Hall: 625-1007)

College of Education

A health examination is required of all boys and girls taking swimming classes. Each child must bring a letter from his or her physician to the first class meeting stating approval of the activity in which he or she is registered.

★PE 0001 SWIMMING FOR CHILDREN.

No credit, \$41.75 plus \$3 course fee and \$10 special fee. Total \$54.75.

A course in swimming for children between the ages of 5 and 12 years. Each child must furnish his or her own towel and swimming suit; (also a cap). Sections are classified as follows: **Beginners**—non-swimmers; **Intermediates**—those who can swim 25 yards of two or more strokes. (The first meeting will be used for the purpose of reclassifying swimmers where necessary. Each section limited to 25)

First 5 wk, June 14-July 14, Beginners, Sec 3, MTWTh (no meeting June 13), 9:30 a.m.-10:15, NorrisH 51, Mary Lampe

First 5 wk, June 14-July 14, Intermediates, Sec 4, MTWTh (no meeting June 13), 10:15 a.m.-11, NorrisH 51, Mary Lampe

Political Science

(1414 Social Sciences: 624-4144)

College of Liberal Arts

Pol 1001 AMERICAN GOVERNMENT AND POLITICS.

5 degree credits, \$208.75 (♦ \$104.50). (IS)

Principles, organization, processes, functions of government, and the interplay of political

★Limited enrollment class. See page 5.

forces in the United States. Attention throughout to current issues. (No prereq)

Second 5 wk, Sec 4, TTh, 6-9:15, BlegH 120, Charles Walcott

PoI 1025 WORLD POLITICS.

4 degree credits, \$167 (♦ \$83.50). (IS)

Contemporary international relations; forms of state interaction; problems of conflict and cooperation. (No prereq)

Second 5 wk, Sec 3, MW, 6-8:30, BlegH 135, Raymond Duvall

PoI 1041 CONTEMPORARY POLITICAL IDEOLOGIES.

4 degree credits, \$167 (♦ \$83.50).

Major modern ideologies such as liberalism, democracy, conservatism, socialism, communism, fascism, nationalism, imperialism, racism. Adequacy of alternative ideologies for analysis and solution of political and social problems. (No prereq)

First 5 wk, Sec 2, TTh, 6-8:30, BlegH 130, Edwin Fogelman

PoI 3051 INTRODUCTION TO POLITICAL ANALYSIS.

5 degree credits, \$1051, \$221.25 (♦ \$110.75).

Formation of political communities, political participation, policy making, compliance, legitimacy, political development, types of political systems. Empirical and normative problems. Comparisons among major countries. (No prereq)

Second 5 wk, Sec 3, MW, 6-9:15, AndH 230, W. Phillips Shively

Portuguese

(See page 87)

Psychology

(N218 Elliott Hall: 625-4042)

College of Liberal Arts

Psy 1001 INTRODUCTION TO PSYCHOLOGY.

5 degree credits, \$208.75 (♦ \$104.50). (IS)

Introduction to study of human behavior. Prerequisite for all advanced courses in psychology. (No prereq)

Ten wk, Sec 14, MW, 6:20-8:30, AndH 370

Ten wk, Sec 15, TTh, 6:20-8:30, AndH 370

Psy 1003 APPLICATION OF PSYCHOLOGY TO LIVING.

4 degree credits, \$167 (♦ \$83.50).

Psychology in personal relationships and in the achievement of mental health, centering, for the most part, around our fundamental needs; and exploration of principles highly applicable in the life of every person. (No prereq. May be taken before or after Psy 1001)

First 5 wk, Sec 5, TTh, 6-8:30, BlegH 10

Second 5 wk, Sec 6, MW, 6-8:30, BlegH 110

★ Limited enrollment class. See page 5.

★Psy 1004-1005 INTRODUCTORY LABORATORY PSYCHOLOGY.

4 degree credits each term, \$167 each term.

Experiments illustrating contemporary subject matter such as human and animal learning, problem solving, visual perception, measurement of general and special abilities and personality traits. (Prereq 1001 or ¶1001 for 1004; 1004 for 1005. Limited to 24)

First 5 wk, 1004, Sec 6, TTh, 6:20-9:50, EIH 150-160

Second 5 wk, 1005, Sec 7, TTh, 6:20-9:50, EIH 150-160

Psy 3101 INTRODUCTION TO PERSONALITY.

4 degree credits, \$5101, \$177 (◆\$88.50). (IS)

An overview of the field of personality, with discussions of personality theory, (e.g., the theories of Freud, Jung, and Adler), of selected topics of empirical research in the field of personality, and of personality assessment. (Prereq 1001)

Ten wk, Sec 3, Th, 6-8:30, AndH 250

Psy 3201 INTRODUCTION TO SOCIAL PSYCHOLOGY.

4 degree credits, \$177 (◆\$88.50).

Survey of theories and research in social psychology. Includes the effects upon the individual's attitudes and behavior of other persons, mass communications, and group membership. (Prereq 1001)

First 5 wk, Sec 3, TTh, 9-11:30 a.m., MacP

Offered through Continuing Education for Women

Ten wk, Sec 4, T, 6-8:30, ScottH 4

★Psy 3604 INTRODUCTION TO ABNORMAL PSYCHOLOGY.

4 degree credits, \$5604, \$177 (◆\$88.50). (IS)

The field of abnormal psychology. Etiologies of behavior disorders; discussion of available treatments. (Prereq 1001. Limited to 55)

Ten wk, Sec 8, M, 6-8:30, BlegH 125

Psy 3801 INTRODUCTION TO MEASUREMENT AND STATISTICAL METHODS.

4 degree credits, \$177 (◆\$88.50).

Quantification in research problems in psychology. Descriptive and inferential statistics, hypothesis testing, nonparametric statistics. Examples from various areas of psychology. (Prereq 1001 or equivalent)

Ten wk, Sec 7, M, 6-8:30, EIH N119

★Ten wk, Sec 8, T, 6-8:30, EIH N119 (Limited to 67)

Psy 5202 ATTITUDES AND SOCIAL BEHAVIOR.

4 degree credits, \$177 (◆\$88.50).

Attitude theory, measurement, and attitude change research in social psychology. The structure, function, and formation of attitudes; the relationship between attitudes and various social behaviors; basic principles of attitude change. (Prereq 1001, 3201 or #. Qualified students may register for graduate credit at the University of Minnesota)

Ten wk, Sec 2, W, 6-8:30, EIH N119, Eugene Borgida

★Limited enrollment class. See page 5.

Public Health

(A302 Mayo: 624-6669)

Sixth Annual Summer Occupational Health and Safety Institute September 8-21, 1988

An intensive, interdisciplinary course of study designed for professionals currently or soon-to-be practicing in occupational health and safety. Thirteen individual, graduate-level courses will be conducted over the two-week period on the St. Paul campus. Courses include: Occupational Safety, Industrial Hygiene Engineering, Occupational Ergonomics, Environmental Toxicology, Health Statistics, Occupational Health Nursing, Occupational Medicine, Principles of Management, Occupational Epidemiology, Hazardous Waste Management, Field Instrumentation, Risk Assessment, and the Interdisciplinary Seminar. Courses are accredited (Category I) through the American College of Preventive Medicine for the AMA Physicians Recognition Award; the American Board of Industrial Hygiene; and approved for Nursing Contact Session channels.

For further information, contact: Ruth K. McIntyre, Director, Program in Continuing Education, Midwest Center for Occupational Health and Safety, St. Paul-Ramsey Medical Center, 640 Jackson Street, St. Paul, MN 55101; (612) 221-3992.

Research Explorations

(See page 109)

Rhetoric

(202 Haecker: 624-3445)

College of Agriculture

★Rhet 1104 LIBRARY RESEARCH METHOD.

1 degree credit, \$41.75.

On-site and interactive video instruction in information retrieval techniques designed to strengthen skills in using the library. Students work independently but must satisfactorily complete all exercises and problem-solving assignments to receive credit. Students must attend an initial orientation session of one hour. Computer-assisted instruction. **Microcomputer lab card required. Must be taken S-N.** (No prereq. Limited to 25)

Ten wk, Sec 1, Th, 5-5:45, CentLib 2, StP Campus, Patricia Rodkewich

★Rhet 1147 EFFICIENT READING.

4 degree credits, \$5147, \$167 plus \$3 course fee. Total \$170. (IS)

The adult reading process is explored with emphasis on comprehension, speed, and vocabulary development. For persons of average or above-average reading ability who wish to develop and refine college-level reading skills. Not a basic course. A suggested follow-up for PO 1001, How to Study. (No prereq. Meets concurrently with 5147. Limited to 30)

Ten wk, Sec 4, W, 6-8:30, FordH 115, Michael Bennett

★Limited enrollment class. See page 5.

★**Rhet 1151 WRITING IN YOUR MAJOR.**

4 degree credits, \$167.

Students investigate and write on subjects related to their majors. The criterion of appropriateness: good writing meets the expectation of readers and the conventions of a particular form. Assignments such as literature review, abstract, fact sheet, instructions, and feature article. (Prereq completion of freshman communication requirement, and sophomore status. Limited to 23)

Ten wk, Sec 2, Th, 6-8:30, HckrH 111, StP Campus

★**Rhet 1222 PUBLIC SPEAKING.**

4 degree credits, \$167.

Practical course in fundamentals of speechmaking. Emphasis on organizing the speech and projecting it to the audience. (Prereq completion of freshman communication requirement. Limited to 18)

Ten wk, Sec 2, T, 6-8:30, CentLib 6, StP Campus, Vito Scotello

★**Rhet 3562 WRITING IN YOUR PROFESSION.**

4 degree credits, \$241.

Projects in professional writing. Relationship between structuring information to meet the needs of particular readers and writing effectively. Assignments such as the feasibility report, proposal, memorandum, letter of application, and resumé. (Prereq jr standing. Limited to 23)

Ten wk, Sec 4, W, 6-8:30, Kolth S135, Greta Gaard

★**Rhet 5147 EFFICIENT READING.**

4 degree credits, \$1147, \$241 plus \$3 course fee. Total \$244.

The adult reading process is explored with emphasis on comprehension, speed, and vocabulary development. For persons of average or above-average reading ability who wish to personally develop and refine college-level reading skills, and also to acquire an understanding of the linguistic, psychological, and physiological aspects of the complex human skill of reading. An evaluative paper and some seminar meetings (times to be arranged) are required. (No prereq. Meets concurrently with 1147. Qualified students may register for graduate credit at the University of Minnesota. Limited to 10)

Ten wk, Sec 4, W, 6-8:30, FordH 115, Michael Bennett

Russian and East European Studies

(253 Elliott Hall: 625-9870)

College of Liberal Arts

Summer Term in Poland

Summer term (July 18-August 29, 1988) at Marie Curie-Sklodowska University in Lublin, Poland; cosponsored by the Department of Russian and East European Studies and Extension Classes Office of Study Abroad. Polish language instruction, culture course, and one-week field trip. Lodging with families (9 credits; prereq high school grad or #). Leonard Polakiewicz. For information, call:

**Extension Classes Office of Study Abroad
625-3379**

★Limited enrollment class. See page 5.

Scandinavian

(210 Folwell Hall: 625-9887)

College of Liberal Arts

Scan 3601 GREAT LITERARY WORKS OF SCANDINAVIA.

4 degree credits, \$177 (♦ \$88.50).

Major literary works from the Middle Ages to the present; Icelandic Saga, H. C. Andersen fairy tales, drama by Strindberg and Ibsen, novels by Hamsun and J. V. Jensen, 20th century Scandinavian novels. Readings in translation. (No prereq)

First 5 wk, Sec 1, TTh, 6-8:30, FolH 110, Göran Stockenström

Scan 3670 TOPICS IN SCANDINAVIAN STUDIES: ICELAND TODAY.

4 degree credits, §Scan 5670, §Geog 5900, \$177.

The role of geography in shaping the history and culture of Iceland. Physical geography and natural resources such as volcanic activity, geothermal power, land forms, geology, glaciers, rivers, hydroelectric power, climate and vegetation. Population and settlement—demographic characteristics, settlement patterns, and internal and external migration. History and culture—origin, language, social and political structure, and foreign relations. Economy—economic structure of the past and present, internal and external trade, industry, farming and fishing. Taught by Dr. Glyfi Már Gudbergsson, a visiting professor and the director of the Geological Research Institute at the University of Iceland in Reykjavik. (No prereq. Meets concurrently with Scan 5670, Geog 5900)

First 5 wk, Sec 1, TTh, 6:30-8:30, AndH 270, Glyfi Már Gudbergsson

Scan 5670 TOPICS IN SCANDINAVIAN STUDIES: ICELAND TODAY.

4 degree credits, §Scan 3670, §Geog 5900, \$177.

See description for 3670. Taught by Dr. Glyfi Már Gudbergsson, a visiting professor and the director of the Geological Research Institute at the University of Iceland in Reykjavik. (No prereq. Qualified students may register for graduate credit at the University of Minnesota. Meets concurrently with Scan 3670, Geog 5900)

First 5 wk, Sec 1, TTh, 6:30-8:30, AndH 270, Glyfi Már Gudbergsson

Social and Philosophical Foundations of Education

(275 Peik Hall: 624-1006)

College of Education

(Department of Educational Policy and Administration)

SPFE 5099 DIRECTED STUDY.

Credits arranged (9 or maximum). 3 degree credits this offering, \$163.50.

Individual or group work on topics or problems in social or philosophical foundations of education. Focus of this offering is on Improving School Mission Statements for the 1990s. Structured review of selected school mission statements to determine viability of these documents for 1) the history of the school system; 2) its present circumstance; and 3) the "most probable" future of the school system within its environment. Guided development of mission statement revisions for the next decade. **May be taken S-N.** (Prereq #. Students

★Limited enrollment class. See page 5.

must contact the instructor prior to enrollment for a brief interview: telephone 624-5244 or 483-3654. Qualified students may register for graduate credit at the University of Minnesota)

Spec Term Sec 1, MTWThF, 8 a.m.-4, June 20-24, ClaOff 27, StP Campus, Arthur M. Harkins

No late fee through June 13

Social Work

(400 Ford Hall: 624-5888)

College of Home Economics

★SW 3984 COMMUNITY ORGANIZATION/DEVELOPMENT/PRACTICE.

4 degree credits, \$229.

Focuses on the critical examination of community processes, community change, and the value base inherent in the form of social work practice called community organization. Three strategies for community intervention are compared and contrasted in terms of constituencies, influence upon decision-making and suitability as strategy for social work intervention at the community level. (Prereq 1001. Limited to 30)

First 5 wk, Sec 1, MW, 4:30-7, BlegH 210, Rama S. Pandey

★SW 5010 SEMINAR: SPECIAL TOPICS—COMPUTERS IN HUMAN SERVICES.

3 degree credits, \$171.75.

Assumes typing skills; acquaints students with hardware and software useful for social work practice, including word processing, information systems, and database management. (Prereq 1001, 3005, and jr or sr or grad student in social work. Qualified students may register for graduate credit at the University of Minnesota. Limited to 15)

First 5 wk, Sec 2, TTh, 4:30-7, BlegH 210, Jerome R. Kolbo

Sociology

(909 Social Sciences: 624-4300)

College of Liberal Arts

Soc 1001 INTRODUCTION TO SOCIOLOGY.

4 degree credits, \$167 (♦ \$83.50). (IS)

Introduction to the scientific study of social behavior. Overview of the major theories, methods, concepts, and research findings. Examination of the characteristics of the basic social units (social relations, groups, organizations, institutions, society), their patterns of interrelation, and processes of change. (No prereq)

First 5 wk, Sec 10, TTh, 6-8:30, BlegH 425, Joel Nelson

Second 5 wk, Sec 11, TTh, 6-8:30, BlegH 425, Jeffrey Broadbent

Soc 3101 (formerly CJS 3101) INTRODUCTION TO AMERICAN CRIMINAL JUSTICE.

4 degree credits, \$177 (♦ \$88.50). (IS)

Philosophical and policy underpinnings of criminal justice in America. (No prereq)

First 5 wk, Sec 2, TTh, 6-8:30, AndH 210, Joel Samaha

★Limited enrollment class. See page 5.

Soc 3102 INTRODUCTION TO CRIMINAL BEHAVIOR AND SOCIAL CONTROL.

4 degree credits, \$177 (♦ \$88.50). (IS)

Introduction to the basic issues in criminology and the sociology of law and social control organizations. (Prereq 3101 or equivalent)

Second 5 wk, Sec 2, TTh, 6-8:30, BlegH 130

Soc 3411 UNDERSTANDING FORMAL ORGANIZATION.

4 degree credits, \$177 (♦ \$88.50).

Formal organizations as major social actors in our work lives, personality development, social change and conflict. Life-course analysis of enterprises, bureaucracies, and voluntary organizations. Emphasis on organizational control, conflict, coordination, and inter-organizational sets and relationships. (Prereq 1001)

First 5 wk, Sec 1, MW, 6-8:30, BlegH 110, Paul Reynolds

Soc 3481 MODERN JAPANESE SOCIETY.

4 degree credits, §Eas 3481, \$177 (♦ \$88.50).

Japanese social institutions, including family, education, business and labor relations, government, and the status of women; ways these institutions differ from the West, and affect Japanese economic success. (Prereq introductory sociology course or #. Meets concurrently with EAS 3481)

First 5 wk, Sec 1, MW, 6-8:30, BlegH 135, Jeffrey P. Broadbent

Soc 3503 SEX, ROMANCE AND RELATIONSHIPS.

4 degree credits, \$177 (♦ \$88.50).

Sociological perspectives on sexual socialization; ideas of masculinity and femininity; history and functions of love and romance; characteristics of romantic relationships, intimacy, emotionality, sexuality, exclusivity; sexual deviance in relation to sexual norms. (Prereq 1001)

Second 5 wk, Sec 2, MW, 6-8:30, BlegH 210

Spanish and Portuguese

(34 Folwell Hall: 625-5858)

College of Liberal Arts

Reading Spanish

Span 0221 is specifically designed for individuals who desire only a reading knowledge of the language. The Spanish language requirements for a graduate degree also may be satisfied by successfully passing an examination given at the end of the course. Graduate students should check with their advisers for specific language requirements in their field of study.

Span 0221 READING SPANISH.

No credit, \$167. (IS)

This course is designed solely to impart a basic reading knowledge of the Spanish language; full time is devoted to intensive reading and translation of a variety of texts. Since this approach deals with only one aspect of the language—reading—great skill can be acquired in a short time. At the end of the one quarter the student may take the equivalent of the

Spanish Graduate Reading Examination. The department will certify to the Graduate School a reading knowledge of Spanish upon successful completion of this examination. **Must be taken S-N.** (No prereq)

First 5 wk, Sec 2, MW, 6-8:30, FolH 108, Ruth E. Jones

★Span 1103 BEGINNING SPANISH.

5 degree credits, \$208.75. (IS)

Basic listening, speaking, reading and writing skills. Stress on the development of communicative competence. Some cultural readings. (Prereq 1002. Limited to 25)

First 5 wk, Sec 22, MW, 6-8:50, FolH 105, Hernán Vidal

★Span 1104 INTERMEDIATE SPANISH.

5 degree credits, \$208.75. (IS)

Speaking and comprehension; development of reading and writing skills based on materials from Spain and Spanish America. Grammar review; compositions and oral presentation. (Prereq 1003 or 1205. Limited to 25)

Second 5 wk, Sec 4, MW, 6-8:50, FolH 104, René Jara

★Span 1105 INTERMEDIATE SPANISH.

5 degree credits, \$208.75. (IS)

For description, see 1104. (Prereq 1104 or #. Limited to 25)

First 5 wk, Sec 3, MW, 6-8:50, FolH 110, Lawrence Mantini

★Port 3001 PORTUGUESE FOR SPANISH SPEAKERS.

5 degree credits, \$221.25.

Study of Portuguese based on student knowledge of Spanish (speakers of other romance languages admissible with permission of the instructor). Contrastive approach to the phonic and morpho-syntactic structures of Portuguese. (Prereq knowledge of Spanish or #. Limited to 20)

First 5 wk, Sec 1, MW, 6-8:50, FolH 103, Roberto Reis

Span 3605 POLITICS IN SPANISH AND LATIN AMERICAN LITERATURE.

4 degree credits, \$177 (♦ \$88.50).

The civil wars in Spain; national liberation movements and political upheavals in Latin America. Taught in English. (No prereq. **May not be used for Spanish or Portuguese major credit**)

First 5 wk, Sec 2, TTh, 6-8:30, FolH 103, Anthony N. Zahareas

Span 3614 DON QUIJOTE: A STUDY OF LOST ILLUSIONS.

4 degree credits, \$177 (♦ \$88.50).

Study of the novel in many facets; the "madness" of its characters, the relation of their actions and attitudes to the theme of reality/illusion and to the society of their times. Taught in English. (No prereq. May be applied toward the CLA second language requirement, Route II, for Spanish. **May not be used for Spanish or Portuguese major credit**)

Second 5 wk, Sec 2, TTh, 6-8:30, FolH 110, Nicholas Spadaccini

★Limited enrollment class. See page 5.

Speech-Communication

(317 Folwell Hall: 624-5800)

College of Liberal Arts

★Spch 1101 FUNDAMENTALS OF SPEECH COMMUNICATION: ORAL COMMUNICATION.

4 degree credits, \$167.

Basic understanding of oral communication processes. Study and application of essential elements in oral communication. Consideration of criticism and response to oral discourse. Opportunities for individual speaking. (No prereq. Limited to 22)

First 5 wk, Sec 6, MW, 6-8:30, MoosT 2-580

First 5 wk, Sec 7, TTh, 6-8:30, KoitH S140

Second 5 wk, Sec 8, MW, 6-8:30, MoosT 2-580

★Spch 3451 INTERCULTURAL COMMUNICATION: THEORY AND PRACTICE.

4 degree credits, \$177.

Theories of and factors influencing intercultural communication. Development of effective intercultural communication skills. (Prereq planning an intercultural experience. Limited to 20)

First 5 wk, Sec 3, MW, 6-8:30, FolH 209

Statistics

(270a Vincent Hall: 625-8046)

College of Liberal Arts

Stat 3091 INTRODUCTION TO PROBABILITY AND STATISTICS.

4 degree credits, \$5121, \$5131, \$177.

Elementary probability and probability distributions, sampling and elements of statistical inference. (Prereq differential and integral calculus)

Ten wk, Sec 4, T, 6:15-8:45, VinH 20

Study and Travel Adventures

(See page 92)

Study Skills

See Learning and Academic Skills, page 69. See also page 105.

Textiles and Clothing

(240 McNeal Hall: 624-9700)

College of Home Economics

Design, Housing, and Apparel

Students interested in a course in pattern grading should see Dsgn 3572, page 47.

★TexC 3605 DRAPING DESIGN AND CONSTRUCTION.

3 degree credits, \$171.75.

Techniques in fitting and draping as a basis for creative designing in fabric. Emphasis on

★Limited enrollment class. See page 5.

relation of fabric to design and construction methods. (Prereq soph, 1603, 3662 or Dsgn 1525. Limited to 20)

First 5 wk, Sec 1, TTh, 6-8:30, McNH 475, StP Campus

★TexC 3646 RETAIL SUPERVISION.

3 degree credits, \$171.75.

Techniques of management, motivation, and supervision with specific attention to retailing environment. Participation through case study in discussion of management by objectives and participative management approach to retail supervision. (Prereq Mgmt 3001, Mgmt 3002 or #. Limited to 30)

First 5 wk, Sec 2, TTh, 7-9:15, McNH 475, StP Campus, Vern Lovestad

★TexC 5623 THE DYEING MEDIUM AND COLOR.

3 degree credits, \$171.75.

Principles of dye selection for specific fibers; precision dyeing for exploring perceived color relationships and expanding the utility of this medium. (Prereq 3621, Dsgn 1521, or #. Students should check at the time of registration for the availability of graduate credit. Limited to 18)

First 5 wk, Sec 1, MW, 6-9:55, McNH B3, StP Campus, Leslie Butterfield

Vocational Education

(210 Vocational/Technical Building: 624-1221)

College of Education

Vocational and Technical Education

★YoEd 5750 TRAINING IN INDUSTRY AND BUSINESS.

3-4 credits; 3 degree credits this offering, \$163.50.

Appraisal of the training function in industry and business; advancement of competencies in areas of analysis, design, development, delivery, and evaluation of training. **Must be taken A-F.** (No prereq. Qualified students may register for graduate credit at the University of Minnesota. Limited to 25)

Spec Term, Sec 3, MTWThF, 9:05 a.m.-4:25, August 1, 2, 3, 4, 5, VoTech R280, StP Campus, Catherine Sleezer
No late fee through July 25

★YoEd 5760 ORGANIZATION DEVELOPMENT IN INDUSTRY AND BUSINESS.

3-4 credits; 3 degree credits this offering, \$163.50.

Introduction to major concepts, skills, and techniques for organization development in industry and business. **Must be taken A-F.** (No prereq. Qualified students may register for graduate credit at the University of Minnesota. Limited to 25)

Spec Term, Sec 4, MTWThF, 9:05 a.m.-4:25, July 25, 26, 27, 28, 29, VoTech R285, StP Campus, Gary McLean

★YoEd 5770 TRAINING AND DEVELOPMENT: MANAGEMENT DEVELOPMENT PRACTICES.

1-4 credits; 4 degree credits this offering, \$218.

Problems, practices, programs, and methodologies, including competencies, needs as-

★Limited enrollment class. See page 5.

assessment, delivery modes, and evaluation: includes on-site visits and critiques. **Must be taken A-F.** (No prereq. Qualified students may register for graduate credit at the University of Minnesota. Limited to 25)

Spec Term, Sec 10, TTh, 5:45-9:30, June 14-July 19, VoTech R205, StP Campus, Susan Stanek

Women's Studies

(492 Ford Hall: 624-6006)

College of Liberal Arts

★WoSt 3205 (formerly 3301) **WOMAN: A SENSE OF IDENTITY.**

4 degree credits, §5205, \$177.

Exploration of social and psychological factors which inhibit or enhance a woman's continuously developing sense of identity. Learning who you are, what you want, and how to take appropriate action. Exercises in power, body image, goal setting, and assertion skills in difficult situations. Journal writing, small-group work, and a project are part of the class requirements. (No prereq. No auditors. Meets concurrently with 5205. Limited to a combined total of 40)

CEW

Ten wk, Sec 8, T, 6:20-9:20, FordH 120, D. Loeffler

Offered through Continuing Education for Women

WoSt 3400 **TOPICS IN WOMEN'S STUDIES: WOMEN, RACE, AND CLASS.**

4 degree credits (maximum 12 cr), \$177 (◆ \$88.50).

Examines the interaction of sex, race, and class upon the lives of women of diverse backgrounds. Readings will provide a socio-historical framework in which students can study how racism and class biases affect women's lives, particularly the lives of women of color, and poor and working class women. (No prereq)

First 5 wk, Sec 1, MW, 6:20-8:50, FordH 175, Pamela Fletcher

CEW

Offered through Continuing Education for Woman

WoSt 5200 **TOPICS IN WOMEN'S STUDIES: WOMEN, FEMINISM, AND POWER.**

4 degree credits (maximum 12 cr), \$177 (◆ \$88.50).

To explore and examine emerging definitions of power, ways in which women individually and collectively use their power. (No prereq. Qualified students may register for graduate credit at the University of Minnesota)

Second 5 wk, Sec 2, MW, 6:20-8:50, FordH 175, Patricia S. Faunce

★WoSt 5205 **WOMAN: A SENSE OF IDENTITY.**

4 degree credits, §3205, \$177.

See description for 3205. (No prereq. No auditors. Qualified students may register for graduate credit at the University of Minnesota. Meets concurrently with WoSt 3205. Limited to a combined total of 40)

Ten wk, Sec 8, T, 6:20-9:20, FordH 120, D. Loeffler

CEW

Offered through Continuing Education for Women

★Limited enrollment class. See page 5.

Noncredit Courses

Credit courses are listed beginning on page 31.

I. The Compleat Scholar (CSch)

Telephone 624-8880 for information.

The Compleat Scholar is a comprehensive curriculum of courses offering University learning without credit. The term "The Compleat Scholar" is borrowed from Isaak Walton, the 17th-century gentleman author of "The Compleat Angler." Here the word "compleat" is used to mean the educated person of eclectic taste, not an authority, but having a curiosity of mind.

The Compleat Scholar combines two former noncredit programs, Continuing Education for Women (CEW) and Informal Courses (IC), and is now organized into subject areas. In addition, Extension Classes offers Study and Travel Adventures (STA) and University Research Explorations (REX).

CSch courses meet for varying numbers of sessions and offer stimulating and challenging learning in lecture and discussion formats which do not include grades or exams. Anyone may register for Compleat Scholar courses. There are no admission or entrance requirements; you need only a desire to learn.

See page 92 for CSch offerings.

Continuing Education for Women Compleat Scholar Offerings

Telephone 624-5267 for information.

The University of Minnesota has a long history of involvement in women's education. Continuing Education for Women (CEW) continues this tradition by offering quality, innovative, and timely programs using University resources. As part of the Compleat Scholar curriculum, CEW offers women noncredit courses to meet their needs and interests in an ever-changing society. This integration of CEW within the Compleat Scholar provides a broader range of course categories, new specialized classes, more sequencing of classes, and more in-depth examination of topic areas. Noncredit CEW classes are identified by a CEW symbol in the left margin next to the CSch course description.

Continuing Education for Women also offers credit classes in times, formats, and locations designed to accommodate student needs. Most credit classes meet during the day at off-campus locations. The following credit courses are being offered through CEW this summer:

Engl 3455	American Short Story
Psy 3201	Introduction to Social Psychology
WoSt 3400	Topics: Women, Race, and Class
WoSt 3205/5205	Woman: A Sense of Identity

See page 92 for CSch offerings.

The Compleat Scholar Registration, Tuition (CSch)

Unless otherwise noted, registration procedures, dates, and locations are the same as for credit summer registrations. See the **When and How to Register** section of this Bulletin for details. Late registrations for noncredit classes must be accompanied by a late fee (see page 9). Late registration dates are listed with course descriptions for each noncredit class that does not begin the first week of a summer term. Tuition and fees are listed with each CSch course description.

University employees who wish to take noncredit classes must pay one-half the regular tuition plus fees (if any). When registering, employees must submit a letter from the head of their department verifying employment. For limited-enrollment classes, registrations will be accepted starting the second week of mail registration. For nonlimited classes, students may register during the regular registration periods.

Persons 62 and older receive a \$10 discount on all noncredit classes that have a minimum tuition of \$30 (see individual course descriptions for tuition). Participants pay course fees and special fees (if any).

See below for CSch offerings.

II. Study and Travel Adventures (STA)

Telephone 624-3300 for information.

Led by University instructors, these study tours are for people who like to travel, have an interest in a particular place or topic, would like a tour with a difference, or want to explore a topic in a retreat setting. They are designed to provide college learning with the special benefit of on-site exploration and first-hand experience. Of particular advantage are the flexibility in scheduling, opportunities for group interaction, and reasonable cost. Instructors are selected for their expertise in a topic and knowledge of locations. Most have traveled widely and have considerable teaching experience, although usually they are not professional tour guides.

See page 106 for Study and Travel offerings.

III. University Research Explorations (REX)

Telephone 626-0214 for information.

See page 109 for complete REX information.

Compleat Scholar Summer Course Offerings

Arts and Humanities

★CSch 0130 USING DRAWING IN EVERYDAY LIFE.

No credit, \$35 (age 62, \$25).

Artists aren't different people—rather, each person is a different artist. Simple drawing skills will help you to develop your artistic ability and awareness. Explore basic shapes to build an appreciation for the natural art all around you, such as the exquisite shape of an eggbeater, or the unique effect of sunlight on the desert and the mountains. Learn to use visual expression as a communications tool in everyday life. For example, a sketch can clarify a complex proposal in a business meeting. Learn to "picture" concepts so that you can better understand and retain information. This course is for the beginner. Simple drawing materials, such as pencil, charcoal, and newsprint paper, are required purchases. (Limited to 20)

Spec Term, Sec 1, W, 6:30-8:30, June 29-July 27 (5 meetings), McNH 262, StP Campus, Kohn. No late fee through June 22.

(Kris Kohn is a scientific illustrator, graphic designer, photographer, and media specialist for the College of Biological Sciences at the University of Minnesota)

★Limited enrollment class. See page 5.

★CSch 0146 MODERN SCULPTURE IN PERSPECTIVE.

No credit, \$48 (age 62, \$38).

Offered in conjunction with Walker Art Center's "Sculpture Inside Outside" exhibition, this course surveys developments in modern sculpture from Rodin to the present. Includes the work of Brancusi, Duchamp, Picasso, Giacometti, David Smith, Di Suvero, Serra and Beuys, and culminates with a look at American sculpture in the 1980s. Discussion includes: the dominance of the figure in traditional sculpture; the move toward abstraction in the early part of the century; the incorporation of found objects in sculpture; the development of welded metal sculpture; the rise of minimalism; earthworks and other forms of public sculpture; and the recent return to moderately-scaled "studio" sculpture. (Offered in cooperation with the Walker Art Center. Limited to 65)

CEW

Spec Term, Sec 1, T, 10 a.m.-12, July 12-Aug. 2 (4 meetings), Walker Art Center, Vineland Pl, Mpls, Boswell. No late fee through July 5.

(Peter Boswell is a Curatorial Associate at Walker Art Center and has been involved in planning the exhibition "Sculpture Inside Outside." He is a Ph.D. candidate at Stanford University, working on a dissertation on Assemblage Sculpture in California, 1950-1965. He has taught art history at the University of Minnesota)

CSch 0147 THE ESSENTIAL THREAD: STORIES IN CLOTH.

No credit, \$48 (age 62, \$38).

Offered in conjunction with the Minneapolis Institute of Arts' exhibition "The Essential Thread: Tapestry on Wall and Body." All cloth tells a tale, and if you know the language you can hear the story. By learning to look for certain clues you can often tell where, when, and for whom a fabric was made. Class uses objects from the exhibition to consider materials made of goat hair from Tibet, silk from China, wool from England, and llama hair from the Andes. All of these materials were turned into luxury goods which conveyed prestige to their owners, be they Chinese emperors, Syrian sharifs, English aristocrats, Russian priests, or French kings. The basic principles learned in this class can be applied to fabrics seen in other environments, whether museums or fabric stores. (Offered in cooperation with the Minneapolis Institute of Arts)

CEW

Spec Term, Sec 1, Th, 10-12, July 7-28 (4 meetings), Minneapolis Institute of Arts, 2400 3rd Ave S, Mpls, Erickson and Stack. No late fee through June 30.

(Ann Erickson is an associate professor in the Department of Design, Housing, and Apparel at the University of Minnesota. She teaches decorative arts and interior design courses. Lotus Stack is curator of textiles at the Minneapolis Institute of Arts and has taught in the Department of Design, Housing, and Apparel. She is on the Board of Directors for the Textile Society of America, and has lectured extensively in the United States and abroad)

★CSch 0148 FRANK LLOYD WRIGHT REMEMBERED.

No credit, \$27 (no discount for persons 62 and older).

This course examines the unique contributions of Frank Lloyd Wright to American architecture. Wright was as much an innovator as he was an architect. His approach combined invention as well as aesthetics. Wright's legacy is examined from three perspectives: architect as social planner, problem solver, and heroic figure. Wright designed the first suburban subdivision, Broadacre City, which was to be in Wisconsin. The development was never built, but its design opened the way for thinking about communities close to but outside of urban centers. (A local example of this thinking is the development, Jonathan, near Chaska.) Two prize-winning designs, Frank Lloyd Wright's Usonian House, and the Royal Berry Wills homes in Edina's Country Club Addition, offer a comparison of Wright's inven-

CEW

★Limited enrollment class. See page 5.

tion versus Wills's conventional solutions. And finally, Wright can be studied as a heroic figure by comparing his "honest arrogance" to Edwin Lundie's "craftsman's humility." (Offered in cooperation with the Walker Art Center. Limited to 65)

Spec Term, Sec 1, Th, 6-7:30, July 21-Aug. 4 (3 meetings), Walker Art Center, Vineland Pl, Mpls, Mulfinger. No late fee through July 14.

(Dale Mulfinger is an associate professor in the School of Architecture and Landscape Architecture at the University of Minnesota, and an architect in the Twin Cities)

★CSch 0183 GARDENING IN MINNESOTA: NORTHERN TRADITIONS, GLACIAL SOILS AND A SHORT SEASON.

No credit, \$48 (age 62, \$38).

What is unique about gardening in Minnesota? The course examines the special conditions of Minnesota gardening: winter/summer temperatures, day lengths, soils, rainfall, growing seasons, and suitable plants. Differences in customs, traditions, and interests of upper Midwest gardeners are considered, with useful garden literature noted. Suggested reference: *Gardening in the Upper Midwest* by Leon C. Snyder. (Limited to 30)

Spec Term, Sec 1, Th, 10 a.m.-12, July 21-Aug. 11 (4 meetings), AlderH 415, StP Campus, McKinnon. No late fee through July 14.

(Jane McKinnon is a former professor and Extension horticulturist in the Department of Horticulture Science and Landscape Architecture at the University of Minnesota. She also teaches residential landscaping)

(See also Natural Sciences)

History and Current Affairs

★CSch 0228 LEPRECHAUNS, WAKES, AND BANSHEES: AN INTRODUCTION TO CELTIC FOLKLORE.

No credit, \$45 (age 62, \$35).

Stories about banshees and wakes fascinate and entertain us, but why did Celtic peoples have such beliefs and practices? This course examines the traditional folklore and folk beliefs of Brittany, Cornwall, Ireland, the Isle of Man, Scotland, and Wales and explores the reasons behind them. Topics include holidays, assorted fairies and spirits, and beliefs connected with birth, marriage, and death. Opportunity for class discussion and questions. (Limited to 35)

Spec Term, Sec 1, T, 6-8, June 14-July 5 (4 meetings), Arch 28, Suppe. No late fee through June 7.

(Frederick Suppe is a visiting assistant professor in the English department at the University of Minnesota. Professor Suppe is also a historian whose research focuses on the medieval period, and the often difficult relations between the Celtic peoples and their non-Celtic neighbors. He spent two years in Wales as a Fulbright Fellow and has visited Ireland)

★CSch 0229 INVESTING: UNDERSTANDING THE MARKET'S VOLATILITY.

No credit, \$25 (no discount for persons 62 or older).

Is it a "random walk" down Wall Street or a rational market response? The increasing volatility of financial markets affects stocks, bonds, mutual funds, and other investment instruments. The causes and effects of this volatility are explained in terms of its impact on

★Limited enrollment class. See page 5.

individual investors. Inflation, interest rates, value of the dollar, unemployment, federal and trade deficits, computer trading, and other valuables are related to the performance of stocks, bonds, and other investment instruments. After the next Black Monday, you may be able to write the financial reporter's column. (Limited to 25)

Spec Term, Sec 1, T, 6:15-8:15, June 21, 28 (2 meetings), FoIH 107, Whitman. No late fee through June 14.

(Andrew Whitman, a professor of Finance and Insurance in the Carlson School of Management, is a Certified Financial Planner and attorney, and adjunct faculty member of the College of Financial Planning. Dr. Whitman teaches courses and seminars on financial planning, investment strategy, retirement planning, risk management, insurance, and estate planning)

(See also Human Development)

Literature

CSch 0404 AS HIS WHIMSY TAKES HIM.

No credit, \$49 (age 62, \$39).

The later detective novels of Dorothy L. Sayers are not only detective novels, but also are novels of manners and character. In *Strong Poison* and *Busman's Honeymoon* the author portrays Lord Peter Wimsey, the dilettante detective, as he falls in love and marries. Lord Peter becomes a real flesh and blood human being with weaknesses and strengths, rather than a mere mechanical device carrying forward the action, the business of detecting. The class also analyzes the changing society of post World War I England as it is portrayed in these novels.

Spec Term, Sec 1, W, 9:30-11:30 a.m., July 13-Aug. 10 (5 meetings), MacP, Kheim. No late fee through July 6.

(Johanna Kheim has taught French and humanities at the University of Minnesota. Her doctoral studies at the University were in comparative literature with a focus on the 19th- and early 20th-century novel)

★CSch 0405 POETRY AS POWER: AUDRE LORDE AND ADRIENNE RICH.

No credit, \$45 (age 62, \$35).

By reading selected and representative poems by Lorde and Rich, we will encounter two of America's leading poets. In addition to considering matters of form and craft, we will ask such questions as: How is their poetry distinctively female? For what purposes do they write poems? Of what use is such poetry to contemporary women as readers and doers in their world? (While taking this course, you may take advantage of the rare opportunity to see and hear these authors in person. Adrienne Rich and Audre Lorde are scheduled to do readings on June 23, 7:30 p.m., at the Women's Studies Association Conference being held at the University of Minnesota.) Texts: Audre Lorde's *The Black Unicorn*, and Adrienne Rich's *The Fact of a Doorframe*. (Limited to 30)

Spec Term, Sec 1, M, 5:30-7:30, June 13-July 11 (4 meetings—no class July 4), LindH 303, McNaron. No late fee through June 6.

(Toni A.H. McNaron is a professor in English and women's studies at the University of Minnesota. She has published on Virginia Woolf, lesbian poetry, and has edited *Voices in the Night: Women Speaking About Incest (1982)*, and *The Sister Bond: A Feminist View of a Timeless Connection (1985)*. She is currently completing her autobiography and beginning a book on Woolf's relationships with the women in her life)

★Limited enrollment class. See page 5.

Natural Sciences

★CSch 0507 NATURAL HISTORY OF THE PRAIRIE.

No credit (3.5 CEUs available), \$57 (age 62, \$47). \$52 for Bell Museum members.

Combines lectures and field trips to give an overview of the prairie. Lectures will include the influence of prairie on American history and culture, and the prairie as an ecosystem. Field trips will be natural history oriented, and will include identification of grasses, flowers, birds, and other organisms as well as discussion of grassland ecology. Other topics include fire ecology and prairie restoration. Two Saturday morning field trips: **June 18** to Shaefer Prairie; **June 25** to Barn Bluff, Red Wing. One weekend trip: **July 9-10** to southwestern Minnesota. (Offered in cooperation with the Bell Museum of Natural History. Limited to 25)

Spec Term, Sec 1, T, 7-9, June 14-July 12 (5 evening meetings plus field trips) BellMus 175 (use Auditorium entrance facing Church Street), Sigford, Johnson. No late fee through June 7.

(Ann Sigford is the manager at Wood Lake Nature Center. David Johnson is a natural history photographer. Both have extensive experience in prairie ecology)

★CSch 0508 MARSH, SWAMP, BOG, AND FEN—MINNESOTA'S WETLANDS.

No credit (3.4 CEUs available), \$57 (age 62, \$47). \$52 for Bell Museum members.

Minnesota's wetlands are rarely visited except by scientists and naturalists. Students will explore them in bug-less, cool weather. Field trips to a bog with insectivorous plants, a dark and quiet black spruce swamp, an alkaline fen with showy flowers, a cattail marsh, and a peat mining area. Lectures cover wetland classification, typical flora and fauna, hydrology and wetland values. Two Saturday morning field trips: **Aug. 27** to Wood Lake Nature Center; **Sept. 10** to Minnesota River Valley. One weekend trip: **Sept. 17, 18** to the Cloquet area (camping at Jay Cooke State Park or staying at a local motel). (Offered in cooperation with the Bell Museum of Natural History. Limited to 25)

Spec Term, Sec 2, T, 7-9, Aug. 23-Sept. 20 (5 evening meetings plus field trips), BellMus 175 (use Auditorium entrance facing Church Street), Sigford, Johnson. No late fee through Aug. 16.

(Ann Sigford is the manager at Wood Lake Nature Center. David Johnson is a natural history photographer and exhibits designer. Both have extensive experience in wetland ecology)

★CSch 0509 WILDFLOWERS OF THE BOG.

No credit (0.6 CEUs available), \$20 (no discount for persons 62 and older). \$18 for Bell Museum members.

Learn to identify the colorful blooming flowers found in bogs during the summer. An evening session will introduce amateur botanists to the wildflowers and shrubs that are likely to be seen in Minnesota bogs, and will include natural history information, slides, and tips on using field guides. Field identification of bog wildflowers will be made during a Saturday morning field trip (**June 25**) to Beckman Lake Bog and Cedar Bog Lake at Cedar Creek Natural History Area near Bethel, Minn. (Offered in cooperation with the Bell Museum of Natural History. Limited to 25)

Spec Term, Sec 1, Th, 7-9, June 23 (1 evening meeting plus field trip), BellMus 311 (use Auditorium entrance facing Church Street), Cowan. No late fee through June 16.

(Mary Lynn Cowan is a naturalist and environmental educator. She received her M.S. in Ecology and Behavioral Biology at the University of Minnesota, and has worked for the University of Minnesota Landscape Arboretum and Hennepin County Parks)

★Limited enrollment class. See page 5.

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★CSch 0510 WILDFLOWERS OF THE PRAIRIE.

No credit (0.6 CEUs available), \$20 (no discount for persons 62 and older). \$18 for Bell Museum members.

Focuses on prairie wildflowers that bloom in midsummer. Uses the same format as CSch 0509 (*Wildflowers of the Bog*). A wide variety of wildflowers will be observed during the Saturday field trip (**July 16**) to Shaefer Prairie, a 160-acre Nature Conservancy site that includes both wet and dry habitats. (Offered in cooperation with the Bell Museum of Natural History. Limited to 25)

Spec Term, Sec 1, Th, 7-9, July 14 (1 evening meeting plus field trip), BellMus 311 (use Auditorium entrance facing Church Street), Cowan. No late fee through July 7.

(Mary Lynn Cowan is a naturalist and environmental educator. She received her M.S. in Ecology and Behavioral Biology at the University of Minnesota, and has worked for the University of Minnesota Landscape Arboretum and Hennepin County Parks)



★CSch 0515 WILDFLOWERS OF THE OAK SAVANNA.

No credit (0.6 CEUs available), \$20 (no discount for persons 62 or older). \$18 for Bell Museum members.

The wildflowers of the oak savanna are explored, using the same format as CSch 0509 (*Wildflowers of the Bog*). Although intermediate between the forest and prairie, the savanna contains many unique plants as well as those shared with the other habitats. Field identification will be made during a Saturday morning field trip (**Aug. 6**) to the Helen Allison Savanna Scientific and Natural Area near Bethel, Minn. (Offered in cooperation with the Bell Museum of Natural History. Limited to 25)

Spec Term, Sec 1, Th, 7-9, Aug. 4 (1 evening meeting plus field trip), BellMus 311 (use Auditorium entrance facing Church Street), Cowan. No late fee through July 27.

(Mary Lynn Cowan is a naturalist and environmental educator. She received her M.S. in Ecology and Behavioral Biology at the University of Minnesota, and has worked for the University of Minnesota Landscape Arboretum and Hennepin County Parks)

★CSch 0535 THE EXOTIC WORLD OF THE JAPANESE GARDEN.

No credit, \$20 (no discount for persons 62 or older). \$18 for Arboretum members. Japanese gardens tend to have an intriguing and mysterious air about them because of their complex nature. Learn about the strong influence of history and philosophy in the development of Japanese gardens, the different types of Japanese gardens, plus the natural and man-made materials used in Japanese gardens. Further understanding of Japanese gardens will be augmented by a Saturday field trip (**June 18**) to three Japanese gardens in the Twin Cities: Como Park, Normandale Community College, and the Arboretum. (Limited to 25)

Spec Term, Sec 1, Th, 7-9, June 16 (1 meeting plus field trip), Minnesota Landscape Arboretum, 3675 Arboretum Drive, Chanhassen, Kooyman. No late fee through June 9.

(Shirley Mah Kooyman, Director of Volunteers and Instructors at the Minnesota Landscape Arboretum, is a botanist and master gardener. She has several years' experience teaching gardening with wildflowers, woody plant materials, and general botany)

★CSch 0536 HERBS FOR EVERY GARDEN.

No credit, \$29 (no discount for persons 62 or older). \$26 for Arboretum members. Through time spent in the classroom, greenhouse, and gardens, participants become famil-

★Limited enrollment class. See page 5.

iar with the world of fragrant and culinary herbs. Emphasis is on identification, culture, and ornamental traits of the plants, although some information on harvest and uses is provided. Propagation labs are designed to provide hands-on experience in growing herbs. (Limited to 25)

Spec Term, Sec 1, Th, 7-9, June 16, 23, and July 7 (3 meetings—no meeting June 30), Minnesota Landscape Arboretum, 3675 Arboretum Drive, Chanhassen, Mieseler. No late fee through June 9.

(Theresa Mieseler is a landscape gardener at the Minnesota Landscape Arboretum)

Writing

★CSch 0600 CREATIVE WRITING I.

No credit, \$58 (age 62, \$48).

Both new and experienced writers of memoirs, journals, and fiction are welcome in this workshop on techniques and problems in writing. Break the writer's block with exercises designed to generate raw material. Learn how to plan revisions and develop unity in your writing. Who is your reader? Learn to keep your audience in mind while you are writing. Students are welcome to bring in their work for reading and discussion, and to talk about problems that arise during the writing process. (Limited to 20)

Spec Term, Sec 3, T, 9:30-11:30 a.m., June 14-July 19 (6 meetings), MacP, Moses. No late fee through June 7.

(Joseph Moses is an instructor in the Composition and Communication Program at the University of Minnesota and is currently in the Ph.D. program in English language and literature, where he has begun work on a textbook for use in fiction writing workshops. His poetry and fiction have appeared in the Emerson Review)

★CSch 0625 POETRY WRITING.

No credit, \$60 (age 62, \$50).

Discover how to write about your life, feelings, and thoughts. In-class exercises will help you to generate raw material and experiment with different forms of poetry. Read contemporary poems and consider problems and issues in poetry writing. Students' poems will be read and discussed in class. For beginners and other writers who wish to explore new areas of poetry writing. (Limited to 16)

Spec Term, Sec 2, T, 1-3, June 14-July 19 (6 meetings), MacP, Williams. No late fee through June 7.

(Leigh Williams teaches Introduction to Poetry Writing and Creative Writing for the Writing Program in the Department of English at the University of Minnesota. Her major academic and professional interest is poetry writing)

CSch 0639 MAGAZINE WRITING.

No credit, \$79 (age 62, \$69).

The rapidly growing world of magazines provides many opportunities for the free-lance writer. This practical course helps you get started by treating topics such as how to get article ideas; types of articles; information search strategies; interviewing skills; writing techniques; how to query an editor; writing ethics and etiquette; and manuscript submission. Class format consists of lecture, discussion, and critiques of students' work.)

★Limited enrollment class. See page 5.

Spec Term, Sec 2, Th, 6:30-8:30, June 23-Aug. 11 (8 meetings), FordH 120, Saetre. No late fee through June 16.

(Sara Saetre is an M.A. student in journalism and mass communication at the University with an emphasis in magazine writing. She has published feature articles in Mpls./St. Paul magazine, Minnesota magazine, Wisconsin Trails magazine, and other regional publications)

★CSch 0642 NONFICTION WRITING FOR PUBLICATION.

No credit, \$64 (age 62, \$54).

Students develop their writing skills and learn procedures for selling their work in magazine, newspaper, book, and corporate markets. Designed to meet specific needs of individual writers. Editors and professional writers from a variety of publications talk with students at several sessions. Participants receive critiques of their writing in a supportive atmosphere. (Limited to 15)

Spec Term, Sec 1, Th, 3-5, June 16-July 21 (6 meetings), Southdale Library, 7001 York Ave, Edina, Vick. No late fee through June 9.

(Judith Vick has a master's degree in journalism from the University of Minnesota, and is a former English teacher. She is the published author of newspaper and magazine articles and two recent books, and is a market consultant)

★CSch 0643 INTRODUCTION TO SCRIPTWRITING.

No credit, \$58 (age 62, \$48).

For individuals interested in learning the fundamentals of writing commercial screenplays. This class covers such areas of film writing as openings, endings, plot points, pacing, character development, and dialogue. Original film scripts, videos and other materials used to demonstrate areas of film writing. Films used in the course may include *Rocky* and *Breaking Away*. (Scripts available for purchase at Kinko's in Dinkytown.) Students have option to submit sample scriptwriting pages. (Limited to 18)

Spec Term, Sec 1, W, June 15-July 13 (5 meetings), MurH 311, Axelrod. The June 15 session will meet from 6 to 9 p.m. No late fee through June 8.

(Mark Axelrod received his doctorate from the University of Minnesota in Comparative Literature and is a practicing screenwriter. He received a Harold Leonard Grant from the University for film studies and was a finalist in Robert Redford's Sundance Institute. He has also taught composition and comparative literature)

Business and Professional Development

★CSch 0702 CAREER DECISIONS: STRATEGIES FOR CHANGE.

No credit, \$61 (age 62, \$51).

Take the first step toward assessing your career, your goals, and yourself in relation to your career. This course focuses on values, job satisfaction, job stress, skills analysis, and person-environment fit as key elements of the decision to stay where you are or make a change. Explores educational and training opportunities that are available. Interest testing included. Attention to learning ways to explore alternatives and to creative job-search techniques. (Limited to 25)

Spec Term, Sec 3, T, 6:30-8:30, June 21-July 26 (6 meetings), NCCE 235, Kott. No late fee through June 14.

(Richard Kott is a licensed psychologist on the staff of Extension Counseling)

★Limited enrollment class. See page 5.

★CSch 0703 CAREER PLANNING.

No credit, \$63 plus \$8 special fee. Total \$71 (age 62, \$53 plus \$8 special fee. Total \$61). Have you decided on a career goal? This class is for women who want to develop strategies for setting successful career goals. Participants receive help in developing individual career plans through lectures, Strong-Campbell Interest Inventory, Myers-Briggs Type Indicator, work values inventory, and self-evaluation techniques. They learn decision-making and goal-setting skills to help select or change careers. Students identify existing and potential occupational skills and interests, learn how to research jobs, identify available and alternative positions, and present themselves professionally. (Limited to 25)

CEW

Spec Term, Sec 1, W, 6-8, June 15-July 13 (5 meetings), NCCE, Huck. No late fee through June 8.

(Christina Huck has several years' experience as a career counselor and is a doctoral student in the Counseling and Student Personnel Psychology Program at the University of Minnesota. Her master's paper from the University focused on career development)

★CSch 0707 PROFESSIONAL SELLING FOR WOMEN: ADVANCED PROBLEM-SOLVING.

No credit, \$78 (age 62, \$68).

Designed as a second level course in selling skills for women with emphasis on developing strategies and strengthening the ability to handle various sales problems before they become obstacles to a sale. Topics include maintaining interview control, uncovering the buyer's hidden agenda, stalls, timing, closing a sale, and ethical issues. An experiential case study approach is used with mini-lectures, small group discussion, and role playing for specific selling incidents. Intended for those who have completed Professional Selling for Women: Techniques, or have had basic selling skills training. (Limited to 25)

CEW

Spec Term, Sec 1, T, 6-8, June 28-July 26 (5 meetings), NCCE, Mader. No late fee through June 21.

(Lynda Galligan Mader currently does free-lance work for Random House publishing and is a sales consultant. She has worked as Midwest sales manager and training director for the publisher, and has been author and co-author of major training manuals for that firm)

★CSch 0713 STARTING A SUCCESSFUL CONSULTING BUSINESS.

No credit, \$55 plus \$5.50 special fee. Total \$60.50 (age 62, \$45 plus \$5.50 special fee. Total \$50.50). Includes lunch.

A practical seminar for people who want to be consultants either part time or full time. This program provides an overview of the consulting field, including an evaluation of the risks and rewards, and resources to help you get started. The particular situations which women encounter in the consulting business will be addressed. Specific topics focus on identifying a market, starting with minimal expense, pricing your services, building a professional image, and avoiding costly mistakes. Resource materials provided. *Limit cannot be exceeded; no instructor permission will be given.* (Limited to 32)

CEW

Spec Term, Sec 2, Sa, 9 a.m.-4 p.m., June 25 (1 meeting), EBCEC 156, StP Campus, Moen. No late fee through June 17.

(Marilyn Moen has been a consultant for 17 years, and is owner and director of Moen Training, Minneapolis. She has a network of more than 100 consultants and trainers in the Midwest)

★Limited enrollment class. See page 5.

★CSch 0748 ASSERTION SKILLS: WOMEN IN THE WORKPLACE.

No credit, \$47 (age 62, \$37).

Relationships in the work setting such as those with clients, superiors, and subordinates may complicate the use of assertive behavior. This course examines the special considerations in deciding how, when, and where to be assertive in work situations, and how to increase personal effectiveness through verbal and nonverbal behavior. Includes overview of assertion, methods of identifying the dynamics of a situation, rights and responsibilities of assertive behavior, choices and consequences of behaving assertively, and ways to build an assertive belief system. Opportunity to discuss and role play situations involving assertion in the workplace. (Limited to 28)

Spec Term, Sec 2, W, 6-8 p.m., June 15-July 6 (4 meetings), NCCE, Flower. No late fee through June 8.

(Jill Flower is a counselor at the University of Minnesota Counseling Services and is a doctoral student in the Counseling and Student Personnel Psychology Program. Her research interests include sex-role stereotyping)

Human Development

★CSch 0802 BUILDING SELF-ESTEEM.

No credit, \$44 (age 62, \$34).

Self-esteem derives from a sense of personal efficacy and personal worth. The nature of this self-evaluation has profound effects on your thoughts, feelings, motivations, goals, and behavior. Low self-esteem may manifest itself in depression, self-derision, self-denial, destructive relationships, excessive guilt and worry, or addictive behaviors. The aim of this course is to help you identify and break harmful patterns that stifle your capacity for achieving a productive life. Through lectures, discussions, group support, and activities you learn specific steps for increasing self-acceptance, developing confidence, setting and achieving realistic goals, and overcoming barriers to change. Designed as an educational experience, not a therapy group. (Limited to 20)

Spec Term, Sec 3, T, 9-11 a.m., June 14-July 5 (4 meetings), MacP, Flower. No late fee through June 7.

(Jill Flower is a counselor at the University of Minnesota Counseling Services and is a doctoral student in the Counseling and Student Personnel Psychology Program. Her research interests include sex-role stereotyping)

★CSch 0804 PERFECTIONISM AND PROCRASTINATION.

No credit, \$44 (age 62, \$34).

Do you find yourself putting things off when you know you shouldn't? Are you always in a rush to get things done at the last minute and do you make excuses when things are late? Is nothing you do quite good enough to measure up to your standards? Includes a combination of lecture about how these behaviors originate and manifest themselves plus small group discussions and exercises to learn techniques to stop these delaying tactics. Designed as an educational experience, not a therapy group. (Limited to 25)

Spec Term, Sec 2, Th, 6:30-8:30, June 16-July 7 (4 meetings), NCCE, Kott. No late fee through June 9.

(Richard Kott is a counselor in Continuing Education and Extension Counseling at the University of Minnesota, and a licensed psychologist)

★Limited enrollment class. See page 5.

★CSch 0807 DEVELOPING A POSITIVE BODY IMAGE.

No credit, \$22 (no discount for persons 62 and older).

Explores the unrealistic messages which women receive from society about the ideal female body shape and appearance, and the results of these messages on women's lives, including perpetual dissatisfaction with one's own body. Class examines approaches toward developing a more positive body image, and techniques for changing attitude and behavior. This class is designed as an educational experience, not a therapy group. (Limited to 25)

CEW

Spec Term, Sec 2, T, 6-8, June 14, 21 (2 meetings), Walker Library, 2880 Hennepin Ave, Mpls, Emerson. No late fee through June 7.

(Nadine Emerson, licensed psychologist, is a consultant and counselor in private practice specializing in relationship issues, addiction, and personal growth. As a doctoral student at the University of Minnesota, she focused her research on the areas of control and anxiety)

★CSch 0820 FEMALE-MALE COMMUNICATION.

No credit, \$35 (age 62, \$25).

What dynamics are involved when men and women communicate in their personal, social, and professional lives? Examine how socialization (acquired sex roles), style, and communication patterns differ between men and women, and how this affects and impacts their interpersonal communication. Students discuss how language and culture reflect and reinforce gender roles, the role of conflict and power issues involved in male-female interactions, and ways to improve the male-female communication dynamic. (Limited to 25)

CEW

Spec Term, Sec 2, W, 6-8, June 15-29 (3 meetings), FolH 203, Foster. No late fee through June 8.

(Scherrie Foster is a Ph.D. student in adult education/speech-communication at the University of Minnesota, and has taught communication courses at the University. She is writing her dissertation on personal storytelling, and her interests include interpersonal communication and group dynamics)

★CSch 0822 IDENTITY AND INTIMACY IN CLOSE RELATIONSHIPS.

No credit, \$35 (age 62, \$25).

The balance is what we strive for—to connect with someone else, yet remain individual. This course explores the dilemmas and choices in intimate relationships. People may behave as "attachers" (those who fear abandonment and being alone), or as "separators" (those who fear being trapped and smothered by others). At either extreme, individuals may have great difficulty in getting their needs met. An understanding of how these patterns develop and are acted out allows class participants to examine their own behavior. This class is designed to help students recognize their attitudes about intimacy and suggest steps to take to achieve a more comfortable balance. Designed as an educational experience, not a therapy group. (Limited to 40)

CEW

Spec Term, Sec 2, M, 6-9, June 20, 27 (2 meetings), NCCE, Colgan. No late fee through June 13.

(Philip Colgan is an instructor in the Department of Family Practice and Community Health at the University of Minnesota, and is a psychotherapist in private practice in Minneapolis)

★CSch 0854 INVESTMENT CHOICES AND STRATEGIES.

No credit, \$20 (no discount for persons 62 and older).

For women who have some knowledge about the basics of investing, financial planning,

★Limited enrollment class. See page 5.

and goal setting, but who want to learn more. The class is in seminar format so that participants may discuss topics of particular interest to them. The characteristics of stocks, bonds, real estate, mutual funds, trusts, and money market funds are discussed in terms of investments versus income and tax benefits. The risks inherent in different investments, how the stock market behaves, and timing in investments also are covered. (Limited to 40)

Spec Term, Sec 1, W, 5:30-8:30, June 22 (1 meeting), Walker Library, 2090 Hennepin Ave, Mpls, Whittlinger. No late fee through June 15.

(Erica Whittlinger, M.B.A., is president of Whittlinger Dubuque, Inc., a financial planning and investment advisory firm)

University Access

★CSch 0900 STUDY SKILLS.

No credit, \$23 (no discount for persons 62 and older).

Thinking about returning to school? About to begin your first class? Already in school and having problems with your studies? This seminar offers basic techniques on budgeting your time, developing efficient study habits, getting the most from lectures and textbooks, taking and organizing notes, studying for exams, and taking exams. The seminar includes lecture, classroom discussion, and practical exercises. (Limited to 30)

Fall Spec Term, Sec 4, W, 9 a.m.-1, Sept. 7 (1 meeting), MacP, DeNoble. No late fee through Aug. 31.

(Jan De Noble is a graduate student in English and a teaching assistant in the General College at the University of Minnesota)

CSch 0930 MATH SKILLS ASSESSMENT CLINIC.

No credit, \$21 (no discount for persons 62 and older).

The Assessment Clinic is the introductory step in the Math Preparation Program. It begins with a brief discussion of math anxiety/avoidance, and how it affects math performance. A math skills test is given which allows students to determine their current levels of math skills. After self-scoring their tests, students will receive an interpretation of the results. Additional topics include an overview of the math program, a discussion of mathematics as a problem-solving tool, and administration of the Math Anxiety Rating Scale.

Spec Term, Sec 4, M, 5:30-8:30, May 23 (1 meeting), NCCE, Robertson. No late fee through May 16.

(Douglas Robertson is an associate professor in the Division of Science, Business, and Mathematics of the General College, and has worked in the Math Preparation Program since 1977. His research interests are in developmental mathematics education)

★CSch 0931 BASIC MATHEMATICS REVIEW.

No credit, \$93 (age 62, \$83).

Individualized instruction and group lecture in basic mathematics including fractions, decimals, ratio and proportion, percentages, the metric system, and word problems from these areas. Students may listen to lecture and/or work on an independent basis with the supervision of a tutor. Option of taking self-graded quizzes to monitor progress during class. Class prepares students for Elementary Algebra. (Limited to 25)

Spec Term, Sec 4, W, 7:15-8:30, June 15-Aug. 24 (11 meetings), CivMinE 212, Robertson. No late fee through June 8.

(Douglas Robertson is an associate professor in the Division of Science, Business, and Mathematics of the General College, and has worked in the Math Preparation Program since 1977. His research interests are in developmental mathematics education)

★Limited enrollment class. See page 5.

★CSch 0932 ELEMENTARY ALGEBRA.

No credit, \$126 (age 62, \$116).

CEW
Individualized instruction and group lecture in elementary algebra including signed numbers, solving equations, graphing, factoring, rational expressions, and roots and radicals. Students may listen to lectures and/or work on an independent basis with the supervision of a tutor. Option of taking self-graded quizzes to monitor progress during class. Prepares students for Intermediate Algebra. Elementary Algebra students interested in Basic Mathematics Review may sit in on that class which follows this class on the same evening. (Limited to 25)

Spec Term, Sec 4, W, 5:30-7:15, June 15-Aug. 24 (11 meetings), CivMinE 212, Robertson. No late fee through June 8.

(Douglas Robertson is an associate professor in the Division of Science, Business, and Mathematics of the General College, and has worked in the Math Preparation Program since 1977. His research interests are in developmental mathematics education)

★CSch 0935 INTERMEDIATE ALGEBRA.

No credit, \$198 (age 62, \$188).

CEW
This is a second course in algebra which covers rational expressions, radicals, roots, quadratic and rational equations and inequalities, determinants, matrices, conic sections, functions and relations, exponential and logarithmic functions, sequences, and series. Option of taking self-graded quizzes to monitor progress during class. Prepares students for Math 1111, College Algebra. Since this is a second course in algebra, students who take this course must know the content of elementary algebra including linear equations and inequalities, exponents, factoring, elementary rational expressions, roots and radicals. (Limited to 40)

Spec Term, Sec 1, M, 5:30-8:30, June 13-Aug. 29 (11 meetings—no class July 4), Arch 30, Robertson. No late fee through June 6.

(Douglas Robertson is an associate professor in the Division of Science, Business, and Mathematics of the General College, and has worked in the Math Preparation Program since 1977. His research interests are in developmental mathematics education)

★Limited enrollment class. See page 5.

Thinking About Going Back to School?

Come to Our FREE Workshop

If you have been thinking about going back to school and don't know where to begin, this informal workshop is for you. Whether you have had some college or none at all, you will find answers to questions about courses, degrees, certificates, available through Extension. You will receive an overview of financial aid programs that may help fund your education. If you are exploring a career change and are wondering how additional education might assist you, find out how our career planning services can help you get started.

If you are not confident about how to study, find out what kind of help you need. You'll learn about free tutoring in note taking, outlining, theme writing, reading, grammar, or whatever help you need to complete a course.

The workshop is informal with plenty of time for questions and answers. Free parking is available.

The workshop will be held Thursday, August 11, from 6 to 9 p.m. in room 135 of the Earle Brown Continuing Education Center on the St. Paul campus of the University. Limited to 100 participants.

To add your name to the registration list for this free workshop, just give us a call at:

624-2388

Study and Travel Adventures Summer Offerings

Registrations for the following Study and Travel Adventure (STA) courses are taken by mail or in person only in room 180 Westbrook Hall, University of Minnesota, 77 Pleasant Street S.E., Minneapolis, MN 55455.

If you like to travel, have an interest in a particular place, or would like a tour with a difference, Study and Travel Adventures are for you. Every tour is conducted by an instructor who is an expert in the field. That expertise, combined with pre-trip lectures and limited tour size, ensures valuable interaction among students and instructors for a memorable trip. You are able to combine the pleasures of a vacation with the satisfactions of learning. STAs come in a variety of packages—ranging from two days to two weeks. All trips are limited in size and fill quickly. Reservations are taken on a first-come, first-served basis.

Call now for detailed itineraries for these and others which will be scheduled during the year: 624-3300. All costs listed are based on the best information available at the time of printing and are approximate only. Costs and details are subject to change without notice. Weekend STAs are designated as 08xx courses. Those with longer trips involved are designated as 09xx courses.

★STA 0815 BIRDS AND WILDFLOWERS OF MINNESOTA'S NORTH SHORE: A WEEKEND FIELD TRIP. June 17-19, 1988.

This weekend trip to Cascade Lodge along Minnesota's North Shore provides the opportunity to enjoy early summer in Minnesota's north woods. Treat yourself to the sound of a distant thrush, the sight of a colorful orchid in bloom and the smell of a fir forest. There is an extensive trail system around the lodge which will allow us to visit a number of different habitats and observe a wide array of species. We will concentrate on bird and wildflower identification during local hikes in the area. Of course, there also will be time to simply relax and enjoy the grandeur of the Lake Superior shoreline. (Limited to 20)

Registration is now open; deadline for registration is May 20. Registrations are accepted on a first-come, first-served basis. Register in person or by mail in 180 Westbrook Hall, University of Minnesota, 77 Pleasant Street S.E., Minneapolis, MN 55455; or call (612) 624-3300 for more information.

Spec Term, Sec 1, no credit. \$159 approximate price includes two nights lodging (double occupancy), three meals, and one pre-trip lecture.

(Roger Eliason, group leader, is a field biologist with an avid interest in Minnesota's native plants and animals)

★STA 0816 WILDERNESS PHOTOGRAPHY IN VOYAGEURS NATIONAL PARK. August 4-7, 1988.

Experience the beauty and charm of one of our nation's newest national parks through the eyes of veteran nature photographer Don Breneman. Learn practical techniques for landscape, wildlife, and wildflower photography amid the sparkling waters and rugged shoreline of Kabetagoma Lake. All-day boat trip to historic Kettle Falls. This unique four-day workshop features seminars and discussions on outdoor photography techniques, as well as field trips and photo critiques. Stay at the rustic Arrowhead Lodge. All you need is film for your camera and transportation to the lodge. The workshop, though intensive, will allow free time for your activities. For family members not participating in the workshop to secure accommodations, call Arrowhead Lodge directly at 1-800-223-2774, ext. 103. This workshop is open to photographers of all skill levels. (Limited to 20)

Registration is now open; deadline for registration is July 1. Registrations are accepted on a first-come, first-served basis. Register in person or by mail in 180 Westbrook Hall, University of Minnesota, 77 Pleasant Street S.E., Minneapolis, MN 55455; or call (612) 624-3300 for more information.

★Limited enrollment class. See page 5.

Spec Term, Sec 1, no credit. \$199 includes three nights lodging (double occupancy), five meals, two boat trips, one to Kettle Falls, and one pre-trip lecture.

(Don Breneman, veteran outdoor photographer, is an associate professor in the College of Agriculture)

★STA 0817 STUDIO ARTS PAINTING IN OILS AND ACRYLICS: A SUMMER WORKSHOP. June 22-26, 1988.

For those interested in the enjoyment and technique of painting. Sessions are designed to encourage personal ideas and to improve skills. Painting can be in acrylics or oils. Workshop will be held at Dillman's Sand Lake Lodge in Lac de Flambeau, Wis., an exceptional, family-run resort which has been offering educational experiences to guests for over 11 years. The lodge is equipped with studio space for art classes as well as a small store which sells artists' supplies. Workshop includes four half-day direct instruction sessions with unlimited additional studio time for you to paint on your own. There also will be free time to take advantage of the resort—swimming, sailing, and nature trails. (Limited to 20)

Registration is now open; deadline for registration is April 29. Registrations are accepted on a first-come, first-served basis. Register in person or by mail in 180 Westbrook Hall, University of Minnesota, 77 Pleasant Street S.E., Minneapolis, MN 55455; or call (612) 624-3300 for more information.

Spec Term, Sec 1, no credit. \$297 approximate price includes four nights lodging (double occupancy), three dinners, four continental breakfasts, all workshop instruction and one pre-trip lecture. (\$267 for those not attending workshops)

(Louis Safer, professor emeritus of art in the General College, is the instructor. His work has been exhibited nationally and in Europe and is included in the collection at the Smithsonian portrait gallery and the national gallery in Finland)

★STA 0818 NATURAL HISTORY DRAWING: A SUMMER WORKSHOP. June 22-26, 1988.

Designed to increase the student's understanding and appreciation of nature and art through the drawing of natural objects. Classically oriented drawing exercises will be combined with natural history discussions of the specimens at hand. Media will include pencil and charcoal with a special emphasis on pen and ink techniques. Students will need to purchase some simple and relatively inexpensive drawing materials. Workshop will be held at Dillman's Sand Lake Lodge in Lac de Flambeau, Wis., an exceptional, family-run resort which has been offering educational experiences to guests for over 11 years. The lodge is equipped with studio space for art classes as well as a small store which sells artists' supplies. Workshop includes direct instruction sessions coupled with excursions to local sites which will provide opportunity for sketching outdoors. You will also have additional studio time in the evenings. Free time is also built in to allow you to take advantage of the resort facilities—swimming, sailing, and nature trails. (Limited to 20)

Registration is now open; deadline for registration is April 29. Registrations are accepted on a first-come, first-served basis. Register in person or by mail in 180 Westbrook Hall, University of Minnesota, 77 Pleasant Street S.E., Minneapolis, MN 55455; or call (612) 624-3300 for more information.

Spec Term, Sec 1, no credit. \$297 approximate price includes four nights lodging (double occupancy), three dinners, four continental breakfasts, all workshop instruction and one pre-trip lecture. (\$267 for those not attending workshops)

(Don Luce, assistant curator, researches, designs, and produces exhibits for the Bell Museum of Natural History. He also does scientific illustrations and fine art. He has a research interest in the history of scientific illustration, and natural history. In addition, he has written a book and several articles on the life and art of Francis Lee Jaques)

★Limited enrollment class. See page 5.

★STA 0917 GREECE: A SUMMER ODYSSEY. June 13-26, 1988.

A unique opportunity to visit Greece during one of the loveliest seasons of the year. In an attempt to combine the pleasant with the useful, this journey will be an adventure into contemporary Greece against the background of its various heritages: classical, Byzantine, and modern. Thus, in addition to visiting classical sites in Athens, the Argolid (Corinth, Argos, Mycenae, Naflion, Epidavros) and Delphi on the mainland, the group will be exposed to the contemporary social and cultural style of Greek society. The tour will include a cruise of the islands in the Saronic Gulf and a tour to Rhodes. The group also will have the opportunity to meet and learn from modern Greek writers and artists. (Limited to 30)

Spec Term, Sec 1, no credit. \$2,999 approximate price includes all transportation from St. Paul/Minneapolis, 13 nights lodging (double occupancy), some meals, and one pre-trip lecture.

(The tour will be under the guidance of Theofanis Stavrou, director of the Modern Greek Studies program at the University)

★STA 0923 THE WILDLIFE AND WILDLANDS OF ALASKA. July 29-August 9, 1988.

An adventure to our 49th state, Alaska, where nature puts on a spectacular showing of unmatched scenery and abundant wildlife. The word Alaska is almost synonymous with wilderness—a land of dense, green forests, rugged mountains, blue-white glaciers, and wildlife galore. The study tour includes the identification and natural history of Alaskan fish, birds, mammals, and the vegetation of the major biomes. Land use challenges and controversies, such as the subsistence hunting and fishing by native Alaskans and petroleum development. The tour is based in Anchorage with trips to Denali National Park, the Kenai Peninsula, and Valdez. Time also will be planned for participants to explore on their own. (Limited to 18)

Spec Term, Sec 1, no credit. \$1,990 approximate price includes all transportation, lodging, two breakfasts, two lunches, one dinner, and one pre-trip lecture.

(James Cooper, Associate Professor of Wildlife at the University, leads the study-tour. He has visited Alaska many times where he has done extensive wildlife research, particularly on the trumpeter swan)

Note: *This course is filled. It is tentatively scheduled again for 1989.*

★STA 0947 THE SOVIET UNION: PAST AND PRESENT. September 6-20, 1988.

All Americans have an image of what the Soviet Union must be like. Now you can compare your preconceptions with on-the-spot personal observation. Visits to the cities of Leningrad and Moscow, and to the Caucasus, explore the splendor of Russia's past and the achievements of its present. Leningrad, Peter the Great's "window to the west," famous for its palaces and museums, the setting of works by Dostoevsky and Pushkin, is also the home of the revolution. The heart of Moscow, a bustling cosmopolitan metropolis, is the Kremlin, seat of the Moscovite tsars and of the current Soviet government. The mountainous Caucasus, homeland of proud, independent peoples whose history and culture predates that of the Russians, gives us a glimpse of the ethnic diversity of this huge expanse called the U.S.S.R. Excursions include points of historical and current interest: tours of such famous art museums as the Hermitage (Leningrad), and the Tretyakov Gallery (Moscow), of the Kremlin, and of representative sites of today's Soviet Union. (Limited to 30)

Spec Term, Sec 1, no credit. \$2,965 approximate price includes all transportation from St. Paul/Minneapolis. 12 nights lodging (double occupancy) all meals, and one pre-trip lecture.

(Adele K. Donchenko, Associate Professor in the Department of Russian and East European Studies at the University, is the group leader. At the University she teaches courses in the Russian language and on Russian civilization and culture. During her many visits to the Soviet Union, Professor Donchenko has studied at Moscow University and has led a number of student groups studying at Leningrad University)

★Limited enrollment class. See page 5.

Research Explorations (REX) Offerings

What is the Research Explorations Program?

Research Explorations (REX) offers the opportunity for public participation in field and laboratory projects of University faculty research.

Research projects are scheduled throughout Minnesota, and exciting projects are also developing at other U.S. and international sites. For example, research volunteers can join an archaeological team in Maine, take part in a geological expedition in Wyoming, or study the effects of indigenous insecticidal plants in Rwanda, Africa. There also are interesting local research projects dealing with the environment, natural resources, wildlife and resource management, social and health issues, architecture, and other disciplines.

Volunteers apply for a project of choice. Applications are screened, and the project leader has final approval. The volunteer's willingness to assist faculty in University research, desire to see the environment from new perspectives, and curiosity and adaptability are important criteria for participation.

Selected individuals contribute their share of the cost of participating in the project, and are responsible for travel expenses. As a donation, the research contribution may be tax deductible. Team members are expected to share in the workload of the day under the guidance of the project leader and staff. This may include hiking, boating, climbing, digging, or whatever physical activity is necessary. Volunteers also may assist in data collection, observation, photography, sampling, questionnaires, interviews, and coding.

Each project is unique, with its own goals and needs. Many do not require specific skills or previous experience and training, but certain general skills and experiences are very helpful. Observational, interviewing, and record-keeping skills are useful, as much research involves data collection, coding, and interpretation. Especially for field projects, camping or wilderness experience is beneficial, and some projects do seek more specific skills such as training in electronics, computers, and photography. However, even more crucial to individual and project success is commitment, common sense, and adaptability to different situations and cultures. Students experience the discovery and satisfaction of experiential learning while advancing important research and expanding intellectual horizons.

Application Process

Persons interested in participating in the REX program first should call (612) 626-0214 for registration materials and complete information, as well as for the application form.

The Contribution: Coverages and Exclusions

REX volunteers contribute funds to cover the cost of their participation in the research project. This contribution covers field and laboratory expenses, compilation of research findings, and costs of planning, implementation, and administration. Projects have different arrangements regarding accommodations, meals, ground transportation, and clothing and equipment needs so cost coverages vary. Volunteer contributions do not cover air fare, costs to and from the assembly site, visas, passports, inoculations, medical or other emergencies, or other personal expenses.

Cancellation and Refunds

Payment of the required initial \$100 deposit is nonrefundable unless the University REX program cancels the research project or the applicant is not accepted as a project participant. The balance of the participant contribution will not be returned if the volunteer withdraws within 30 days prior to the project starting date (unless a replacement can be found).

The research project depends on the financial contribution of the participant for advance costs. No returns or replacements can be made once the laboratory or field project has begun.

Orientation

Prior to participation, volunteers receive necessary information regarding project objectives, site conditions, laboratory and field activities and techniques, clothing and equipment needs, and health and entry requirements (for international projects). Direction and learning continues at the research site.

Project Expectations

The project leader is responsible for the involvement of the volunteer in the laboratory/field work of the research project. The project leader and REX staff reserve the right to end participation of any volunteer and require that the person leave the research site if he or she is unwilling to do the work, is unadaptable to the field conditions or to the research team, or does not adhere to University of Minnesota regulations and policies.

In some countries, the research team's presence requires governmental approval. Thus it is crucial to respect the customs and laws of the host country. Though advance planning is always conducted, sometimes unforeseen situations do arise. Understanding, adaptability, and cooperation are therefore essential for all research participants.

Academic Credit

Opportunity for receiving graduate credit for involvement in Research Explorations projects is currently in the proposal stage. Several project leaders have indicated an interest in allowing participants to earn credit on a directed or independent study basis. Those interested in obtaining credit should check with the REX director and the specific project leader regarding requirements.

1988 Research Projects

Several projects took place during spring and early summer, 1988. The following research projects remain for 1988, and several projects are in the planning stages for 1989. **Call 626-0214 or 624-9345 for the most current project information.**

REX 0105 The Impact of Soil Fertility on Crop Productivity. *Dates:* July 18-29, or Sept. 6-20, 1988. *Contribution:* \$350.

Vegetable growing is gaining importance in Minnesota, and soil fertility research to expand vegetable and small fruit production is part of a University of Minnesota Extension Services research project. Another aspect of the research is studying the use of incinerator ash as a fertilizer source for a field corn crop. Volunteers will learn field research techniques to collect samples of soil and leaf tissue from farmers' fields for lab study. Participants should enjoy outdoor and horticultural activities. *Participation limited to two volunteers.* Project leader is Assistant Professor Carl Rosen, Soil Science. **Call 626-0214 for registration information and an application form.**

REX 0111 Ruffed Grouse Drumming Activities in the Northern Woods. *Dates:* Any three-week period between September 12 and November 4. *Contribution:* \$450. Includes lodging; participants responsible for meals.

This long-term (over 30 years) study is one of the few that has documented the rise and fall of a wildlife population that could be directly attributed to forest management. Research vol-

unteer activities include: investigation and study of drumming sites and bird behavior. *Participation limited to five volunteers.* Project leader is Professor Gordon Gullion, Fisheries and Wildlife. Assembly point: Mille Lacs Wildlife Management Area. **Call 626-0214 for registration information and an application form.**

REX 0115 Taking the "Wild" Out of Wild Rice. *Dates:* Aug. 8-26, 1988. *Contribution:* \$450. Accommodations and meals are the responsibility of the participant.

University of Minnesota research is helping an indigenous cereal to become a domestic crop. Volunteers will be involved in harvesting rice by machines, preparing new beds, and collecting data on seed experiments. *Participation limited to two volunteers.* Project leader is Professor Ervin Oelke, Agronomy and Plant Genetics. Assembly point: University of Minnesota North Central Experiment Station, Grand Rapids, Minn. **Call 626-0214 for registration information and an application form.**

REX 0117 Young Fish Diets—Zooplankton. *Dates:* Section 1—June 13-25 (two weeks); Section 2—July 11-30 (three weeks); Section 3—June 27-July 23, 1988 (four weeks). *Contribution:* Section 1—\$480; Section 2—\$645; Section 3—\$810. Includes room and board at Itasca.

This University research project studies fish food niches and periodicity of feeding; it also investigates which communities of zooplankton are affected over the life of the fish. Volunteers collect fish and zooplankton and work in the lakeside laboratory. *Participation limited to two volunteers.* Project leader is Professor Melbourne Whiteside, Biology, University of Minnesota-Duluth. Assembly point: Lake Itasca Forestry and Biology Station, Itasca State Park. **Call 626-0214 for registration information and an application form.**

REX 0120 Groundwater—Our Vulnerable Natural Resource. *Dates:* Section 1—July 11-July 22, 1988; Section 2—Sept. 12-23, 1988. *Contribution:* \$350. Accommodations and meals are the responsibility of the participant.

Increased competition for water is depleting the supply by disrupting the natural equilibrium, and leaking underground storage tanks, waste disposal, and agricultural chemicals are resulting in groundwater contamination. Volunteers will assist a Minnesota Geological Survey team in determining geologic and groundwater conditions, and in assessing impacts on land use and water use. *Participation limited to six volunteers.* Project leader is Bruce Olsen, Minnesota Geological Survey. Assembly point: Minnesota Geological Survey Office, 2642 University Ave., St. Paul. **Call 626-0214 for registration information and an application form.**

REX 0122 Orogenesis—Early History of the Rockies. *Dates:* July 1988 (exact dates to be determined). *Contribution:* \$600. Travel costs are the responsibility of the participant; volunteers provide their own tent and camping and clothing needs; meals are provided by the project.

Geologists from the University of Wyoming and the University of Minnesota are conducting a field survey of the Sevier thrust belt area to determine timing, rate of movement, and mechanics of the gravel deposits in that area. If this information can be accumulated, the data can be extrapolated to other mountainous sites and their origins resolved. Volunteers will assist the project leader in the search for gravel outcrops. *Participation limited to two volunteers.* Project leader is Professor Chris Paola, University of Minnesota Department of Geology. Assembly point: Denver, Colo. or Salt Lake City, Utah (to be determined). **Call 626-0214 for registration information and an application form.**

REX 0124 Rwanda—Indigenous Insecticidal Plants in Long-Term Food Storage.

Dates: Two or three weeks in late summer or early fall 1988 (exact dates to be determined). (Final written approval from Rwandan research officials is pending.) *Contribution:* \$600—two weeks; \$800—three weeks (plus airfare and accommodations).

This project is in the planning stages and has three important goals: (1) To develop safe, long-term food storage in feeding an ever-growing population, and reducing pesticide imports through use of indigenous insecticidal plants; (2) to grow insect protectants intercropped with edible beans; and (3) to determine potential implications of indigenous insecticidal plants for use in pest management in other countries. Volunteers will work in labs, in the field, and with native farmers to develop insecticidal plant use. *Participation limited to two volunteers.* Project coordinator is Steven Clarke, Morocco Project office, International Agricultural Programs. Assembly point: Butare, Rwanda (Africa). **Call 626-0214 for registration information and an application form.**

REX 0126 Peregrine Falcon Reintroduction. *Dates:* Apr. 15-Sept. 15, 1988 (depending on whether volunteer wants to work in laboratory or field site; also depends on when nesting occurs). *Contribution:* \$350—two weeks; \$550—four weeks.

The purpose of this project is to raise young falcon chicks for release into the wild. Volunteers assisting in April and May could assist with propagation and raising of young falcons at the local facility. Volunteers participating in June, July, or August, could work as assistant hatch site attendants. *Participation limited to maximum of 10 volunteers.* Project leaders are Professor Patrick Redig, Veterinary Medicine; and Professor Harrison Tordoff, Ecology and Behavioral Biology. Assembly point and orientation: 295 M Veterinary Medicine Building, St. Paul campus. **Call 626-0214 for registration information and an application form.**

REX 0127 Manitoba Battles Mistletoe. *Dates:* Sept. 1988 (exact dates to be determined). *Contribution:* \$600. Meals, transportation, and some lodging the responsibility of the participant.

In an effort to stop the spread of the insidious parasitic mistletoe plant to jack pine forests in the United States, the University of Minnesota has joined research forces with the Province of Manitoba. Together they hope to find management strategies to reproduce health stands and stop the spread of the parasite. Participants will collect data and assist in applying treatments to trees. *Participation limited to three volunteers.* Project leader is Professor David French, Plant Pathology. Assembly point: Winnipeg, Manitoba (specifics to be determined). **Call 626-0214 for registration information and an application form.**

REX 0210 A Journey Back to Israel's Past. *Dates:* Three weeks, July 6-Aug. 12, 1988. *Contribution:* \$957. Includes accommodations at the Pardess Hanna Agricultural School.

Led by the Hebrew University of Jerusalem, the University of Minnesota and other universities are participating in the exploration of this site on the Carmel coast. Excavations have revealed a sequence of structures from the Iron Age, and Persian and Hellenistic periods. This year's program will be an exploratory mission prior to opening the University's site officially in summer 1989. Volunteers will be involved in excavation, classification, and record keeping. *Participation limited to three volunteers.* Project leader is Professor Philip Sellow, Classical Studies. Assembly point; Jerusalem. **Call 626-0214 for registration information and an application form.**

REX 0226 Industry and Town Formation in Maine. *Dates:* July 18-29, 1988. *Contribution:* \$600. Does not include meals, accommodations, or travel.

This University of Minnesota field research project will study early industrial and population center beginnings in Maine. Volunteers will be involved in site survey and archaeological

excavation activities at sites from Kittery to Portland, Maine. *Participation is limited to five volunteers.* Project leader is Professor Peter S. Wells, Anthropology; and Director, Center for Ancient Studies. Assembly point: Portland, Maine. **Call 626-0214 for registration information and an application form.**

REX 0227 Children's Folklore and Culture. *Dates:* July 18-Aug. 5, 1988. *Contribution:* \$450. Volunteers must provide own transportation and cassette recorder; tapes and field notebook provided by project.

This Twin Cities metropolitan area project will attempt to describe pre-adolescent culture in the 1980s. Through observation and interviews of groups of children in day camp and playground program sites, researchers will learn about children's games, songs, language, and jokes. Volunteers must exhibit strong observational skills, rapport with children, and ability to use tape recorder and compile research notes. Two references requested. *Participation limited to minimum of three volunteers and maximum of ten.* Project leader is Professor Gary Alan Fine, Sociology. Assembly point: 1152 Social Sciences, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0228 The Archaeological Origin of Wild Rice Harvesting. *Dates:* Three weeks, June 1988 (exact dates to be determined). *Contribution:* \$450. Lodging and meals are \$64 per week; participants provide own transportation to and from site.

Archaeological excavation of a prehistoric site in Itasca State Park in northern Minnesota will attempt to determine the origins of wild rice harvesting. REX volunteers will have the opportunity to excavate and photograph at the site, collect data, and help interpret findings in the laboratory. *Participation limited to six volunteers.* Project leader: Professor Guy Gibbon, Anthropology. Assembly point: Itasca State Park. **Call 626-0214 for registration information and an application form.**

REX 0229 Prehistoric Ceramics in Minnesota. *Dates:* Section 1, two weeks Apr. 15-May 27, 1988; or Section 2, three times per week for five weeks, same time period. *Contribution:* \$350. Transportation, accommodations, and meals are responsibility of the participant.

This study focuses on prehistoric ceramics in Minnesota, much of which was excavated by Professor Elden Johnson. Professor Guy Gibbon, who worked with Johnson, is now responsible for the laboratory work of the project. Research volunteers are needed to assist in identification, sorting, and recording information regarding these prehistoric artifacts. *Participation limited to two volunteers.* Project leader is Professor Guy Gibbon, Anthropology. Assembly point: Archaeology laboratory, Ford Hall, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0230 International Women's Rights Issues. *Dates:* Time to be arranged according to schedule of volunteer and project leader. *Contribution:* \$350. Participant must provide own transportation, meals, and accommodations if needed.

Arvonne Fraser, Senior Fellow at the Hubert Humphrey Institute, has worked on women's issues for several years. As Director for the Center for Women and Public Policy, she has received a vast amount of information regarding the actions of women activists and women's organizations throughout the world. Ms. Fraser is seeking a research volunteer to assist with the reading, analysis, abstraction, and compilation of this wealth of information. The ability to read or write in Spanish, French, or Portuguese would be an asset, but is not required. *Participation limited to one volunteer.* Project leader is Arvonne Fraser, Hubert Humphrey Institute. Assembly Point: 143 Hubert Humphrey Institute, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0314 Chronobiology—The Rhythms of Life. *Dates:* Section 1—June 13-24, 1988; Section 2—July 11-22, 1988; Section 3—Aug. 1-19, 1988. *Contribution:* Section 1 and 2—\$350; Section 3—\$450. Accommodations and meals are responsibility of the participant.

The fine line between curative and toxic effects of drugs used to combat disease is affected by circadian (24 hours), ultradian (under 24 hours), and infradian (over 24 hours) body rhythms. By regulating the administration of drugs to correspond to the strengths and weaknesses of human organs, University of Minnesota researchers take into account chemical changes controlled by the body's internal clock. Volunteers will work in the clinic, collecting, tabulating, and analyzing data and will also measure their own body variables to determine their own circadian rhythms. *Participation limited to two volunteers per section.* Project leaders are Dr. William Hrushesky, Laboratory Medicine and Pathology, and Robert Sothorn. Assembly point: 5-279 Millard Hall, 420 Washington Ave. S.E., Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0322 The Art and Science of Orthodontics. *Dates:* Any two-week period, fall quarter 1988 (Sept. 12-Nov. 4). *Contribution:* \$350. Accommodations and meals are responsibility of the participant.

This research has two dimensions. One project involves the development and use of a FORTRAN program to quantify data regarding occlusion or mismatch of jaw alignment. This data will lead to new surgical techniques to alleviate the problem. A second project examines the use of stereophotogrammetry (contour mapping) in the clinical analysis of the facial form. Volunteers will be involved in manipulating data on computers and observing and assisting orthodontic clinic staff. *Participation limited to two volunteers per section.* Project leader is Dr. Dianne Rekow, Orthodontics, Assembly point: Department of Orthodontics, Moos Tower, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0324 Alcohol and Degenerative Disease. *Dates:* One-week period—May 2-6, June 6-10, July 11-15, Sept. 5-9, or Oct. 3-7, 1988. *Contribution:* \$350. Participant is responsible for travel expenses to and from the research site, accommodations, and meals.

Alcohol consumption may have a role in the etiology and/or prognosis of various degenerative diseases, such as coronary heart disease. The purpose of this study is to develop lab tests for quantitation of long-term alcohol consumption. Research volunteers may be involved in lab work, using computer software on protein analysis; they may also input crucial data into a computer data bank. Some familiarity with basic laboratory procedures and equipment would be helpful. *Participation limited to one volunteer.* Project leader is Dr. Myron Gross, Research Associate, Epidemiology. Assembly point: Mayo D 330-6, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0403 The Fine Homes of Architect Edwin Lundie. *Dates:* Summer 1988 (exact dates to be determined). *Contribution:* \$350.

Edwin Lundie's work encompassed over 300 projects, many of them fine homes and vacation houses in Minnesota and Wisconsin. Volunteers will assist the research team in recording these structures through photography, drawings, and oral interviews. Participants must have basic photographic ability, home-plan drawing skills, and/or ability to use a cassette tape recorder. Research will take place in the Twin Cities, along Lake Superior's North Shore, and in Wisconsin. *Participation limited to three volunteers.* Project leader is Professor Dale Mulfinger, Architecture and Landscape Architecture. Assembly point: 110 Architecture, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0404 Molecular Processes—From Computer Simulation to Film. Dates: June 15-Aug. 26, 1988. Four hours per week. *Contribution:* \$350. Participant must provide own transportation, accommodations, and meals.

Researchers are now able to produce visualizations rather than only numerical calculations of molecular processes in fluids and at fluid-solid interfaces. A research volunteer with an electronics photographic background is needed to produce a film of one or more of the computer animations of molecular processes being studied. To make the film, the volunteer must devise a method to make the IBM-AT computer trigger a high quality super 8mm movie camera, frame by frame. Thus familiarity with electronics and photography would be very useful. *Participation limited to one volunteer.* Project leader is Professor Woods Halley, Physics. Assembly point: 436 Physics, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0801 American Movie Mania in the 1930s. Dates: Apr. 4-29, 1988. Five hours per day. *Contribution:* \$350.

Professor Herbert Scherer has spent the past 10 years researching America's love affair with movies and movie theaters during the Depression. He has had colorful conversations with theater ushers, managers, owners, film distributors, architects, and many moviegoers. Now Scherer needs assistance in transcribing these recollections from cassette to print. The resulting analysis and record of the 1930s moviegoing experience will be several articles and a chapter for a book on art-deco theaters. *Participation limited to one volunteer.* Project leader is University Assistant Professor, and Art Librarian, Herbert Scherer. Assembly point: 5 Wilson Library, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

REX 0802 Artistic Discovery in 17th-Century Naples. Dates: Any time between now and the end of 1988—schedule to meet needs of volunteer and project leader. *Contribution:* \$350. Participant must provide transportation, meals, and accommodations if needed.

Although Caravaggio, an Italian Baroque painter, has become familiar to many today, Caracciolo, another artist greatly influenced by him, still remains relatively unknown and enigmatic. Professor Michael Stoughton, art historian, has been working on what will be the first book-length study of Caracciolo. He seeks the assistance of a research volunteer to translate and transcribe Latin documents about the artist's life. The project also involves library research on iconography of the Carmelite and Carthusian religious orders. *Participation limited to one volunteer.* Project leader is Professor Michael Stoughton, Art History. Assembly point: 107 Jones Hall, Minneapolis campus. **Call 626-0214 for registration information and an application form.**

Project Proposals Being Developed for 1989

Barbados Water Quality and Land Use Project. Professor James Perry and Professor Charles Blinn, Forestry. Spring 1989, Belair Research Station, Barbados.

Euro-Africa Bird Migration Project. Professor Yosef Cohen, Fisheries and Wildlife. Late summer or early fall 1989, Elat, Israel.

Tel Dor: Back to Israel's Ancient Past. Professor Ronald Marchese, History, University of Minnesota-Duluth. July-August 1989, Dor, Israel. (The University of Minnesota is planning to open a new archaeological section.)

The Lenca Indians—From Independent Chieftdoms to Peasant Farming. Professor John M. Weeks, Wilson Library and Departments of Anthropology and Latin American Studies. Five weeks of archaeological and ethnographic fieldwork in western Honduras during spring 1989.

The Kelheim Project—A Search for Germanic Beginnings. Professor Peter Wells, Anthropology and Director, Center for Ancient Studies. A return in summer 1989 with Professor Wells to continue to uncover the rich cultural history of Germany.

Translating the Works of Honduran Missionaries. Professor John M. Weeks, Wilson Library and Departments of Anthropology and Latin American Studies. Translating manuscripts of sixteenth-century missionaries (Mercedarians) from Honduras.

Elderhostel (for those over 60)

The University of Minnesota, along with several other Minnesota colleges, offers persons 60 and older a sampling of college life through a program called Elderhostel. The colleges will offer week-long programs of residential continuing education for anyone 60 and over who has a desire to explore new ideas and meet new people, young and old. In its 11th year in Minnesota, Elderhostel is part of a national network that began 14 years ago.

Hostelers live in college dormitories, interact with peers, and experience the role of student in specially designed academic but noncredit courses. There are no exams, no grades, and no previous educational requirements. Courses are taught by regular college faculty. The cost for a one-week program is \$225 for food, lodging, and class instruction.

June 5-11, Itasca State Park: **Deep in the Virgin Forest—Spring in the Mississippi Headwaters Country.**

July 19-25, July 21-27, Minneapolis Campus: **Sommerfest '88—A Viennese Music Festival.**

July 31-Aug. 6, Minneapolis Campus: **Contemporary African Politics; Debussy—Music at the Turn of the Century; Tin Pan Alley Revisited.**

Sept. 25-Oct. 1, Itasca State Park: **Deep in the Virgin Forest—Autumn in the Mississippi Headwaters Country.**

Call 624-7004 for details and registration instructions.

General Information

Faculty

The teaching staff in Extension Classes consists primarily of University of Minnesota faculty. In some instances, faculty members from other educational institutions and specialists in professional and business fields have been selected to teach courses. All Extension Classes instructors are approved by the academic departments through which classes are offered.

Additional staff—Faculty other than those listed under each department may be assigned to teach certain courses.

Funding Extension Classes

While the state legislature has begun to help fund Continuing Education and Extension, the Extension Classes program—including instructional, administrative and staff costs and related costs—is supported mainly by students' tuition. Therefore, depending on overall enrollments, program adjustments are sometimes necessary, as is the cancellation of classes in which enrollment is low.

Campus Services

Recreational Sports Facilities

An Extension student may use the sports facilities of the University, during scheduled recreation hours, through either of the following methods.

1. Students registered for three or more credits may pay a sports facilities fee (\$7.50 per 5-week summer term, subject to change) that entitles them to use University facilities and participate in Recreational Sports programs. The sports facilities fee should be paid at the time of registration in the Extension registration office in Wesbrook Hall. The sports facilities fee is entered on a receipt separate from the course fee statement. Students must present the receipt when they wish to use sports facilities.

If students cancel classes, they must surrender the facilities fee receipt at the time of cancellation. The University reserves the right to cancel sports facility permits of students who cancel classes and do not surrender the permit.

The sports facilities permit fee will not be refunded after the second week of classes. No tuition refund will be made without surrender of the facilities fee receipt.

2. Students registered for fewer than three credits, or who are registered in noncredit courses, must purchase a Recreational Sports Participation Permit if they wish to use sports facilities. Call 625-6800 after June 1 to find out participation permit costs; identify yourself as an Extension student.

Recreational Sports Participation Permits may be purchased at Cooke Hall. Proof of enrollment (the student's receipted copy of the registration form) is required.

Recreational sports facilities include swimming pools, tennis courts, gymnasiums, racquet courts, fields, and other areas on both the Minneapolis and St. Paul campuses. Separate towel and locker rental is also available.

Since facilities are heavily used, often to capacity, their use may be restricted occasionally.

Services for Students with Disabilities

Adapted services and procedures are possible throughout the University of Minnesota. Information, counseling, and referral services are provided for students and prospective students with physical, sensory, learning, and emotional disabilities. Students are encouraged to contact the Extension Counseling Office, 314 Nolte Center, 625-2500 or the Office for Students with Disabilities, 12 Johnston Hall, 624-4037 (626-1346 TTY/TDD).

Health Service

Students who register for at least one Extension class may enroll in the Boynton Health Service Extended Outpatient Plan. Those enrolled in the plan are eligible to receive general medical care and laboratory tests at the Health Service at no charge. Full or partial charges are made for prescription drugs, glasses, dental care, routine physical examinations, and some specialty care. Mental health services, x-rays, and minor surgical procedures are charged to the student's hospitalization insurance; any balance after insurance is covered by the Extended Outpatient fee. The cost of the plan is: 10-week term (plus 4-week interim), \$85; first 5-week term, \$30.50; second 5-week term (plus 4-week interim), \$54.50; interim only, \$24.

Health Service summer hours are 8 a.m. to 4:30 p.m., Monday through Friday (closed holidays). When the Health Service is closed, medical care for emergencies is available at the University Hospital Emergency room; one-half of the charges that are not collectible from a student's hospitalization insurance (excluding take-home drugs and supplies) will be paid by Boynton Health Service if the student has paid the Extended Outpatient Plan fee. Students who do not have medical insurance and those who use emergency rooms other than University Hospital's emergency room are responsible for the entire bill. Follow-up care after an emergency must be obtained at Boynton Health Service to be covered.

Students interested in enrolling in the Extended Outpatient Plan must do so no later than the end of the first week of the term. Students may cancel their membership in the plan before the end of the first week of the term and receive a full refund upon surrender of the health service receipt.

Students who do not belong to the Extended Outpatient Plan and spouses of students may use the Health Service on a fee-for-service basis.

The Extended Outpatient Plan fee does not cover hospitalization or surgery. However, in some cases, Extension students who have paid for extended outpatient benefits may be eligible to purchase the University-sponsored hospitalization insurance offered to day school students. Call 624-0627 for more information on hospitalization insurance. The additional cost is \$91 for both summer terms plus interim.

For additional information on the Health Service, call 625-8400 and request the booklet *Welcome to Boynton Health Service*, or pick it up at 101 Wesbrook Hall.

Libraries

The University of Minnesota—Twin Cities Libraries contain more than 4 million catalogued volumes. In addition to books and periodicals, the libraries have substantial holdings of government documents, manuscripts, archives, phonograph records, audiovisual tapes, and other materials.

Humanities and social science collections: The main humanities and social sciences collections are in Wilson Library on the West Bank and include American studies, anthropology, art, business, film, geography, history, language, literature, philosophy, political science, religion, sociology, and women's studies. The collections for education, library science, and psychology are found in Walter Library on the East Bank. (Walter also includes a broad general undergraduate collection.) The collections in design, vocational education, family social science, rural sociology, and textiles are found in the St. Paul Central Library on the St. Paul campus.

Science collections: The main science and technology collection, including chemistry, engineering, geology, and physics is housed in the Science and Engineering Library in Walter Library. The health science collections, including allied health, dentistry, medicine, mortuary science, nursing, pharmacy, and public health are in the Bio-Medical Library in Diehl Hall on the East Bank. The agricultural and biological sciences collections are found in the St. Paul Central Library on the St. Paul campus.

Many subject collections are located in other buildings, as well. Call for locations on materials in horticulture, architecture, entomology, mathematics, forestry, plant pathology, law, journalism, maps, music, public affairs, government publications, biochemistry, natural

history, East Asia, South Asia, and the Middle East. Special collections exist for children's literature, social welfare history, and other areas.

Reference and research service points are located in major library buildings: for humanities and social sciences, Walter Library, first floor, and Wilson Library, first floor; for business, Wilson Library, second floor; for government publications, Wilson Library, fourth floor; for bio-medical subjects, Diehl Hall, third floor; for science and technology, Walter Library, second floor; and on the ground floor of the St. Paul Campus Central Library.

Specialized services of University Libraries include in-depth reference service, library instruction, computer-literature searching, inter-library borrowing, and photocopying.

Continuing Education and Extension students are encouraged to use library services. A current fee statement (the student's receipted copy of the registration form) is needed to borrow materials. For library hours, call 624-4552.

Locker Rental Service and Lost and Found

Lockers are available for \$2 for a half locker and \$3.75 for a full locker per quarter. Deposit cards must be purchased (cost is \$18.50) on the campus you are renting a locker: Coffman Union Service Center, East Bank; West Bank Cashier Section, Burs (W); and St. Paul Cashier Office, 107 Coffey Hall.

Locker rental offices are at the Service Center in Coffman Union for the East Bank, the Periodical Shop, 48 SocSci, for West Bank, and on the St. Paul campus at 213 Agricultural Engineering, 32 McNeal Hall, and 231 Classroom Office Building. For more information, call the East Bank main office at 625-0981.

For lost and found assistance, check the lost and found office in the building where you may have lost items. For additional help and information, contact one of the main lost and found offices: Coffman Union Information Desk, 625-4177 or 625-0457 for East Bank; 100 West Bank Union Skyway, 624-5200, for West Bank; and the Coffey Hall Post Office, 625-8284, for the St. Paul campus.

The Coffman Union Service Center, on the ground level of Coffman Union, in addition to locker rental, offers several other services: postal services; MTC monthly pass and commuter ticket sales; parking coupons; discount movie passes; and campus bus (Route 13) punch cards.

Parking Facilities

Parking is available for Extension students at a nominal fee. Call 624-2388 to request a parking and campus map. For parking information, call 625-2862 or 625-6566.

Parking for handicapped students—For information on parking for the handicapped, call the University Police Department, 624-3550 or the State of Minnesota Special Permits Division at 296-6911.

Police Services

The University Police Department is your full-service law enforcement agency for the campus community, available to Extension students as to others, for responsive crime control, emergency, and other related public service and assisting roles.

Strategic priorities of prevention, interception, and investigation are implemented by almost one hundred employees, including over forty security monitors who are University students providing building security, crime reporting, and rules enforcement. Regular officers are extensively trained, certified according to state standards, and completely authorized agents of the criminal justice system. You are urged to help them help you—report crimes, take advantage of informational and prevention programs by the department, and by all the

means that can be achieved together—protect yourself. Contact University Police from any campus phone by dialing the appropriate telephone numbers listed below:

Police-Fire-Emergency (only)	911
Escort	624-WALK
Non-urgent contacts (dispatcher)	624-7828
Chief of Police	624-2575
All other (including program requests)	624-3550

Arts and Entertainment

Educational and cultural events are offered regularly on the University campuses. Some are open to the public and student body without charge.

The Department of Concerts and Lectures presents the Northrop Dance Season along with other arts and entertainment events. For information about scheduled performances, call the Northrop Ticket Office, 624-2345. For information about University Theatre productions, call the ticket office (625-4001).

Also check student and local newspapers' entertainment sections for events.

Degrees and Certificates

Below are listed degrees and certificates which can be completed entirely through Extension Classes to fit the goals, interests, and professional needs of most people. For complete information, call the Extension Counseling Office: *telephone 625-2500* to arrange day or evening advising. For complete information, see page 557 in the 1987-88 Extension Classes Bulletin.

Degrees

General College

Associate in Arts (A.A.)
Bachelor of Applied Studies (B.A.S.)
Bachelor of General Studies (B.G.S.)

College of Liberal Arts

Bachelor of Arts (B.A.)
Bachelor of Science (B.S.)
Bachelor of Individualized Studies (B.I.S.)

School of Management

Bachelor of Science in Business (B.S.B.)

Institute of Technology

Bachelor of Civil Engineering (B.C.E.)

University College

(B.A. and B.S.)
The Inter-College Program
Program For Individualized Learning
(formerly University Without Walls)

College of Agriculture

Bachelor of Science in Food Science and Technology (B.S.)

College of Home Economics

Bachelor of Science in Food Science and Technology (B.S.)

Graduate Degrees

Master of Arts in English (Graduate School)
Master of Agriculture in Food Technology (College of Agriculture)
Master of Business Taxation (M.B.T.)
Graduate Minor Program in Gerontology

Certificates

Check the list in the 1987-88 Extension Classes Bulletin, page 585.

For free program advising, telephone 625-2500

Campus Buildings

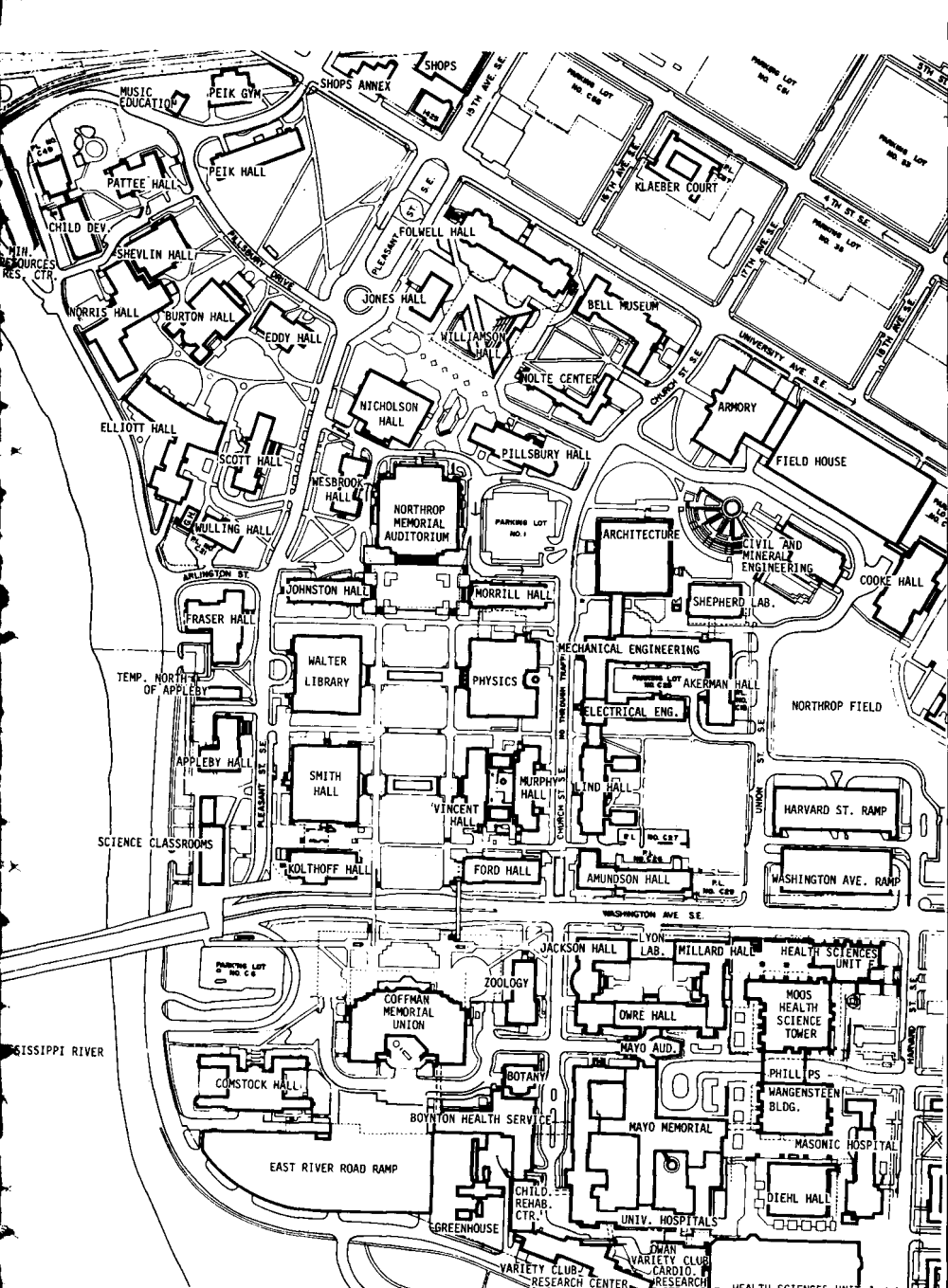
AkerH, *Akerman Hall*
 AlderH, *Alderman Hall (St. Paul)*
 AndH, *Anderson Hall (West Bank)*
 APH, *Appleby Hall*
 Arch, *Architecture*
 ArtB, *Art Building (West Bank)*
 BellMus, *Bell Museum of Natural History*
 BioSci, *Biological Science Center (St. Paul)*
 BlegH, *Blegen Hall (West Bank)*
 BorH, *Borlaug Hall (St. Paul)*
 BuH, *Burton Hall*
 CentLib, *Central Library (St. Paul)*
 CivMinE, *Civil and Mineral Engineering*
 ClaOff, *Classroom Office Building (St. Paul)*
 CookeH, *Cooke Hall*
 EBCEC, *Earle Brown Continuing Education Center (St. Paul)*
 EddyH, *Eddy Hall*
 Elth, *Elliott Hall*
 FergH, *Ferguson Hall (West Bank)*
 FolH, *Folwell Hall*
 FordH, *Ford Hall*
 FraserH, *Fraser Hall*

HckrH, *Haecker Hall (St. Paul)*
 HHHHCir, *Humphrey Center (West Bank)*
 Intermedia Arts, *Intermedia Arts of Minnesota (425 Ontario S.E., formerly UC Video)*
 JonesH, *Jones Hall*
 Kolth, *Kolthoff Hall*
 Law, *Law Building (West Bank)*
 MacP, *MacPhail Center, 1128 LaSalle Avenue, downtown Minneapolis*
 MechE, *Mechanical Engineering*
 McNH, *McNeal Hall (St. Paul)*
 MoosT, *Moos Tower (formerly HSUnitA)*
 MurH, *Murphy Hall*
 NichH, *Nicholson Hall*
 NCCE, *Nolte Center for Continuing Education*
 Norrish, *Norris Hall*
 SciCB, *Science Classroom Building*
 VinH, *Vincent Hall*
 VoTech, *Vocational-Technical Education (St. Paul)*
 WaLib, *Walter Library*

Departments, Course Designators

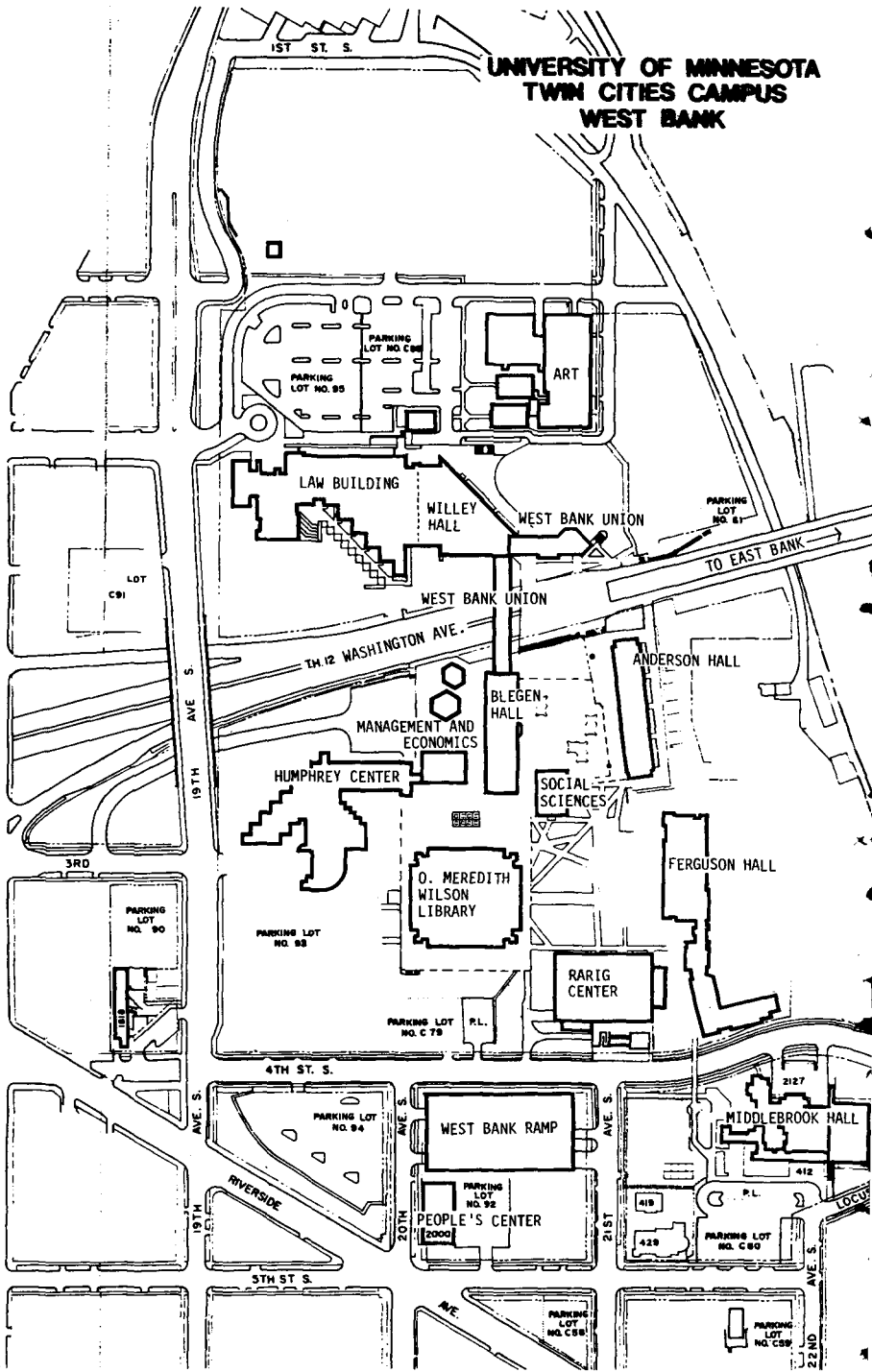
Acct, *Accounting*
 AmSt, *American Studies*
 Anth, *Anthropology*
 Arch, *Architecture*
 ArtH, *Art History*
 Arts, *Studio Arts*
 Biol, *Biology*
 Bot, *Botany*
 BGS, *Business, Government, and Society*
 BFin, *Business Finance*
 BLaw, *Business Law*
 CFP, *Certified Financial Planner*
 CPsy, *Child Psychology*
 Chn, *Chinese*
 CE, *Civil and Mineral Engineering*
 Clas, *Classical Studies*
 CSch, *Compleat Scholar*
 Comp, *English Composition*
 CSci, *Computer Science*
 CISy, *Curriculum and Instructional Systems*
 DSci, *Decision Sciences*
 Dsgn, *Design*
 EAS, *East Asian Studies*
 Econ, *Economics*
 Educ, *Adult and Teacher Education*
 Elem, *Elementary Education*
 Engl, *English*
 FSoS, *Family Social Science*
 Fren, *French*
 Frit, *French and Italian*
 GC, *General College*
 Geog, *Geography*
 Ger, *German*
 Hist, *History*
 Hum, *Humanities*
 IEOR, *Industrial Engineering/Operations Research*
 IR, *Industrial Relations*
 Ins, *Insurance*

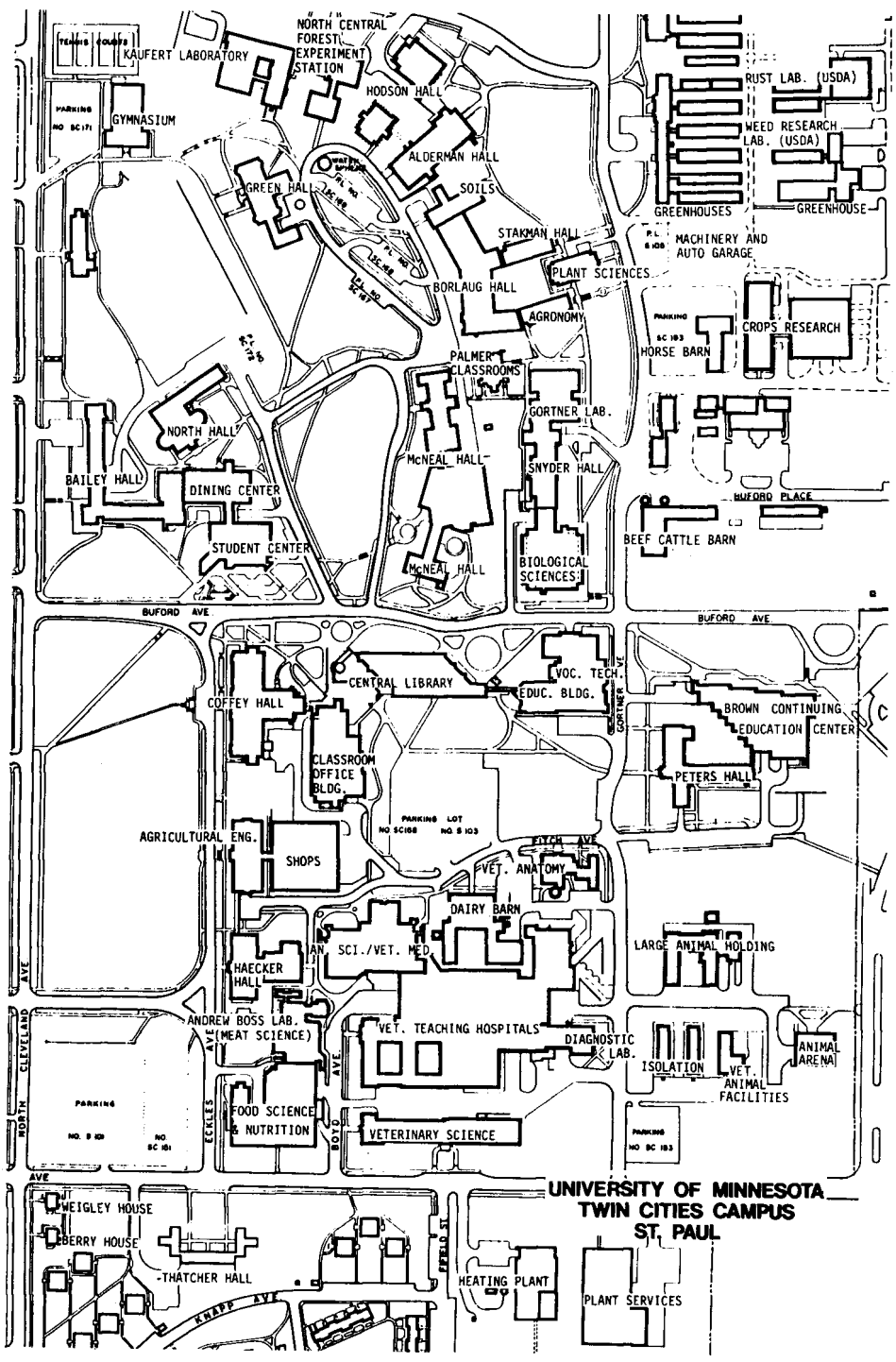
Jpn, *Japanese*
 Jour, *Journalism and Mass Communication*
 LA, *Landscape Architecture*
 Lat, *Latin*
 LASK, *Learning and Academic Skills*
 Ling, *Linguistics*
 LM, *Logistics Management*
 MacP, *MacPhail Center Courses*
 Mgmt, *Management*
 MIS, *Management Information Systems*
 MSci, *Management Sciences*
 Mktg, *Marketing*
 Math, *Mathematics*
 ME, *Mechanical Engineering*
 MidE, *Middle Eastern and South Asian Studies*
 Mus, *Music*
 OM, *Operations Management*
 Phil, *Philosophy*
 PE, *Physical Education*
 Pol, *Political Science*
 Port, *Portuguese (see Spanish)*
 Psy, *Psychology*
 REX, *Research Explorations*
 Rhet, *Rhetoric*
 Scan, *Scandinavian*
 SPFE, *Social and Philosophical Foundations of Education*
 SW, *Social Work*
 Soc, *Sociology*
 Span, *Spanish*
 Spch, *Speech-Communication*
 Stat, *Statistics*
 STA, *Study and Travel Adventures*
 TexC, *Textiles and Clothing*
 Tran, *Transportation*
 VoEd, *Vocational Education*
 WoSt, *Women's Studies*



**UNIVERSITY OF MINNESOTA
 TWIN CITIES CAMPUS
 EAST BANK**

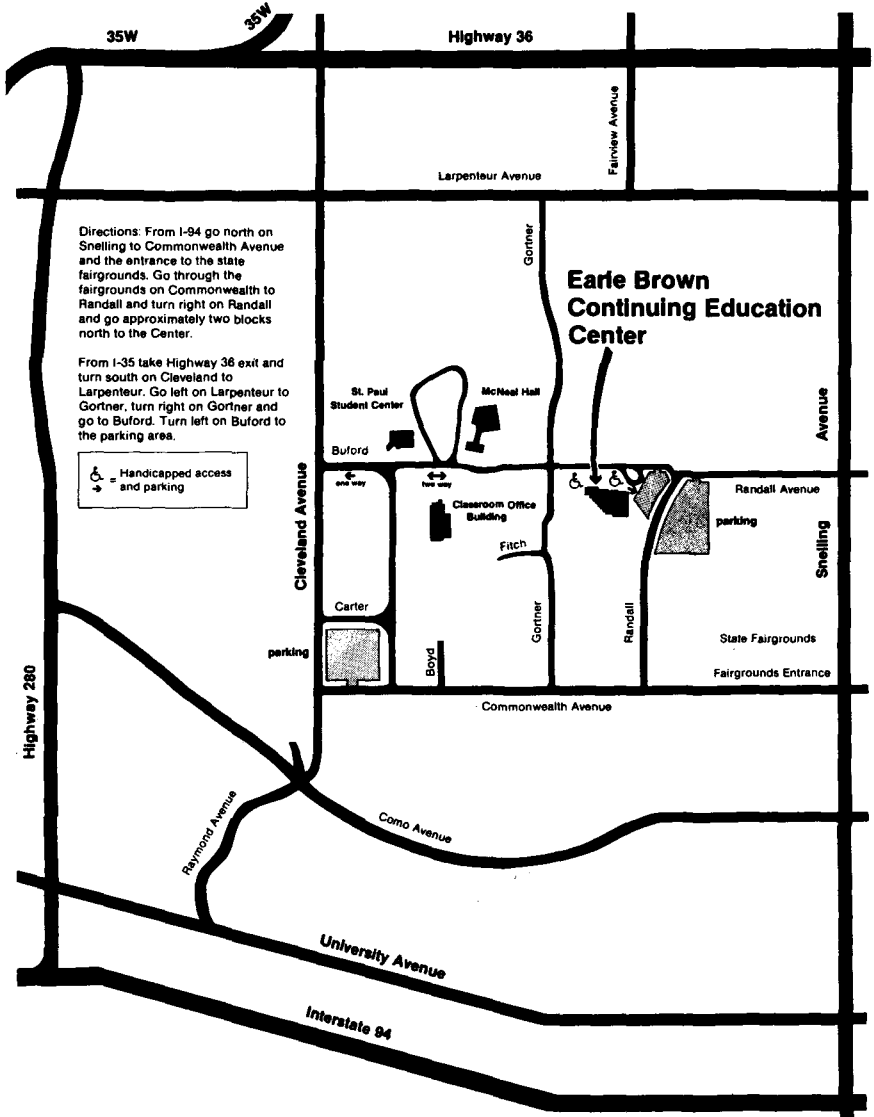
UNIVERSITY OF MINNESOTA
TWIN CITIES CAMPUS
WEST BANK








**UNIVERSITY OF MINNESOTA
TWIN CITIES CAMPUS
ST. PAUL**

ACCESS ROUTES TO EARLE BROWN CONTINUING EDUCATION CENTER—ST. PAUL CAMPUS Parking Map



PARKING FACILITIES (East and West Bank)

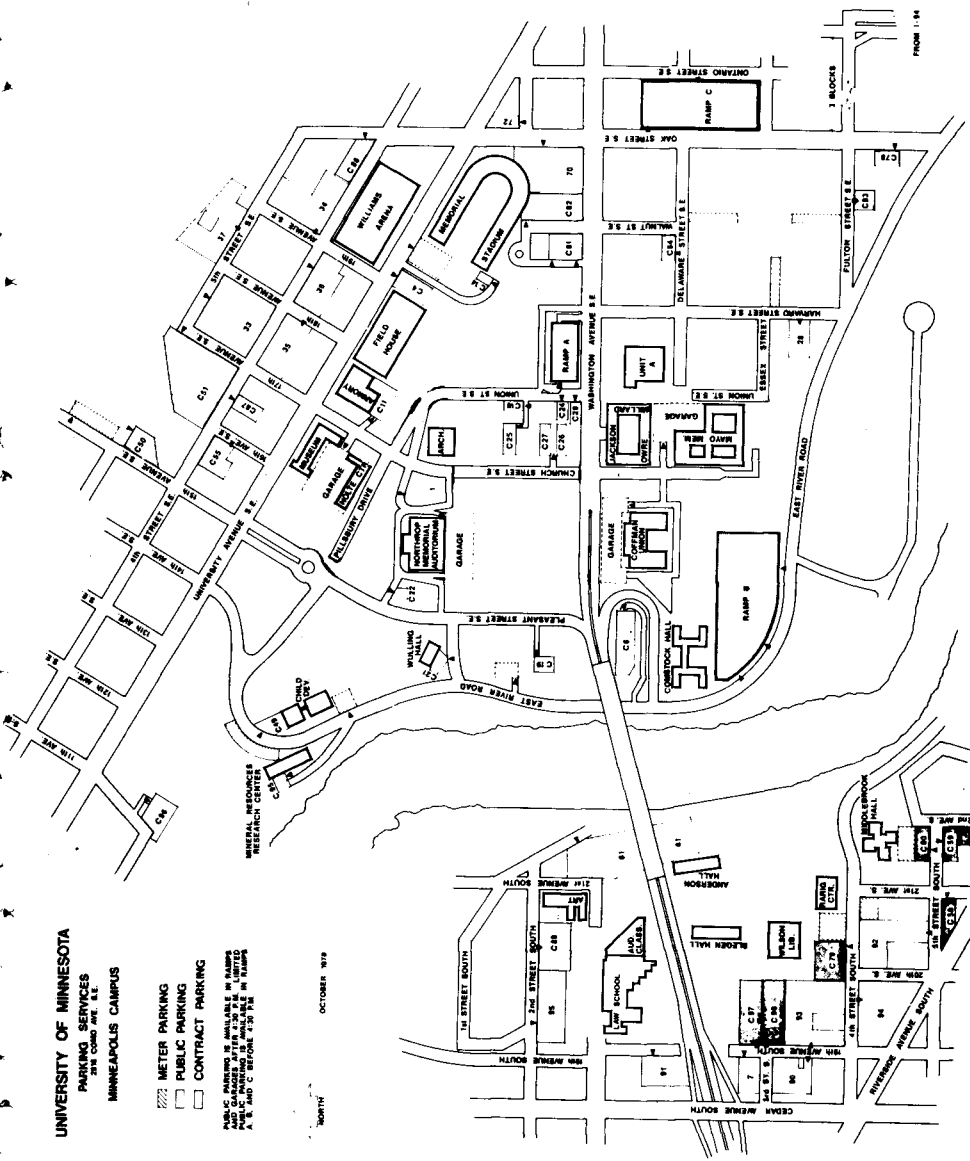
UNIVERSITY OF MINNESOTA
PARKING SERVICES
215 CONANT AVE. S.E.
MINNEAPOLIS CAMPUS

-  METER PARKING
-  PUBLIC PARKING
-  CONTRACT PARKING

PUBLIC PARKING IS AVAILABLE IN PARKING LOTS AND GARAGES AFTER 2:30 P.M. IN LIMITED AREAS AND CONTRACT PARKING IS IN RAMP C.

OCTOBER 1979

NORTH



University of Minnesota

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Index

A

A-F grading system	17
Abbreviations	30, 122
Accounting	31, 54
Additions	9
Admission	10
Adult and Teacher Education	32
Alcohol and drug counseling	51
Alternate choice forms	8
American Studies	33
Anthropology	33
Architecture	34
Art History	35
Arts, Studio	36
Athletic facilities	117
Auditors	23

B

Back-to-school workshops	105
Biology	40
Bookstores	25
Botany	40
Buildings	122, 123, 124, 125
Business Finance	54
Business, Government, and Society	40
Business Law	41

C

Campus buildings	122, 123, 124, 125
Cancellations	27, 28
Certificates	121
Child Psychology	42
Chinese	47
Classical Studies	42
CLEP	22
Compleat Scholar	91
Composition	43, 49, 58, 98
Computer Science	38, 44, 59, 71, 73, 85
Continuing Education Unit (CEU)	21
Continuing Education for Women	91
Counseling office	4, 9, 121
Course numbering	30
Course offerings	31
Credits	19, 20, 21, 22

D

Data processing	44, 59, 71, 73, 85
Decision Sciences	45

Degrees	121
Design	45
Directed studies	22
Disabled Students	13, 117
Dropping a course	27, 28

E

Early Childhood Studies	47
Early registration permission	8
East Asian Studies	47, 48
Economics	48
Elderhostel	116
English	49
Enrollment information	10
Extra credit	22

F

Faculty	117
Family Social Science	51
Fees	10
Fee statements	26
Finance	54
Financial aid	10-14
Financial planning	54
French	55
French and Italian	56

G

General College	56
General information	117
Geography	61
German	61
Grade reports	18
Grading systems	17, 18
Graduate credit	20
Graduate degrees	20, 121

H

Handicapped students	13, 117
Handicapped student parking	119
Health services	118
History	63
How to register	5
Humanities	64, 92

I

Identification card	19
Incompletes	18
Independent study	21-23
Industrial Engineering/Operations Research	65
Industrial Relations	65
In-person registration	7

Insurance	66
Italian	56

J-K-L

Japanese	48, 86
Journalism	67
Landscape Architecture	67
Late registration	9
Latin	68
Learning and Academic Skills	69
Legal studies	41, 59
Library	118
Limited-enrollment classes	5
Linguistics	69
Loans	10-14
Locker rental	119
Logistics Management	69
Lost and found	119

M

MacPhail Center	9, 133
Mail registration	6
Management	66, 70, 73
Management Information Systems	71
Management Sciences	73
Maps, campus and parking	123
Marketing	74
MBA Program	70
Mathematics	56, 74, 103
Mechanical Engineering	76
Middle Eastern and South Asian Studies	76
Military information	14
Music	77, 78, 133

N

Noncredit course offerings	91
Nonlimited classes	5
Numbering of courses	30

O

Office hours	9
Operations Management	78

P

Parking	119, 127
Philosophy	78
Photography	37, 38, 39, 106
Physical Education	79
Police	119
Policies	26
Polish	83
Political Science	79

Portuguese	87
Prerequisites	17
Psychology	80
Public Health	82

Q-R

Reading	82
Real Estate	54
Records	18, 27
Reduced-tuition plans	23
Refunds	28
Regents' Scholarships	13
Registration hours	9
Research Explorations	109
Rhetoric	82
Rules and regulations	26
Russian and East European Studies	83

S

Scandinavian	84
Senior citizens	24, 116
S-N grading	18
Social and Philosophical Foundations of Education	84
Social Work	85
Sociology	85
Spanish	86, Inside Back Cover
Special examinations	22
Speech-Communication	88
Split Rock Arts Program	39
Sports Facilities	117
Statistics	88
Studio Arts	36, 107
Study abroad	Inside Back Cover
Study and Travel Adventures	106
Study skills	69, 103
Summer arts study center	39
Symbols	30

T-U

Textbooks	25
Textiles and Clothing	88
Transcripts	18
Transferring classes	26
Tuition	10
University Research Explorations	109

V-W-X-Y-Z

Veterans	14
Vocational-Technical Education	89
West Bank bookstore	25
When to register	5
Women's Studies	90



MACPHAIL
CENTER
FOR THE
ARTS

Classes in music for young people and adults of all ages and levels

MacPhail Center for the Arts, one of the nation's oldest and largest community music schools, serves a quarterly enrollment of almost 3,000 students, providing classes in music and private lessons in all instruments and voice. The faculty is composed of over 100 teaching-professionals from throughout the Twin Cities music community. Many of MacPhail's teachers are members of the area's premier musical organizations, such as The Minnesota Orchestra, The Saint Paul Chamber Orchestra, Minnesota Opera, Lyra Concert, and the Minneapolis Chamber Symphony.

Students at MacPhail Center are given additional musical opportunities beyond the scope of the private lesson and class. Ensemble and performance opportunities are available for both the recreational musician and the emerging professional. In addition, music theory and solfege classes are available for students enrolled in private study or Suzuki, at a greatly reduced cost.

Summer activities scheduled for 1988 include:

- Classes in piano and voice for adults and young people
- Summer Piano Pedagogy for Beginning and Experienced Teachers
- Chamber Music for Young People
- Flute Choir
- Early Childhood Arts Exploration
- Jazz Combos

For further information on these offerings and others, contact MacPhail Center at 627-4020. MacPhail Center is a Non-Degree Granting Institutional Member of the National Association of Schools of Music and a member of the National Guild of Community Schools of the Arts.

NOTES

Calendar

1988

APRIL						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MAY						
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29	30	31				

JUNE						
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JULY						
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17	18	19	20	21	22	23
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31						

AUGUST						
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7	8	9	10	11	12	13
14	15	16	17	18	19	20
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28	29	30	31			

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The Global Campus



Explore the University of Minnesota's global campus with a study abroad program through the Global Campus. Programs are cosponsored by University academic departments, offering courses in several disciplines. Anyone may apply; you need not be in a degree program. Call the Global Campus at 625-3379 to be placed on the mailing list for information.

Spanish in Cuernavaca: Fall, winter, or spring quarter in Cuernavaca, Mexico, cosponsored by the Department of Spanish and Portuguese. Integrates intensive language instruction, culture courses, and field trips with home-stay experience. (12-14 cr; prereq #)

Literature in London: Spring quarter in London, England, cosponsored by the departments of English and theatre arts. Incorporates literary history; geographical and cultural perspectives into reading and study of literature and drama. Graduate credit available. (12 cr)

French in Montpellier: Fall, winter, or spring quarter in France, cosponsored by the Department of French and Italian. Intensive French language instruction, culture courses, and field trips. (12-14 cr)

German and Austrian Studies in Graz: Fall or winter program cosponsored by the Center for Austrian Studies, the Department of German, and the Global Campus. Integrates intensive language instruction and culture courses with home-stay experience. (12-13 cr)

Polish in Lublin: Summer program cosponsored by the Department of Russian and East European Studies. Led by University faculty. Intensive language instruction, culture courses, and field trips. (9 cr)

Summer Writing Program in England: Cosponsored by the Department of English. Fiction and playwriting in London and Dorset. Graduate credit available. (8-12 cr)

International Program in Toledo, Spain: Cosponsored by the College of Liberal Arts, and the Ortega y Gasset Foundation. Spanish language and other courses in the liberal arts; field trips; full semester, summer terms. (18-27 cr)

Minnesota Studies in International Development: Internship program for Third World development. Locations in Colombia, Jamaica, India, Kenya, Morocco, Senegal; variable credits. Fall quarter orientation classes on campus.

Extension Classes
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101 Wesbrook Hall
77 Pleasant Street S.E.
Mineapolis, MN 55455

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University of Minnesota Bulletin



**Independent Study
1988-89**

Continuing Education and Extension

About the Cover

The portraits on the cover were created by St. Paul artist Alexandra Boies for an Independent Study marketing/promotion campaign called "Great Minds Come Alive." At the 1988 National University Continuing Education Association conference, Independent Study won three awards for its use of this artwork: Gold Awards of Excellence for a calendar and a bus stop poster, and a Bronze Award of Excellence as a visual identification logo. Boies' work has been used in several national publications, as well as in **Mpls. St. Paul, Twin Cities, and Minnesota Monthly** magazines. She has also developed posters for the Ordway Theatre, Minnesota Opera, and Minnesota Public Radio, and T-shirt designs for the St. Anthony Main Jazz Festival, the Twin Cities Marathon, and Hello Minnesota. Her work has been exhibited in galleries in Minnesota and Utah.

Credit Card Payment Plan

You can pay for the tuition, fees, and materials for an Independent Study course by four methods—your personal check, a money order, cash (in person, only, please), or your Visa or MasterCard. Complete details on how to use Visa or MasterCard to pay for an Independent Study course are given in the General Information Section of this bulletin. You **cannot** use your credit card to pay for a course using the Partial Payment Plan (see General Information Section).

Volume 91, Number 11

July 19, 1988

UNIVERSITY OF MINNESOTA BULLETIN (USPS 651-720)

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Bulletin Use

The contents of this bulletin and other University bulletins, publications, or announcements are subject to change without notice. University offices can provide current information about possible changes. It is possible for degree and certificate programs to change or be discontinued. The University will make every reasonable effort to assist admitted students in completing a program.

Equal Opportunity

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

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

Contents

- A Bulletin User's Guide** 6-10
 - Selecting a Course 6-7
 - Registering 7-8
 - Completing an Independent Study Course 8-9
 - Your Responsibilities 9-10
- Course Descriptions** 11-58
- Special Learning Opportunities** 59-62
 - Correspondence Courses 59-60
 - Computer-Assisted Courses 60
 - Contract Alternatives 60
 - Group Study/Credit by Exam 61-62
 - Directed Study 62
- Media-Assisted Courses** 63-72
 - Radio Courses 63-65
 - Television Courses 65-69
 - Audio/Video Cassette Courses 70
 - Home VCR Courses 70-71
 - Upcoming Courses/Programs 71-72
 - Updates for Professionals 72
- General Information** 73-92
 - Credit Card Payment Plan 74
 - High School Students—PSEOA College Enrollment 83
- Extension Certificate Programs** 93-105
- University Degree Programs** 106-112
- Faculty** 113-120
- Index** 121-124
- Campus Map** inside back cover

If you have questions about registering, courses, texts, etc., call Independent Study at the number below. Also see page 3.

For degree and certificate program advising, please call the Extension Counseling Office:

624-0000

625-2500

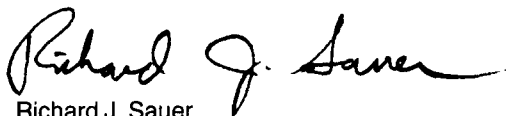
A Message from the President

The University of Minnesota Independent Study program offers an opportunity for learning that is rooted in an old and highly respected model, the individual tutor system still used by prestigious universities here and abroad. Today Minnesota's options are far broader, as this bulletin illustrates, yet they retain the personal character of that tutor model. Even though you will be working at a distance from your course instructor, you can expect a close one-to-one learning link as your assignments, comments, and questions are reviewed.

Independent Study places special demands on students. A mature, self-directed approach to learning is fundamental to success. You set the pace. You shape the quality of your educational experience. You alone determine how fast and how far you move in your study. At the same time, you are assured of guidance by University of Minnesota faculty, a promise of a quality standard that meets University expectations.

This study option opens the doors of the University no matter how far you may be from campus or what hours you can schedule your study. It affords another and special method of continuing your lifelong education.

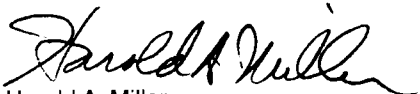
Please accept my best wishes for your success as you pursue your educational objectives.



Richard J. Sauer
Interim President
University of Minnesota

A Message from the Dean

People who elect to continue their education by Independent Study know what they want out of their educational experience. They are self-motivated enough to keep going with no study schedules but the ones they set for themselves. They are mature enough to work independently, with their instructor's guidance, on what interests them most. We're proud of our Independent Study students, and I hope you will join them as students at the University of Minnesota.



Harold A. Miller
Dean
Continuing Education and Extension

Highlights

Toll-Free Information Number

Students **outside** the Twin Cities area can obtain registration and course availability information by calling the toll-free 800 number given below. For any other information (for example, about partial payments, texts, lessons, grades, etc.), students must use the Independent Study general number: 612-624-0000.

1-800-234-6564

Updates for Professionals Program (UPP)

For the last two years, Independent Study has been developing non-credit short courses to help professionals in business and industry maintain their expertise in technological areas. The UPP courses explore the latest developments in computer science, chemical and electrical engineering, and statistical theory. For more information on this program, see the blue section.

New Registration Form

The Independent Study registration form is now larger. When you fill it out to enroll in a course, please take the time to complete the general questions at the bottom. These questions will help us gather numerical information about the people who enroll in our courses—why students enroll, their occupations, and how they learned about Independent Study. Please check off as many responses as apply to you. We won't keep track of your responses by name; we only want this information in order to better understand what kind of courses our students are interested in and what kind of courses we should develop in the future.

Required Social Security Number

Independent Study is now required to obtain a student's Social Security number when he or she registers in a course because the Social Security number is now used as a common identifier for all record systems at the University. That way, if you want to have your Independent Study grade transferred to your day school transcript, the process will go much smoother. You should put your Social Security number on the first line of the Independent Study registration form. If you don't have a Social Security number, Independent Study can assign a nine-digit number (not a real Social Security number) that you can use as your identifying number.

UNIVERSITY OF MINNESOTA

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A Bulletin User's Guide

To make this bulletin easier to use, we've prepared the following five pages. They briefly explain how to select a course appropriate to your needs and wants, how to register, how to successfully complete a course, and your responsibilities as an Independent Study student. More detailed information about Independent Study's procedures, courses, and enrollment options is given in the rest of this bulletin, but these five pages will give you a synopsis of how you can get the most from your Independent Study experience.

Selecting a Course

In order to choose a course appropriate to your educational needs, wants, and abilities, it is important that you understand the course description format used in this bulletin.

- Courses are listed under **departmental or subject headings**, alphabetically arranged. Where other classifications are possible, cross references are given. Also refer to the index.
- The course description below indicates the information that is found in all course descriptions in this bulletin.

¹
Engl 3111 ²SURVEY OF ENGLISH LITERATURE I ³(3657)
⁴12 lessons—⁵\$185—⁶4 degree credits—⁷text price \$23-28—⁸1 audio cassette \$3—Collins

A historical survey of the major figures, movements, and trends in English literature. This course will consider the works of Chaucer, Marvell, Spenser, Shakespeare, and Donne.

1. Department designation and course number
2. Course title
3. Department of Independent Study reference number (for office use only)
4. Number of lessons
5. Tuition cost
6. Number and kind of credits offered (i.e., degree or certificate)
7. Approximate price of texts and materials
8. Instructor's last name (see Faculty list for title)
9. Course content and prerequisites, if any

- Additional information about a course can be obtained by writing to the Department of Independent Study for an introduction to the course study guide. Use the form included at the end of this bulletin. Study guides are also available for inspection at the Independent Study office.

- The University uses the following course numbering system.

0001 to 0998	Noncredit or certificate courses; certificate credit course numbers are followed by a "C"
1000 to 1998	Introductory courses primarily for freshmen and sophomores
3000 to 3998	Intermediate courses primarily for juniors and seniors; also open to other students with at least a C average and necessary prerequisites
5000 to 5998	Advanced courses for juniors, seniors, and graduate students (credits earned through Independent Study, except for specified broadcast television and other courses, are not accepted as graduate credit in the University of Minnesota Graduate School)

- Generally, 3000 and 5000-level courses are more difficult than 1000-level courses. However, you may register in any course you believe you can successfully complete and for which you meet the prerequisites. If you have any questions about course difficulty, contact the instructor (in care of the Department of Independent Study) or the Extension Counseling Office.
- If you need or want a course not listed in this bulletin, it may be available from one of the other member institutions of the National University Continuing Education Association (N.U.C.E.A.). The N.U.C.E.A.'s **Independent Study Catalog** lists the courses that are offered by these institutions. It is available from Peterson's Guides, N.U.C.E.A. Book Order Department, Box 2123, Princeton, NJ 08543-2123. Write to Peterson's Guides for the cost.

Registering

To Register

- You can register for most Independent Study courses at any time.
- Using the Course Descriptions section of this bulletin, select the course or courses you want to register in.
- Complete the registration form at the center of this bulletin.
- Mail or bring in your completed registration form with full or partial-payment tuition (including any special fees) to
 Department of Independent Study
 45 Wesbrook Hall
 77 Pleasant St. SE
 University of Minnesota
 Minneapolis, MN 55455
 Make your check or money order payable to the University of Minnesota, or fill out the Credit Card Payment box on the registration form.

- If you are registering for a Home VCR Course, indicate this on the registration form and include the \$20 deposit fee.
- If you are registering under the G.I. Bill, please indicate this when you register.
- You are encouraged to send one check for tuition and books (approximate book prices are given with the course description). Indicate that you are including payment for texts and add a \$4 service charge per course. Overpayments of \$1 or more will be refunded.

After You Register

- After you register, you will receive a comprehensive study guide, lesson submission forms, mailing labels, and a book order form.
- If you choose to purchase your texts after you receive your study guide, you should obtain them as soon as possible from your local library, bookstore, or the Minnesota Book Center on the Minneapolis campus of the University. You may also order texts by mail through the Department of Independent Study by sending in a list of the books you want to purchase with your check or money order. There is a \$4 service charge per course for ordering texts by mail.
- Students who have not received a fee statement three weeks after mailing in registration and tuition should call 612/624-0000.

Completing an Independent Study Course

- The study guide tells you how to proceed in a course. Read the study guide introduction carefully to understand the course format and study procedures.
- Most Independent Study courses require you to prepare lesson assignments based on required readings (in the texts and study notes). The average time required to complete a lesson is between six and ten hours. Assignments are submitted to the Department of Independent Study, evaluated by the instructor, and returned to you. Do **not** send assignments directly to your instructor.
- You should wait until one lesson assignment has been returned before submitting another. By doing this, you may consider any comments from your instructor and recognize your mistakes and strengths.
- If your instructor asks you to redo a lesson for re-evaluation, you must submit a **\$6.00 resubmission fee** with that lesson.
- Most Independent Study courses require you to take midcourse and final exams. All preceding lesson assignments must be completed before you take an exam. Specific exam information is given in the course study guide.
- Exams may be taken at the offices of Independent Study or under the supervision of an acceptable proctor.

- It is best to set a study schedule and submit assignments on a regular basis.
- Expect to spend a minimum of three months to complete an Independent Study course (excluding grade recording).

Your Responsibilities

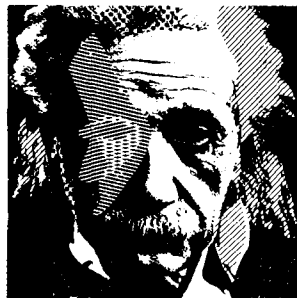
You are responsible for all rules and information given in this bulletin. The most significant rules are listed here; also see the General Information section.

- You must assume full responsibility for enrolling in courses appropriate to your needs and educational level.
- Some colleges and universities set restrictions governing the acceptance of Independent Study credits. Contact your college or department office before enrolling in a course if you plan to apply it to a specific program. If you have any questions concerning the applicability of credits, contact:

Extension Counseling
314 Nolte Center
315 Pillsbury Drive SE
University of Minnesota
Minneapolis, MN 55455
Telephone: (612) 625-2500

- To earn credit in a course, you must complete all required assignments and exams in the sequence given in the study guide (unless special arrangements have been made with the instructor and approved by the Department of Independent Study).
- You are responsible for meeting grade recording deadlines. Allow at least three weeks after course completion for your final grade to be officially recorded. Check with the Department before enrolling if you have deadlines.

Albert Einstein (1879-1955) American theoretical physicist (born in Germany). Formulated the special theory of relativity, the quantum theory of specific heat, and the unified field theory. He was awarded the 1921 Nobel Prize in physics.



- The University of Minnesota Graduate School does not permit Independent Study credits (except **specified** broadcast television and other courses) to be applied toward a master's degree or doctorate. Home VCR courses do **not** carry graduate credit. Independent Study credits may be applied toward the graduate language requirement or used as prerequisites, however. See University Degree Programs section, Graduate School.
- You have one year from the date of registration to complete **most** Independent Study courses. Reinstatements (renewals) of one year are permitted; see General Information section, Tuition.
- If requested within 90 days of registration, transfers from one course to another are permitted. There is a service charge for this privilege. You must complete your course within a year from the date of your original registration. No transfers are permitted after 90 days and after half of the lesson assignments have been completed. Transfers involving a Home VCR Course are **not** permitted. See General Information section, Transferring to Another Course.
- If requested within 90 days of the date of registration, cancellations are accepted and partial refunds can be made. No portion of the tuition will be refunded after 90 days and after half of the lesson assignments have been evaluated. See General Information section, Tuition, for the refund schedule.
- The course completion time, cancellation, and refund policies for television, radio, and Home VCR courses are different from the above. See General Information section, Tuition, for the refund schedule.

Course Descriptions

Accounting (Management)

Also see Business Studies

Acct 1024 PRINCIPLES OF ACCOUNTING I (1524)

16 lessons—\$132.75—3 degree credits—text price \$51-56—Daly
Recording, reporting, and interpreting business events. Use of accounting as a tool of business management. Topics: financial statements; journal, ledger, and trial balance; adjusting process; receivables, payables, and interest; merchandise inventory; plant assets and intangibles.

Acct 1025 PRINCIPLES OF ACCOUNTING II (1525)

16 lessons—\$132.75—3 degree credits—text price \$65-70—Daly
Continuation of Acct 1024. Topics: control over cash; bank reconciliation; petty cash; voucher system, payroll records; partnership accounting; corporation accounting; manufacturing statements; process cost systems; job order cost systems; fund statement; cash-flow statement and financial statement analysis. (Prerequisite: Acct 1024 or introductory college accounting course)

Acct 1051 MANAGERIAL ACCOUNTING (1530)

16 lessons—\$177—4 degree credits—text price \$56-61—Daly
Accounting analysis and reports for managerial decisions. Information for planning and controlling of operations. Must be taken A-F. (Prerequisites: Acct 1025 and at least 90 credits completed or in progress)
This course is now in preparation; please inquire before enrolling.

Acct 5135 INCOME TAX ACCOUNTING (1587)

16 lessons—\$216—4 degree credits—text price \$40-45—Lassila
The more common and important provisions of the federal income tax system as applied to individuals and corporations. Begins with a consideration of which types of income are taxable and which are not. Consideration is then given to gains and losses, dividends, and deductions. Covers recent tax laws, including the Tax Reform Act of 1986. (Prerequisite: Acct 1025 or Acct 1050 and 1051 or equivalent)

Adolescent Psychology

See Child Psychology

Aerospace Engineering and Mechanics (IT)

AEM 3016 DEFORMABLE BODY MECHANICS (3238)

8 lessons—\$227—4 degree credits—text price \$47-52—Patten
See Engr 3016. Students may receive credit for this course either as AEM 3016 or Engr 3016, but **not both**.

Agricultural Economics (Agriculture)

AgEc 1400 AGRICULTURAL MARKETS AND PRICES (1082)

15 lessons—\$177—4 degree credits—text price \$22-27—Coggins
Agricultural markets and marketing systems; food consumption and demand; agricultural production and supply; market prices; marketing margins; markets over space and time; quality differences and grades for farm products; market information; market structure analysis; marketing and pricing institutions; market and price policy; and marketing pricing and economic development. (Prerequisite: Econ 1002 or equivalent)

Course Descriptions

Agriculture

See Animal Science; Entomology; Food Science and Nutrition; Horticultural Science

American Studies (CLA)

AmSt 1920 ELLERY QUEEN AND THE AMERICAN DETECTIVE STORY (A141)

Audio Cassette Course—\$177—4 degree credits—text price \$18-23—10 audio cassettes \$20.75—study guide \$6—Cox

Examines some of the reasons for the popularity of Ellery Queen—author, detective-hero, scholar, editor, and critic. This versatile gentleman represents much of the history and style of the American detective story. Novels and stories from the four "periods" of the Queen canon, as well as other representative American writers, will be assigned for reading and discussion.

AmSt 3920/5920 THE MEANINGS OF PLACE (T143)

10 lessons—\$185—4 degree credits—text price \$52-57—study guide \$18—Clemence and Martin

This course provides direct experiences in analyzing the cultural and psychological messages of our surroundings. With guidance from a cultural historian and a landscape architect, students will observe and explore various settings to discover what present day environments can reveal about the past and to gain a better understanding of the connections between sense of place and feelings of well-being. Places picked for analysis include the Minneapolis and St. Paul central districts, selected Twin Cities neighborhoods, village and small town settings inside and outside Minnesota, and various landscapes of the open countryside. **Students may receive credit for only one of the following: AmSt 3920, AmSt 5920, or Arch 5956. This course will be broadcast Spring 1989 on KTCI-TV (Channel 17) and KWCM-TV (Channel 10) (see the blue section).**

AmSt 3920/5920 THE MEANINGS OF PLACE (V143)

Video Cassette Course—\$185—4 degree credits—text price \$52-57—study guide \$18—Clemence and Martin

See above. **Enrollment restricted to students who can view the cassettes at Walter Library, the Morris Learning Center, or on their Home VCR (see the blue section).**

AmSt 3970 AMERICAN ARCHITECTURE TO 1860 (1408)

13 lessons—\$185—4 degree credits—text price \$48-53—Roberts

Selective examination of building forms and patterns in America, with attention to Old World antecedents and their vernacular expressions during the pre-Revolutionary period. The scope of this course extends into the mid-19th century, covering the birth of a national style (architecture as politics). Also available as Arch 3970.

AmSt 5123 WOMEN IN CONTEMPORARY AMERICAN RELIGION (1412)

10 lessons—\$185—4 degree credits—text price \$62-67—Kilde

A course in religious practice and viewpoints, spirituality, ethics, and issues regarding women in the United States. Also explores feminist scholarship about women in a variety of groups since the 1960s. Also available as WoSt 5123. Students can receive credit for this course only **once**: as AmSt 5123 or WoSt 5123.

Animal Science (Agriculture)

AnSc 1600 HORSE PRODUCTION (1041)

13 lessons—\$177—4 degree credits—text price \$38-43—Jordan

Breeds and selection, inheritance and reproduction, nutrition and management of the weanling, mare, and stallion; farriery, tack and equipment, diseases and health; and stable management.

Anthropology (CLA)

Anth 1101 HUMAN ORIGINS (1103)

4 lessons—\$221.25—5 degree credits—text price \$43-48—Spector

World prehistory as investigated by archaeologists is the major topic of this course. The methods and concepts employed by archaeologists in the study of human origins and prehistoric biological and cultural development are also considered.

Course Descriptions

Anth 1102 INTRODUCTION TO SOCIAL AND CULTURAL ANTHROPOLOGY (1102)

16 lessons—\$221.25—5 degree credits—text price \$60-65—Cohen

Study of cultures in all parts of the world, directed toward a broad understanding of how people view their world, cope with their environments, and organize their lives. A bio-cultural approach is used.

Anth 1102 INTRODUCTION TO SOCIAL AND CULTURAL ANTHROPOLOGY (V112)

Video Cassette Course—\$221.25—5 degree credits—text price \$71-76—study guide \$10—Gerlach

An introduction to the ways in which the cross-cultural, comparative, and holistic study of contemporary societies and cultures across the world and of their social, political, economic, technological, and religious institutions can provide an understanding of human diversity, adaptation, and condition. **Enrollment restricted to students who can view the cassettes at Walter Library and at the Morris Learning Center.**

Anth 1102 INTRODUCTION TO SOCIAL AND CULTURAL ANTHROPOLOGY (T112)

10 lessons—\$221.25—5 degree credits—text price \$71-76—study guide \$10—Gerlach

See above. **This course will be broadcast Winter and Spring 1989 on KTCI-TV (Channel 17) (see the blue section).**

Anth 3211 INDIANS OF NORTH AMERICA (1180)

18 lessons—\$231.25—5 degree credits—Cohen

Focuses on the traditional culture of the Indians of North and Middle America. A survey of native life-ways in different regions. Opportunities for student-selected in-depth study of specific cultures are also provided. Primary emphasis is on the Indian cultures prior to extensive contacts with Europeans, but some attention is also directed toward the history of Indian-white contact and toward the contemporary Indian living on reservations or in cities. (Prerequisite: Anth 1102) **This course is now in preparation; please inquire before enrolling.**

Anth 5141 CULTURE AND PERSONALITY (1197)

\$185—4 degree credits—text price \$37-42—Ingham

Examines the relation between culture and personality, with emphasis on recent work in psychoanalytic anthropology. Topics include human nature, child development, personality, mental illness, group psychodynamics, religious ritual and symbolism, and war.

Architecture (IT)

Arch 3970 AMERICAN ARCHITECTURE TO 1860 (1408)

13 lessons—\$227—4 degree credits—text price \$48-53—Roberts

See AmSt 3970. You **cannot** take this course if you have already received credit for AmSt 3970. This course can only be used as an elective for architecture degrees.

Arch 5956 THE MEANINGS OF PLACE (T143)

10 lessons—\$227—4 degree credits—text price \$52-57—study guide \$18—Clemence and Martin

See AmSt 3920/5920.

Arch 5956 THE MEANINGS OF PLACE (V143)

Video Cassette Course—\$227—4 degree credits—text price \$52-57—study guide \$18—Clemence and Martin

See AmSt 3920/5920. **Enrollment restricted to students who can view the cassettes at Walter Library, Morris Learning Center or on their Home VCR (see the blue section).**

Art (CLA)

ARTH 1001 INTRODUCTION TO THE VISUAL ARTS (T121)

10 lessons—\$177—4 degree credits—text price \$26-31—study guide \$11—McNally

Basic problems of art. Major visual arts examples as basis for the study of the nature of art, problems of design, materials and techniques, presented topically rather than chronologically. **This course will be broadcast Spring 1989 on KTCI-TV (Channel 17) (see the blue section).**

Course Descriptions

ArH 1001 INTRODUCTION TO THE VISUAL ARTS (V121)

Video Cassette Course—\$177—4 degree credits—text price \$26-31—study guide \$11—McNally
See above. Enrollment restricted to students who can view the cassettes at Walter Library and the Morris Learning Center.

Astronomy (GC)

GC 1161 PHYSICAL SCIENCE: SOLAR ASTRONOMY (1314)

15 lessons—\$221.25—5 degree credits—text price \$35-40—Polioff

An introductory survey of the solar system, including a study of the earth, planets, satellites, asteroids, comets, and meteorites. Topics include the celestial sphere, coordinate systems, time intervals, motions and physical attributes of planets in the solar system, and instruments used by the astronomer. Observations of the night sky will be required.

Beekeeping

See Entomology

Biology (Biological Sciences)

Biol 1009 GENERAL BIOLOGY (1601)

15 lessons—\$221.25—5 degree credits—text price \$41-46—lab kit \$8.50—Swart

An introduction to the general principles of biology. Topics include the cell, metabolism, heredity, reproduction, ecology, and evolution. Simple laboratory exercises are performed.

Business

See the following departmental listings for course offerings:

Accounting

Business, Government and Society

Business Law

Business Studies

Decision Sciences

Educational Administration ("Personal Time Management")

Industrial Relations

Insurance

Management

Marketing

Operations Management

Business, Government and Society (Management)

BGS 3005 GOVERNMENT AND BUSINESS (1590)

14 lessons—\$216—4 degree credits—text price \$53-58—B. Erickson

Topics covered in this course include the role of the free enterprise system, structure of American industry, economic and social consequences of big business, public policies toward private enterprise, public regulation, public ownership, and antitrust laws and their applications. Social regulations of business, such as EEO, consumer, and occupational safety and health laws, are also covered. (Prerequisite: Econ 1001 and 1002 or equivalent) **Students may not receive credit for both BGS 3005 and Econ 3651.**

Course Descriptions

Business Law (Management)

BLaw 3058 INTRODUCTION TO LAW, AND THE LAW OF CONTRACTS AND AGENCY (1859)

13 lessons—\$216—4 degree credits—text price \$57-62—Hower

Study of the origin of law, its place in and affect upon society; the history and development of law; the systems of courts; and legal procedure. An extensive study of the law of contracts as the basic law affecting business transactions. Also a study of law affecting the relationship between principal and agent, master and servant, and employer and employee. **Students may not receive credit for both BLaw 3058 and GC 1534.**

BLaw 3078 PARTNERSHIPS, CORPORATIONS, AND LAW OF REAL PROPERTY (1860)

13 lessons—\$216—4 degree credits—text price \$57-62—Hower

A study of the partnership and corporate forms of business entities, including the methods of creating the relationships, and the law developed to regulate and control these organizations and their members. Also a study of the basic concepts and principles of real property law; transfers of ownership, control of and encumbering such interests. (Prerequisite: BLaw 3058 or GC 1534)

BLaw 3088 LAW OF PERSONAL PROPERTY, SALES CONTRACTS, COMMERCIAL PAPER, AND WILLS AND ESTATES (1861)

14 lessons—\$216—4 degree credits—text price \$57-62—Hower

Study of the basic concepts of personal property, including rights of possessors, bailee, finders and holders of security interests. An extensive study of the law affecting sales of goods contracts and contracts referred to as commercial papers (negotiable instruments) with emphasis on effect of the Uniform Commercial Code. Concludes with a brief study of the law of wills and estates in passing rights to property in event of death. (Prerequisite: BLaw 3058 or GC 1534)

Business Studies (GC)

GC 1235 LAW IN SOCIETY (1615)

13 lessons—\$221.25—5 degree credits—text price \$36-41—Hower

In order to give students an appreciation of the role of law in our changing society, the legal aspects of current topics are discussed. Topics include: court and court systems; grand and petit juries; corrections; welfare and domestic problems; consumer issues including insurance (no-fault auto and life); wills and probate procedures. A civil law suit, from beginning to end, is explained. Each student is required to complete a project paper. This course is a prerequisite for Legal Studies courses.

GC 1511 INTRODUCTION TO MODERN BUSINESS (1625)

18 lessons—\$221.25—5 degree credits—text price \$28-33—Hower

Intended for both business and general education; provides an overview of economic environment in which business operates. Major functions of a business organization are surveyed, including production, finance, personnel, and marketing. A useful introductory course for students planning to do more work in business, but also recommended for those who only want to survey the field.

GC 1534 PRACTICAL LAW (1620)

15 lessons—\$221.25—5 degree credits—text price \$68-73—Hower

Designed to acquaint students with common legal problems. Topics include: definition and sources of law; formation and discharge of contracts; torts (personal injury and property damage suits); criminal law; bailments; nature and classification of real and personal property; joint ownership and tenancy. This course is a prerequisite for Legal Studies courses. **Students may not receive credit for both GC 1534 and BLaw 3058.**

GC 1540 ACCOUNTING FUNDAMENTALS I (1527)

13 lessons—\$177—4 degree credits—text price \$48-53—R. Larson

The first of a two-part introductory course in college accounting, which is designed for both business and nonbusiness students. Starts with a study of balance sheet and income statement methodology, continues through the accounting cycle for both service and merchandising businesses, and concludes with an examination of special journals, inventories, receivables, and accounting for plant assets.

GC 1542 ACCOUNTING FUNDAMENTALS II (1528)

13 lessons—\$177—text prices \$48-61—4 degree credits—R. Larson

Continues GC 1540 accounting sequence. Topics include handling dividends, retained earnings and

Course Descriptions

treasury stock, debt, investments, financial reporting, and sources and uses of working capital. Also examines financial statements, accounting for manufacturing operations, and cost analysis problems. (Prerequisite: GC 1540)

GC 1551 MARKETING: INTRODUCTION (1622)

13 lessons—\$221.25—5 degree credits—text price \$29-34—Peterson

Emphasis on application of the fundamentals of marketing. Topics include target markets, segmentation analysis, marketing mix, and strategic marketing.

GC 1553 MARKETING: MANAGEMENT (1623)

13 lessons—\$221.25—5 degree credits—text price \$32-37—Peterson

Emphasis on application of the principles of management. Specific topics include planning, organizing, directing, controlling, decision-making, leadership, and group dynamics. **This course is now in preparation; please inquire before enrolling.**

GC 1731 CONSUMER PROBLEMS: PERSONAL FINANCE (A161)

Audio Cassette Course—\$177—4 degree credits—text price \$31-36—9 audio cassettes \$18.75—study guide \$6—Killen

This course details the economic system from the consumer's point of view. It considers the fundamentals of financial planning and personal economic decision making, including how to apply economic concepts to making informed selections of food, clothing, housing, transportation, insurance, investments, and credit, and how to recognize and evaluate sources of consumer information, your rights as a consumer, and common frauds. Assignments include applying concepts to practical consumer decisions and identifying community sources of consumer information and assistance.

GC 3560 PERSONNEL ADMINISTRATION (1626)

10 lessons—\$183—4 degree credits—text price \$37-42—Kroll

An applied practical course in personnel practices. It includes human resource planning, Equal Employment Opportunity regulations, staffing, employee development, performance evaluation, and reward systems and methods. Through readings, brief exercises, and in-depth cases, students get a comprehensive first-time exposure to personnel department practices.

GC 3583 ESTATE PLANNING AND ADMINISTRATION (1627)

15 lessons—\$183—4 degree credits—text price \$36-41—Hower

Problems associated with planning for efficient use of financial resources during the working life and after the death of an income provider. Forms of property ownership, fact gathering for devices used in estate planning (wills and trusts), and the drafting of these devices, and administering a decedent's estate, are discussed.

GC 3602 APPLIED SUPERVISION (1624)

13 lessons—\$183—4 degree credits—text price \$38-43—Kroll

Practical, applied approach to first-level and intermediate-level management. Through readings, short exercises, and in-depth cases, students learn basic management principles and practices—leading, delegating, problem solving, influencing motivation and productivity, and planning organizing and controlling functions. The course fits the needs of students interested in either profit-oriented or nonprofit organizations. (Prerequisite: third-quarter freshman or sophomore, one course in basic composition; introductory psychology and sociology courses helpful but not required)

Business Writing

See Composition

Chemistry (GC)

GC 1166 PHYSICAL SCIENCE: PRINCIPLES OF CHEMISTRY (7725)

14 lessons—\$221.25—5 degree credits—text price \$28-33—Uthe

Fundamental principles and laws of chemistry, stressing the development and application of theories and their roots in experience. Problem-solving techniques applied to chemistry. Topics include classification of matter, elements, atomic and molecular structure, compounds and chemical bonding, mole

Course Descriptions

calculations, percent composition and empirical formulas, chemical equations, reactions, and stoichiometry, solutions and solution concentrations, acids and bases, gases and gas laws, organic chemistry, and others. Students gain general understanding of both the content and process of the science of chemistry. (Prerequisite: basic background in elementary algebra)

Child Psychology (Education)

Also see Psychology

CPsy 1301 CHILD PSYCHOLOGY (8283)

13 lessons—\$177—4 degree credits—text price \$36-41—Dickison

Designed to provide an understanding of children and their development, the methods used by child psychologists, and the critical evaluation of research. Topics include: personality and social behavior, biological bases and cognitive development, and the work of Jean Piaget. (Prerequisite: 5 credits introductory psychology).

CPsy 3302 INFANCY (8285)

10 lessons—\$237—4 degree credits—text price \$27-32—Glicksman

Perceptual, motor, emotional, social, and cognitive development during the first two years of life; the developing infant in his or her social and physical environment. (Prerequisite: CPsy 1301 or consent of instructor)

CPsy 3304 INTRODUCTION TO MATURITY AND AGING (8284)

10 lessons—\$237—4 degree credits—text price \$36-41—Nusslé

Exploration of practical and theoretical issues in the psychology of maturity and aging. Also, a review of developmental changes in perceptual-motor, cognitive, and social behavior from young adulthood to old age.

CPsy 5303 ADOLESCENT PSYCHOLOGY (8282)

14 lessons—\$237—4 degree credits—text price \$46-51—Dickison

Survey of the behavior and psychological development of the adolescent including: biological considerations, cognition and creativity, moral development, parent-child relations, peers, ego identity, sexual development, school adjustment, social-cultural considerations, and the adolescent subculture. (Prerequisite: 5 credits introductory psychology)

CPsy 5305 MULTIDISCIPLINARY PERSPECTIVES ON AGING (V822)

Video Cassette Course—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle

A multidisciplinary introduction to aging and the aging process. Topics include biological, social, psychological aspects of aging; theories of aging; older adults in America; human services and their delivery systems, such as social services, health, nutrition, long-term care, and education; public policy and legislation; environments and housing; advocates; retirement. This All-University Council on Aging-sponsored course is being offered by a number of departments. Students may receive credit for **only one** of the following: CPsy 5305, Educ 5440, HSU 5009, PA 5414, SAHP 5009, SW 5024, or Soc 5960. **Enrollment limited to students who can view the cassettes at Walter Library or Duluth Center, or on their Home VCR (see the blue section).**

CPsy 5305 MULTIDISCIPLINARY PERSPECTIVES ON AGING (T822)

10 lessons—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle

See above. **This course will be broadcast Spring 1989 on KTCI-TV (Channel 17) (see the blue section).**

Civil Engineering (IT)

CE 0302 CONCRETE AND CONCRETE MATERIALS (2896)

16 lessons—\$132.75—3 certificate credits—text price \$51-56—Skok

Includes a study of materials from which concrete is made, methods of designing a concrete mixture, the principles of air-entrained concrete, methods of measuring and controlling the air content, the chemical constitution of cement, properties of concrete, the practical aspects of proportioning, mixing, placing, and curing concrete and related topics. (Prerequisite: Basic knowledge of algebra, physics, and chemistry)

Course Descriptions

Classics (CLA)

Clas 1019 MAGIC, WITCHCRAFT, AND THE OCCULT IN GREECE AND ROME (A524)

Audio Cassette Course—\$177—4 degree credits—text price \$25-30—study guide \$10—10 audio cassettes \$20.75—G. Erickson

Magic and witchcraft in classical literature and mythology, the practice of magic as observed from papyri, epigraphical and literary evidence, and beliefs and practices concerning prophecy and the interpretation of dreams are considered. The course also explores the changing role of witchcraft and divine possession from early to later antiquity, and the relation of these phenomena to changes in economic and social conditions.

Clas 1048 TECHNICAL TERMS OF SCIENCE, MEDICINE, AND THE HUMANITIES (5248)

16 lessons—\$132.75—3 degree credits—no required texts—K. Baldwin

Presentation in English contexts of Greek and Latin prefixes, suffixes, and root words in modern technical vocabularies; special attention to medical terminology. No previous study of Greek or Latin required. (Prerequisite: Clas 1045 or 3045 or concurrent registration in Clas 1045 or 3045)

Clas 3071 RELIGION IN ANTIQUITY: GREEK, HELLENISTIC (A525)

Audio Cassette Course—\$185—4 degree credits—text price \$59-64—15 audio cassettes \$30.50—study guide \$6—Sellew

The course focuses on the Greek religion of the Archaic, Classical, and Hellenistic periods. Some of the specific topics examined include: death, sexuality, time, heroes, goddesses, and rituals. These topics are examined in the broader context of the non-Greek religion and philosophies of that period.

Clas 3970 ROMAN REALITIES: LIFE AND THOUGHT IN THE ROMAN EMPIRE (5247)

11 lessons—\$185—4 degree credits—text price \$41-46—G. Erickson

The eruption of Vesuvius buried and preserved the Italian cities of Pompeii and Herculaneum so quickly and completely that excavations now enable us to construct a vivid picture of life at that time. Using this evidence and other research, this course focuses on social history through the study of art, archeology, literature, dream interpretation, medical writing, and magic.

Clas 3970 ROMAN REALITIES: LIFE AND THOUGHT IN THE ROMAN EMPIRE (A523)

Audio Cassette Course—\$185—4 degree credits—text price \$41-46—study guide \$10—10 audio cassettes \$20.75—G. Erickson

See above.

Clas 5004 EROTICISM AND FAMILY LIFE IN GREECE AND ROME (K526)

10 lessons—\$185—4 degree credits—text price \$15-20 (plus study guide)—Erickson

Analysis of Greek and Roman family life in the shaping of personality; diachronic change in modes of erotic expression; Narcissism and homosexuality; the status and roles of women; evolving views of sexual morality in the ancient world compared to present trends. Representative views taken for analysis and discussion from art and literature. Development of early Christian attitudes toward sexuality. **This course will be broadcast Winter 1989 on KUOM radio (770 AM) (see the blue section).**

Clas 5005 MADNESS AND DEVIANT BEHAVIOR IN GREECE AND ROME (A522)

Audio Cassette Course—\$185—4 degree credits—text price \$20-25—15 audio cassettes \$30.50—study guide \$6—G. Erickson

Definitions of madness in Greece and Rome and theories of its etiology; assessment of predisposing factors in Greece and Rome; examples of madness from mythology, legend, and history; cross-cultural comparison with contemporary United States.

Clas 5006 FAMOUS FIGURES IN ANCIENT BIOGRAPHY (V522)

Video Cassette Course—\$185—4 degree credits—text price \$36-41—study guide \$10—G. Erickson

The lives of important historical and legendary people in classical literature. Their accomplishments, factors that shaped their characters, criteria for "greatness," the social and political milieu in which they functioned, the hero myth and history, the psychohistorical approach to biography. **Enrollment restricted to students who can view the cassettes at Walter Library.**

Course Descriptions

Clas 5145 CLASSICAL MYTHOLOGY: MYTHS AND THE MODERN WORLD (V591)

Video Cassette Course—\$185—4 degree credits—text price \$41-46—study guide \$10—G. Erickson

Investigates the successive interpretations of selected Greek and Roman myths and their influence on our literature, art, and music. **Enrollment restricted to students who can view the cassettes at Walter Library, Rochester Center, and the Morris Learning Center.**

Communication (Duluth)

Comm 5900 PRIME TIME WOMEN (K373) (Duluth)

10 lessons—\$159.75—3 degree credits—text price \$20-25—study guide \$7—Krug

This course examines women in the media, both the realities of working in radio and television, and the way in which they are presented on radio and television programs. **This course will be broadcast Fall 1988 on KUOM radio (770 AM) and Spring 1989 on KUMD radio (103.3 FM) (see the blue section).**

Comm 5900 PRIME TIME WOMEN (A373) (Duluth)

Audio cassette course—\$159.75—3 degree credits—text price \$20-25—10 audio cassettes \$20.75—study guide \$7—Krug

See above.

Comparative Literature

See English

Composition (CLA and GC)

GC 0402 GRAMMAR AND USAGE REVIEW (3505)

11 lessons—\$132.75—no credit—text price \$10-15—O'Connell

A step-by-step review and explanation of grammatical forms, punctuation, spelling, and vocabulary. Recommended for anyone who needs to start with English composition fundamentals, or for the student who requires a thorough review of grammar. Additional exercises provided when lessons indicate the student should do extra work. No theme or letter writing required in this course.

Comp 0011 PREPARATORY COMPOSITION (3517)

12 lessons—\$132.75—no credit—no required text—Guenther

This course is for students who need to build confidence in their writing ability. Exercises emphasize writing as a process—from generating and developing ideas, to writing clearly, to revising. S-N grading only.

Comp 0017 MANUSCRIPT CRITICISM (3580)

8,000 words (\$132.75)/12,500 words (\$177)—no credit—no required text—Ross

Consists of manuscript criticism. The instructor will read 8,000 words or 12,500 words, divided into writings as the student wishes. Students who are interested in having their fiction and poetry manuscripts evaluated should contact the Program in Creative and Professional Writing in the English Department. All other kinds of manuscripts will be considered for this course and assigned a reader from the Program in Composition and Communication. S-N grading only. (Prerequisite: consent of instructor) Also available as Engl 0017.

Comp 1011 WRITING PRACTICE I (3543)

12 lessons—\$221.25—5 degree credits—text price \$21-26—O'Meara

Journal-based practice in solving writers' problems: developing and organizing content, analyzing audience, drafting the whole essay and its parts, and revising and editing to master the fundamentals of expository structure and style.

Comp 1031 INTRODUCTION TO TECHNICAL AND BUSINESS COMMUNICATION (V351)

Video Cassette Course—\$88.50—2 degree credits—text price \$16-21—study guide \$6—Yeager
Introduction to the processes used to define a topic, draft, and edit texts for business, government, and technical fields. **Enrollment restricted to students who can view the cassettes at Walter Library or on their Home VCR (see the blue section).**

Course Descriptions

Comp 1031 INTRODUCTION TO TECHNICAL AND BUSINESS COMMUNICATION (T351)

10 lessons—\$88.50—2 degree credits—text price \$16-21—study guide \$6—Yeager
See above. **This course will be broadcast Fall 1988 on KTCI (Channel 17) and KAWE-TV (Channel 9) (see the blue section).**

Comp 3011 WRITING ABOUT LITERATURE (3535)

10 lessons—\$185—4 degree credits—text price \$47-52—O'Meara
Developing a critical argument about literary texts (novels, poems, plays, short stories) with attention to use of secondary sources. Examination and use of different modes of explication and criticism.

Comp 3012 WRITING IN THE HUMANITIES (3536)

12 lessons—\$185—4 degree credits—text price \$51-56—Schramer
The major emphasis will be writing about the kind of texts ordinarily encountered in philosophy, history, cultural anthropology, social work, and inter-disciplinary fields. Initial work will concern ways to abstract and represent complicated discussions, including those of "primary" texts and "secondary" scholarship and commentary. Topics covered will be effective analysis and argument, including the proper use and presentation of textual evidence, with attention paid to the evaluation of sources. Intended for majors in anthropology, art history, geography, history, humanities, international relations, philosophy, political science, and social work.

Comp 3013 WRITING FOR ARTS OTHER THAN LITERATURE (3537)

12 lessons—\$185—4 degree credits—text price \$26-31—Porter
Descriptions of painting, film, music, architecture, and other types of art (other than literature) as the basis for analysis. Initial emphasis will be on developing concise and unambiguous descriptions of art objects or performances. The chief emphasis will be on how descriptions serve as the basis for more complicated writing assignments, such as formal analyses and reviews.

Comp 3014 WRITING FOR THE QUANTITATIVE SOCIAL SCIENCES (3538)

10 lessons—\$185—4 degree credits—text price \$17-22—Steinmetz
The initial concern will be to develop strategies for expressing quantitative or statistical information in clear prose. Attention will be given to how statistical tables and summaries interact with the written text and how to develop narrative and descriptive techniques for producing case studies and histories. The course will emphasize the proper use of qualitative information and case histories in the analysis of complex situations, and how the texture of writing should change for different audiences. Intended for majors in communication disorders, economics, political science, psychology, and sociology.

Comp 3015 WRITING ABOUT SCIENCE (3539)

12 lessons—\$185—4 degree credits—text price \$17-22—Church
This course is designed to improve the writing ability of students interested in science, and it focuses on two kinds of writing: writing about science and writing for science (the former is general; the latter, special). The various tasks science writing involves will be discussed and practiced, as will the various forms science writing can assume. This course will also consider the writing process and what makes for rhetorical effectiveness: organization, support, clarity, cleanliness, and appropriateness for the audience. As much as possible, the course will respond to individual student needs, interests, and abilities.

Comp 3031 TECHNICAL WRITING FOR ENGINEERS (3541)

12 lessons—\$185—4 degree credits—text price \$42-47—E. Anderson
The course deals with the problem of writing for a multiple audience (expert, executive, and lay), the writing process itself, and ways to master apprehension about writing. It also provides information about the appropriate format for technical writing, whether instruction manual, memo, or formal report.

Comp 3032 PREPROFESSIONAL WRITING FOR BUSINESS (3542)

12 lessons—\$185—4 degree credits—text price \$50-55—Bergland
Focus on rhetoric, form, and style of business writing in reports, case studies, and correspondence. Practical examples.

Engl 3101 FICTION WRITING (A353)

Audio Cassette Course—\$185—4 degree credits—text price \$12-17—study guide \$6—10 audio cassettes \$20.75—Daniel
An examination of the essential elements in creative writing. Discussion of the creative process in writing fiction and intensive practice in the genre. Readings, discussion, and practice will include such topics as diction, structure, plotting, and dialogue. No examinations, but lesson assignments and a final portfolio. Course author is Alan Burns.

Course Descriptions

Engl 3101 FICTION WRITING (K353)

10 lessons—\$185—4 degree credits—text price \$12-17—study guide \$6—Daniel

See above. **This course will be broadcast Winter 1989 on KUOM radio (770 AM) (see the blue section).**

Engl 3104 POETRY WRITING (A350)

Audio Cassette Course—\$185—4 degree credits—text price \$30-35—study guide \$6—10 audio cassettes \$20.75—Bibby

This course is intended to help students develop new ways of using language to explore the world around them and in them. There will be numerous writing assignments, readings in contemporary poetry, and consideration of such topics as rhythm, image, structure, diction, voice and tone.

Engl 5109 JOURNAL AND MEMOIR WRITING (A358)

Audio Cassette Course—\$185—4 degree credits—text price \$27-32—study guide \$6—10 audio cassettes \$20.75—Galt

Students will read selected journals and memoirs, as well as completing exercises based on the readings. The journal writing process—in formal and fragmentary—will be the basis of all writing suggestions; students will be encouraged to work from memory and personal experience. The student course project will be to write a memoir or autobiographical work.

GC 3425 WRITING FOR BUSINESS AND THE PROFESSIONS (3518)

14 lessons—\$183—4 degree credits—text price \$34-41—Gidmark

A course in effective business writing, emphasizing the relationship between creative writing and successful management; the course will focus on various challenging business situations, all calling for a knowledge of human needs and the ability to write complete, concise, clear, correct, and convincing business letters, memorandums, and informal reports. In writing, the student will learn to understand and use aspects of human psychology; tone; correct letter, memorandum, and report formats; and the fundamentals of grammar, punctuation, and sentence structure.

Computers (GC)

GC 1571 INTRODUCTION TO BASIC PROGRAMMING AND MICROCOMPUTERS (1975)

13 lessons—\$221.25—5 degree credits—text price (including software) \$44-49—Robertson

Introduction to microcomputers, applications, and elementary programming using BASIC computer language. Topics include: description of microcomputers (emphasis on IBM PC and compatibles), writing simple BASIC programs, using word processor, spreadsheet, and data base manager. Students must have access to an IBM PC or compatible or be able to come to campus to use the microcomputers in the University Computer Lab. (Prerequisite: elementary algebra)

GC 3571 COMPUTER APPROACH TO PROBLEM SOLVING (1974)

16 lessons—\$228.75—5 degree credits—text price \$18-23—Robertson

Students learn to use a computer as a problem solving tool by writing programs in BASIC computer language. Topics: problem solving process, writing pseudocode, elements of BASIC, output modification, subscripted variables, and file manipulation. Provides good background for further programming courses. Students must have access to a computer, or to a terminal and modem, or be able to come to campus to use the University Computer Lab. (Prerequisite: elementary algebra)

Decision Sciences (Management)

DSci 1060 BUSINESS RESEARCH PRACTICE (2290)

8 lessons—\$177—4 degree credits—Klietsch

The design and conduct of business research from a management perspective, emphasizing competencies associated with business research practice within functional areas. Business research aims and expectations, research strategies, methods and managerial requirements are stressed. Open to nondegree students with equivalent experience. (Prerequisites: DSci 1050 and at least 90 credits completed or in progress) **This course is now in preparation; please inquire before enrolling.**

Course Descriptions



Eleanor Roosevelt (1884-1962) Wife of President Franklin D. Roosevelt and niece of President Theodore Roosevelt. She worked for social betterment as a lecturer, newspaper columnist, and world traveler. In the 1950s, she led the liberal wing of the Democratic party.

East Asian Studies (CLA)

EAS 1032 RELIGIONS OF EAST ASIA (5521)

12 lessons—\$177—4 degree credits—text price \$42-47—Ditmanson
See ReIS 1032. **Students may not receive credit for both EAS 1032 and ReIS 1032.**

Ecology and Behavioral Biology (Biological Sciences and GC)

Also see Forestry

EBB 3001 INTRODUCTION TO ECOLOGY (2011)

6 lessons—\$249—4 degree credits—text price \$42-47—Zabinski
A survey of the basic concepts of ecology, beginning with a consideration of how individual animals and plants interact with their environment and ending with the functioning of entire ecosystems. Subsidiary topics are evolution by natural selection and man's impact on the natural world.

GC 3115 EVOLUTION OF LIFE ON EARTH (1602)

13 lessons—\$228.75—5 degree credits—text price \$40-45—Hatch
History of life on earth from the first organic molecules to humankind and human culture. Evidence for evolution. Processes that lead some groups of organisms to extinction and others to survival or further speciation.

Economics (CLA)

Also see Agricultural Economics

Econ 1101 PRINCIPLES OF MICROECONOMICS (2103)

13 lessons—\$177—4 degree credits—text price \$54-59—Gupta
Formerly Econ 1002. A study of the basic economic principles of pricing and resource allocation. Includes demand and supply, consumer choice, costs of production; competition, monopoly, oligopoly; determination of wages, rent, interest, profits; income distribution; farm and urban problems. **Students who have taken Econ 1002 cannot receive credit for course.**

Econ 1102 PRINCIPLES OF MACROECONOMICS (2104)

14 lessons—\$177—4 degree credits—text price \$54-59—Gupta
Formerly Econ 1001. Determinants of national income, national income accounting, unemployment and inflation, classical and Keynesian theories, money and banking, monetary and fiscal policy, international economic relations, and less-developed nations. **Students who have taken Econ 1001 cannot receive credit for this course.**

Econ 3102 MACROECONOMIC THEORY (2164)

16 lessons—\$185—4 degree credits—text price \$51-56—Gupta
Factors determining price level, amount of employment and unemployment, total spending by consumers, business investments, total savings, national income, and the effects of government spending, taxes, and monetary policy on price level, employment, output, and national income.

Course Descriptions

Econ 3701/5721 MONEY AND BANKING (2168/2169)

14 lessons—\$185—4 degree credits—text price \$35-40—H. Smith

Money, banks, and financial intermediaries as economic institutions; the mechanics of monetary transactions; the value of money; international monetary relationships; issues relating to monetary policy. (Prerequisite for 3701: Econ 1001 or 1102, Principles of Macroeconomics, or equivalent. Prerequisite for 5721: Econ 3102 or equivalent; economics majors must register for 5721 and will not receive credit for 3701)

Econ 5534 ECONOMIC SECURITY (2183)

12 lessons—\$185—4 degree credits—text price \$36-41—Williams

Origins and development of economic and social problems of the individual worker, public and private attempts to deal with these issues; economic and social implications. Emphasis on public insurance programs such as Old Age, Survivors, Disability, and Health Insurance (Social Security), workers' compensation and unemployment compensation. Also available as Ins 3210.

Education (Education)

Also see Child Psychology

Educ 5440 MULTIDISCIPLINARY PERSPECTIVES ON AGING (V822)

Video Cassette Course—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

Educ 5440 MULTIDISCIPLINARY PERSPECTIVES ON AGING (T822)

10 lessons—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

Educational Administration

EdAd 5110 PERSONAL TIME MANAGEMENT AND EFFECTIVE ADMINISTRATION (2681)

10 lessons—\$118.50—2 degree credits—text price \$85-90—Hoyt

This course is designed for any individual who "doesn't have enough time." It teaches practical, pragmatic approaches—using examples and samples of proven techniques—to the problems of scheduling, organizing work, delegating, setting priorities, handling interruptions and meetings, doing the distasteful and the difficult, setting up filing systems that work, and finding the time to do those things that you really want to do, but don't have the time for.

Educational Psychology

EPsy 3220 INTRODUCTION TO STATISTICS AND MEASUREMENT (2661)

9 lessons—\$177.75—3 degree credits—text price \$35-40—Giese

Elementary statistical methods and their application to behavioral science and educational problems. The commonly used statistical terms and methods (such as mean, median, mode, percentiles, graphs, standard deviation, correlation, standard scores, and test analysis) are considered. An attempt is made to give the student a thorough understanding of statistics, including an introduction to inferential statistics. Emphasis on the intelligent use of statistical methods so students may interpret behavioral science data correctly. (Prerequisite: Introductory psychology course or permission of instructor)

EPsy 5400 CAREER DEVELOPMENT AND PLANNING (V263)

Video Cassette Course—\$237—4 degree credits—text price \$9-14—study guide \$16—Hansen

This course is designed primarily for counselors, teachers, and human resource personnel who want to update their knowledge and skills in the field of career development and the career planning process. It is also appropriate for adults who want to independently study their own career development. Topics include life-span career development, the career planning process, labor market data and trends, sex-role socialization and stereotyping, career decision making, dual careers, and career change and transitions. **Enrollment restricted to students who can view the cassettes at Walter Library, the Duluth Center, or on their Home VCR (see the blue section).**

EPsy 5690 EDUCATION OF THE GIFTED AND TALENTED (T264)

10 lessons—\$177.75—3 degree credits—text price \$33-38—study guide \$10—Reynolds and Rogers

Origin and development of terms such as giftedness, creativity, genius, talent, and intelligence; implica-

Course Descriptions

tions for educational practice; current issues and trends. **This course will be broadcast Fall 1988 on KTCI-TV (Channel 17) and Winter 1989 on KAWE-TV (Channel 9) (see the blue section).**

EPsy 5690 EDUCATION OF THE GIFTED AND TALENTED (V264)

Video Cassette Course—\$177.75—3 degree credits—text price \$33-38—study guide \$10—Reynolds and Rogers

See above. **Enrollment limited to students who can view the cassettes at Walter Library, the Duluth Center, and the Morris Center, or on their Home VCR (see the blue section).**

Electrical Engineering (IT)

EE 3351 INTRODUCTION TO LOGIC DESIGN AND MICROPROCESSORS (2903)

\$227—4 degree credits—text and equipment \$284-289—Kinney

Boolean algebra and logic gates. Combinational logic and design examples. Design with MSI logic devices. Sequential logic and design of sequential logic systems. Integral laboratory. (Prerequisite: IT sophomore standing) **This course is now in preparation; please inquire before enrolling.**

EE 3352 INTRODUCTION TO MICROPROCESSORS (2904)

10 lessons—\$227—4 degree credits—text and equipment \$287-292—Kinney

Basic computer organization and assembly language programming. Instruction types and addressing modes. Binary and BCD arithmetic. Subroutines. Program assembly. Integral laboratory using Z80-based educational system. Independent Study has the microprocessor equipment for sale. (Prerequisite: IT sophomore standing or consent of instructor)

Engineering

Also see the following departmental listings for course offerings:

Electrical Engineering

Mechanical Engineering

Civil Engineering

Industrial Engineering/Operations Research

Engr 3016 DEFORMABLE BODY MECHANICS (3238) (Duluth)

8 lessons—\$213—4 degree credits—text price \$47-52—Patten

Introductory treatment of stress and strain at a point. Stress-strain relation in two dimensions. Linear theory of torsion. Bending stresses. Deflection of determinate and indeterminate beams. Instability. (Prerequisites: Engr 3015, Statics, and concurrent registration in Math 3380, Differential Equations I, or Math 3381, Introduction to Differential Equations) Also available as AEM 3016. Students may receive credit for this course either as Engr 3016 or AEM 3015, but **not for both.**

English (CLA and GC)

Also see Composition

Note: Only two Independent Study lower division English courses and one upper division course may be applied toward requirements for an English major. This does not include GC courses.

Engl 0017 MANUSCRIPT CRITICISM (3580)

See Comp 0017.

Engl 1016 INTRODUCTION TO AMERICAN LITERATURE: SOME MAJOR FIGURES AND THEMES (3671)

9 lessons—\$177—4 degree credits—text price \$39-44—Schramer

Examination of a few selected themes that recur in American writing. Not a survey of literary history. Main emphasis on the fate of innocence in American fiction with some attention to the ways several writers treat the problem of establishing a distinctively "American" identity. (Prerequisite: introductory composition course)

Course Descriptions

Engl 1016 INTRODUCTION TO AMERICAN LITERATURE: SOME MAJOR FIGURES AND THEMES (A366)

Audio Cassette Course—\$177—4 degree credits—text price \$40-45—study guide \$6—10 audio cassettes \$20.75—Schramer

See above.

Engl 1017 INTRODUCTION TO MODERN LITERATURE: POETRY (3676)

14 lessons—\$177—4 degree credits—text price \$30-35—Furia

A study of modern British and American poetry organized around themes (war, the city, nature, death, love, etc.) and including such writers as Yeats, Thomas, Auden, Eliot, Frost, Cummings, and Stevens.

Engl 1019 INTRODUCTION TO MODERN LITERATURE: DRAMA (3677)

12 lessons—\$177—4 degree credits—text price \$27-32—E. Anderson

A study of modern drama, including plays by Ibsen, Strindberg, Chekhov, Synge, Shaw, O'Neill, Pirandello, Brecht, Williams, Miller, Ionesco, and Beckett. (Prerequisite: Comp 1011 or equivalent)

Engl 1020 MODERN SCIENCE FICTION AND FANTASY (A364)

Audio Cassette Course—\$177—4 degree credits—text price \$34-39—study guide \$6—10 audio cassettes \$20.75—Hodgell

Deals with the evolution of modern science fiction and fantasy from their 19th century roots to the popular literature of today. Considers such major themes as the future of technology, religion, and sexuality in the works of Le Guin, Huxley, and Sturgeon, among others, and also the contributions of such eminent fantasists as Tolkien, CS Lewis, and Richard Adams.

Engl 1020 MODERN SCIENCE FICTION AND FANTASY (K364)

20 lessons—\$177—4 degree credits—text price \$34-39—study guide \$6—Hodgell

See above. **This course will be broadcast Spring 1989 on KUOM radio (770 AM) (see the blue section).**

Engl 3101 FICTION WRITING

See Composition

Engl 3104 POETRY WRITING

See Composition

Engl 3111 SURVEY OF ENGLISH LITERATURE I (3657)

12 lessons—\$185—4 degree credits—text price \$23-28—1 audio cassette \$3—Collins

A historical survey of the major figures, movements, and trends in English literature. This course will consider the works of Chaucer, Marvell, Spenser, Shakespeare, and Donne.

Engl 3112 SURVEY OF ENGLISH LITERATURE II (3658)

12 lessons—\$185—4 degree credits—text price \$25-30—Collins

A continuation of Engl 3111, this course deals with Milton, Johnson, Dryden, Swift, and Pope.

Engl 3113 SURVEY OF ENGLISH LITERATURE III (3659)

14 lessons—\$185—4 degree credits—text price \$25-30—Collins

A continuation of Engl 3112, this course considers the works of Blake, Wordsworth, Coleridge, Keats, Tennyson, Browning, Shelley, Byron, Carlyle, Dickens, Yeats.

Engl 3241 SHAKESPEARE I (3650)

12 lessons—\$185—4 degree credits—text price \$29-34—Shaw

Study of Shakespeare's early and middle plays, with attention to history, literary values, and theatrical performance. Students will read *A Midsummer Night's Dream*, *Romeo and Juliet*, *Henry IV, Part I*, *Henry V*, *Much Ado About Nothing*, *Julius Caesar*, *Comedy of Errors*, *Othello*, and *Hamlet*.

Engl 3242 SHAKESPEARE II (3651)

12 lessons—\$185—4 degree credits—text price \$25-30—Shaw

Study of Shakespeare's middle and late periods, with attention to literary values, theatrical performance, and textual problems. Students will read *As You Like It*, *Twelfth Night*, *Measure for Measure*, *Macbeth*, *King Lear*, *Antony and Cleopatra*, *Coriolanus*, *The Winters Tale*, and *The Tempest*.

Course Descriptions

Engl 3410 FITZGERALD AND HEMINGWAY (A365)

Audio Cassette Course—\$185—4 degree credits—text price \$59-64—study guide \$6—10 audio cassettes \$20.75—Furia

An examination of the writings of two contemporary early 20th century writers—F. Scott Fitzgerald and Ernest Hemingway.

Engl 3411 AMERICAN LITERATURE I (3672)

11 lessons—\$185—4 degree credits—text price \$44-49—Collins

The development of American literature and thought from the beginnings through the early American Renaissance. Authors studied include some from the colonial and early national periods and such major figures as Poe, Emerson, and Hawthorne.

Engl 3412 AMERICAN LITERATURE II (3682)

15 lessons—\$185—4 degree credits—text price \$81-86—Collins

American literature from the American Renaissance to the end of the 19th century. Among the authors studied are Whitman, Dickinson, Twain, James, and Crane.

Engl 3413 AMERICAN LITERATURE III (3683)

16 lessons—\$185(plus texts)—4 degree credits—Collins

American literature from the end of the 19th century to the 1960s. Authors studied include Frost, Eliot, O'Neill, Cather, Fitzgerald, Faulkner, and Hemingway, as well as a selection of contemporary poets.

Engl 3455 AMERICAN SHORT STORY (3684)

14 lessons—\$185—4 degree credits—text price \$19-24—Furia

Students will study the works of Irving, Poe, Melville, Crane, Cather, Hemingway, Updike, Cheever, and other authors.

Engl 3851 THE ENGLISH LANGUAGE (V360)

Video Cassette course—\$185—4 degree credits—text price \$50-55—study guide \$11—Bridwell-Bowles

An introduction to the English language, including historical changes, syntax, phonetics and phonology, semantics, pragmatics, *British and American dialects*, and the acquisition of English as a first language. **Enrollment limited to students who can view the cassettes at Walter Library.**

Engl 3910 TOPICS IN ENGLISH AND AMERICAN LITERATURE: THE CELTIC WORLD (A360)

Audio Cassette Course—\$185—4 degree credits—text price \$38-43—10 audio cassettes \$20.75—study guide \$10—Suppe

A wide-ranging introductory survey of the history, music, folk ways, and traditional oral culture of the six Celtic countries (Brittany, Cornwall, Ireland, Isle of Man, Scotland, and Wales). Topics considered are ancient culture; tribal society; saints, druids, bards, poets; the age of King Arthur; languages; and the future of Celtic culture.

Engl 3910 MODERN WOMEN WRITERS (3685)

12 lessons—\$185—4 degree credits—text price \$35-40—Poulakis

Readings in fiction and poetry by British and American women writers from 1900 to the present. Kate Chopin, Edith Wharton, Virginia Woolf, Doris Lessing, Eudora Welty, Sylvia Plath, Anne Sexton, Toni Morrison, Audre Lorde, and Adrienne Rich are among the writers included. Emphasis is on how these writers perceived themselves as women and as artists, their analyses of the roles of women in modern society, and the formal literary qualities of their works.

Engl 3910 TOPICS IN ENGLISH AND AMERICAN LITERATURE: D. H. LAWRENCE AND FREUD (3688)

10 lessons—\$185—4 degree credits—Lock

An intensive reading of major works by Lawrence and Freud with an emphasis on sexuality and the individual, the family, and the group within modern culture.

Engl 3190 TOPICS IN ENGLISH AND AMERICAN LITERATURE: D. H. LAWRENCE AND FREUD (K374)

10 lessons—\$185—4 degree credits—text price \$30-40 (plus study guide)—Lock and Mishler

An intensive reading of the prose fiction and poetry of D. H. Lawrence alongside key texts by Freud. The course will examine modern culture and its discontents as interpreted by these two writers. **This course will be broadcast Spring 1989 on KUOM radio (770 AM) (see the blue section).**

Course Descriptions

Engl 3940 THE WOMAN WRITER: NINETEENTH CENTURY FICTION (3686)

12 lessons—\$185—4 degree credits—text price \$28-33—Poulakis

Short stories and novels by nineteenth century women writers—Jane Austen, Elizabeth Gaskell, Charlotte Bronte, Harriet Beecher Stowe, George Eliot, Sarah Orne Jewett, Mary E. Wilkins Freeman, and Charlotte Perkins Gilman—who were actively engaged in the business of writing. Emphasis is on the ways in which women writers' professional roles evolved during the nineteenth century, the conflicts these writers faced as their careers developed, the extent to which their writing satisfied the requirements of their audiences for successful fiction, and the formal literary qualities of their works.

Engl 3940 FIGURES IN ENGLISH AND AMERICAN LITERATURE: HEMINGWAY (3689)

14 lessons—\$185—4 degree credits—text price \$20-25—Solotaroff

The course will cover what most critics feel to be the most impressive segment of Hemingway's career, the period between 1922 and 1929. Students will read two novels from this period—**The Sun Also Rises** and **A Farewell to Arms**—and two collections of stories: **In Our Time** and **Men without Women**.

Engl 5109 JOURNAL AND MEMOIR WRITING

See Composition.

Engl 5153 TWENTIETH CENTURY ENGLISH NOVEL (3660)

15 lessons—\$185—4 degree credits—text price \$53-58—Reed

A study of the British novel in the 20th century, emphasizing some of its main ideas, techniques, and relationships to the history of the novel. Selected authors of historical or representative importance include Forster, Joyce, Lawrence, Woolf, Waugh, Cary, Amis, Sillitoe, Murdoch, and Burgess. (Prerequisite: Comp 1002 or equivalent and 5 additional credits in either English or Humanities)

Engl 5363 JAMES JOYCE (A371)

Audio Cassette Course—\$185—4 degree credits—text price \$53-58—10 audio cassettes \$20.75—study guide \$10—C. Anderson

An introduction to the life and works of Joyce, including the epiphanies, the poems, the play, **Dubliners**, **A Portrait of the Artist as a Young Man**, **Ulysses**, and bits of **Finnegans Wake**.

Engl 5432 AMERICAN POETRY (3687)

15 lessons—\$185—4 degree credits—text price \$57-63—Furia

An examination of American poetry from 1890 to 1940. Includes historical and intellectual background, and poetic theory. Poets discussed include Frost, Stevens, Pound, Eliot, Moore, and Williams.

GC 1365 LITERATURE OF THE UNITED STATES (3611)

14 lessons—\$177—4 degree credits—text price \$16-21—Gidmark

A historic survey and analysis of nearly 30 giants of American fiction. Students will examine the development of the form of the short story in America to enhance their understanding and appreciation of a wide range of writers, from Irving's early sketches to Barthelme's and Coover's present-day experiments.

GC 1371 LITERATURE: READING SHORT STORIES (3610)

10 lessons—\$132.75—3 degree credits—text price \$16-21—Kurak

Representative short stories by American, British, and Continental writers. This course considers how individual writers have used the short story to express their ideas about human experience.

GC 1816 AFRO-AMERICAN LITERATURE (3608/3609)

9 lessons—\$132.75—3 degree credits (or 15 lessons—\$221.25—5 degree credits)—text price \$31-47—C.A. Miller

Students read and evaluate the poetry, drama, folklore, short stories, and longer fiction of black authors. Through literature, students assess the artists' own perceptions and interpretations of black culture in America from colonial times to the present. This course can be taken for either 3 or 5 credits. Students who take the 3-credit version can register later for the additional 2 credits, pay \$83.50 in tuition, and complete 6 more lessons and a final examination.

GC 3352 PHILOSOPHY THROUGH LITERATURE (3606)

12 lessons—\$183—4 degree credits—text price \$22-27—Kurak

Readings in literary forms such as the novel, short story, poetry, and drama provide instances of broad philosophical problems including individualism and responsibility, free will and determinism, knowledge and values, and the status of the artist in society. Essays in philosophy will acquaint students with various philosophic perspectives and illustrate the contrast between Western and Oriental world views.

Course Descriptions

CLit 5414 EUROPEAN FOLK TALES (A362)

Audio Cassette Course—\$185—4 degree credits—text price \$35-40—study guide \$6—10 audio cassettes \$20.75—Lieberman

This course is devoted to the folk tales of Germany, Scandinavia, France, Russia, and England. It discusses the structure, message for adults and children, origins of folk tales as a genre, and compares the tales of different nations and states the differences and similarities among them. Folk tales will be analyzed within the broader context of oral literature and folklore.

English As A Second Language (CLA)

ESL 0117 READING AND VOCABULARY (3591)

12 lessons—\$177—no credit—text price \$33-38—2 audio cassettes \$5—Landa

Practice of basic reading techniques designed to improve comprehension and reading speed. Some practice of reading for special purposes. Word formation is studied with reference to an English-English dictionary. S-N grading only.

Entomology (Agriculture)

Ent 0004C PRINCIPLES OF BEEKEEPING (1004)

16 lessons—\$132.75—3 certificate credits—text price \$14-19—Furgala

Useful to both the nonexperienced and experienced beekeeper. History of beekeeping, life history and behavior of honey bees; colony and apiary management; pollination and hive products; honey bee diseases and their control.

Family Studies (Home Economics and GC)

FSoS 3240 MINORITY FAMILIES IN THE UNITED STATES (4112)

9 lessons—\$246—4 degree credits—text price \$14-19—Burkett

Sociological overview of family structures and family values of various American racial and ethnic groups, including blacks, Indians, Chicanos, Jews, and Asian-Americans. This course combines a study of research and case studies with individual projects to develop and enrich understanding of cultural diversity.

FSoS 5001 HUMAN SEXUALITY (4103)

14 lessons—\$307.50—5 degree credits—text price \$31-36—Engel

Examination of biological, psychological, and social aspects of human sexuality. Topics include: sexuality in literature, history, and religion; sex education and communication; sexual anatomy and physiology; sexual differentiation and gender roles; reproduction, fertilization, pregnancy, and childbirth; birth control; love and intimacy; arousal and stimulation; the sexual response cycle, intercourse, and orgasm; sexual development in infancy, childhood, adolescence, adulthood, and old age; variations in sexual preferences and behaviors; homosexuality and bisexuality; sex and law; and sexual dysfunctions, diseases, and disorders.

FSoS 5200 FAMILY RELATIONSHIPS (4107)

15 lessons—\$307.50—5 degree credits—text price \$43-48—Budd

This course provides an analysis of the family as an institution and its system of relationships. It also surveys current developments in the study of the family and analyzes changes in American society and their influence on family life. (Prerequisite: Soc 1001 and Psy 1001)

FSoS 5200 FAMILY RELATIONSHIPS (T417)

10 lessons—\$307.50—5 degree credits—text price \$53-58—Doherty and Dollahite

This course will examine the family as an institution and system of relationships. It surveys current developments in the study of family, changes in American society and their influence on family life. Course will be offered in an innovative format including lectures, simulated family interaction, and participation of a studio audience. This course is applicable toward the M.Ed. degree and the Licensure in Parenting Education. This course will be broadcast Winter 1989 on KTCI-TV (Channel 17) and KWCM-TV (Channel 10) and Spring 1989 on WDSE-TV (Channel 8) (see the blue section).

Course Descriptions

FSoS 5200 FAMILY RELATIONSHIPS (V417)

Video Cassette Course—\$307.50—5 degree credits—text price \$53-58—Doherty and Dollahite
See above. Available starting Spring 1988. **Enrollment limited to students who can view the cassettes at Walter Library or on their Home VCR (see the blue section).**

FSoS 5230 AMERICAN FAMILIES IN TRANSITION (A415)

Audio Cassette course—\$246—4 degree credits—text price \$43-48—10 audio cassettes \$20.75—study guide \$6—Rossmann
The family, our most basic institution, provides us with our first anchor in society and earliest sense of identity. This course will present a comprehensive view of family life and examine historical and contemporary family issues. Focus will be on helpful information related to adjustment to rapid changes in family. **This course is available for graduate credit toward the M.Ed.**

FSoS 5240 PARENTING: ALTERNATIVES FOR THE '80S (A414)

Audio Cassette Course—\$246—4 degree credits—no required text—study guide \$20—10 audio cassettes \$20.75—Budd
An examination of parenting in different life styles and situations, such as the blended family, joint custody, parenting a gifted child, parenting a learning disabled child, etc.

FSoS 5240 FAMILY STRESS AND COPING (V415)

Video Cassette Course—\$184.50—3 degree credits—text price \$27-32—study guide \$10—McCubbin
This course will examine family responses to both normal and unusual circumstances by focusing on the coping strategies families employ to face stress. It will additionally consider why families survive amidst change and adversity. The application of family stress theories and research to counseling families will also be explored. **Enrollment limited to students who can view the cassettes at Walter Library, Duluth Center, and Morris Center, or on their Home VCR (see the blue section).**

FSoS 5240 FAMILY VIOLENCE (4113)

9 lessons—\$246—4 degree credits—text price \$32-37—Latts
This course focuses on the various forms of abuse (physical, psycho-emotional, sexual) found among family members—spouses, parents and children, siblings. Attention is given to the factors that bring about or inhibit family violence, and to prevention and treatment strategies.

GC 1722 PARENT-CHILD RELATIONSHIPS (4109)

10 lessons—\$177—4 degree credits—text price \$55-60—Latts
An interdisciplinary course aimed at helping students to develop their own philosophy of child rearing—attitudes, principles, and perspectives that will guide them in their relations to their children and performance of their parental responsibilities. Focus is on helpful information related to crises of parenthood. Relevant research is used to emphasize principles of parent-child relations and to prepare students for tasks of parenthood.

GC 1733 CONTEMPORARY SEX ROLES (4110)

10 lessons—\$221.25—5 degree credits—text price \$16-21—Thoen
An examination of the roles of men and women. Social roles and related concepts of expectations, informal and formal roles, role modification, and role reversal are explored. The goal of this course is to overcome sexual stereotyping. Focus is on analyzing the openness and rigidity of sex roles in childhood socialization; education; mate selection; marital, parental, and homemaking roles; and social trends.

Finance (Management)

BFin 3000 FINANCE FUNDAMENTALS (2354)

13 lessons—\$216—4 degree credits—text price \$43-48—Reik
A comprehensive, analytical introduction to the principal concepts of finance. The general business environment, valuation theory, financial management decisions concerning uses and sources of funds (capital budgeting), survey of the nation's financial markets. (Prerequisite: Acct 1051 or Acct 3001) **This course is now in preparation; please inquire before enrolling.**

Course Descriptions

Food Science and Nutrition (Agriculture and Home Economics)

FScN 1102 TECHNOLOGY OF FOOD PROCESSING (4304)

14 lessons—\$177—4 degree credits—text price \$46-51—Zottola

An introduction to the technology of processing and distribution of foods, with reference to the prevention of biological, physical, and chemical deterioration. Changes in food composition, microbiological safety, food laws and regulations, technologies of the major food processes (canning, freezing, drying), cereal and oilseed processing are considered. (Prerequisite: high school chemistry and biology)

Forestry (Forestry)

FR 1201 CONSERVATION OF NATURAL RESOURCES (4202)

16 lessons—\$132.75—3 degree credits—text price \$21-26—Scholten

Current status, utilization, and sound management of natural resources with emphasis on the ecological approach. Conservation principles and their application to soil, water, forests, grasslands, wildlife, minerals, and energy sources.

French (CLA)

Fren 0001 FRENCH FOR GRADUATE STUDENTS (5718)

17 lessons—\$177—no credit—text price \$20-25—Akehurst

Fundamentals of grammar; reading of appropriate prose. Prepares for graduate reading examination in French.

Fren 1101 BEGINNING FRENCH I (5711)

10 lessons—\$221.25—5 degree credits—text price \$47-52—8 audio cassettes \$16.50—Ssebudde

An audio-lingual approach to elementary French, adapted for home use.

Fren 1102 BEGINNING FRENCH II (5712)

7 lessons—\$221.25—5 degree credits—text price \$47-52—5 audio cassettes \$10.75—Ssebudde

Continuation of French 1101.

Fren 1103 BEGINNING FRENCH III (5713)

7 lessons—\$221.25—5 degree credits—text price \$47-52—5 audio cassettes \$10.75—Ssebudde

Continuation of French 1102.

Fren 3104 INTRODUCTION TO FRENCH LITERARY TEXTS (5710)

15 lessons—\$231.25—5 degree credits—text price \$21-26—Akehurst

Provides training in reading literary works of poetry, drama, prose. Completely in French.

Fren 3602 FRENCH LITERATURE IN ENGLISH TRANSLATION: FLAUBERT AND MODERN WRITING (5714)

11 lessons—\$185—4 degree credits—text price \$26-31—Lock

An intensive reading in English of major works by Flaubert in the context of Freudian criticism and modern writing.

Frit 3604 CINEMAS OF THE REAL (V571)

Video Cassette Course—\$185—4 degree credits—text price \$25-30—Conley

Film works of major vanguards: surrealism; Vigo, Renoir, Wells; Visconti, Rossellini, DeSica. Course varies in structure. Knowledge of French and Italian helpful but not necessary. **Available only through the Home VCR Library (see the blue section). This course is now in preparation; please inquire before enrolling.**

Gardening

See Horticultural Science

General College

As nearly as possible, General College courses are planned to be complete in themselves. Emphasis is on relationships within and among fields of knowledge rather than intensive study of isolated segments. Most courses do not have pre-requisites.

Refer to the following pages for General College courses.

Arts, Communication, and Philosophy Division

- GC 0402 Grammar and Usage Review, p. 19
- GC 1085 How to Study, p. 57
- GC 1355 Ethics, p. 47
- GC 1365 Literature of the United States, p. 27
- GC 1371 Literature: Reading Short Stories, p. 27
- GC 1816 Afro-American Literature, p. 27
- GC 3352 Philosophy Through Literature, p. 27
- GC 3425 Writing for Business and the Professions, p. 21

Science, Business, and Mathematics Division

- GC 0631 Mathematics: Intermediate Algebra, p. 44
- GC 1161 Solar Astronomy, p. 14
- GC 1166 Principles of Chemistry, p. 16
- GC 1235 Law in Society, p. 15
- GC 1511 Introduction to Modern Business, p. 15
- GC 1534 Practical Law, p. 15
- GC 1540 Accounting Fundamentals I, p. 15
- GC 1542 Accounting Fundamentals II, p. 15
- GC 1551 Marketing: Introduction, p. 16
- GC 1553 Marketing: Management, p. 16
- GC 1571 Introduction to BASIC Programming and Microcomputers, p. 21
- GC 1731 Consumer Problems: Personal Finance, p. 16
- GC 3115 Evolution of Life on Earth, p. 22
- GC 3560 Personnel Administration, p. 16
- GC 3571 Computer Approach to Problem Solving, p. 21
- GC 3583 Estate Planning and Administration, p. 16
- GC 3602 Applied Supervision, p. 16

Social and Behavioral Science Division

- GC 1283 Psychology of Human Development, p. 53
- GC 1722 Parent-Child Relationships, p. 29
- GC 1733 Contemporary Sex Roles, p. 29
- GC 3841 Minnesota Resources, p. 32

Course Descriptions

Geography (CLA and GC)

Geog 3101 GEOGRAPHY OF THE UNITED STATES AND CANADA (4453)

14 lessons—\$185—4 degree credits—text price \$39-44—Hickey

Provides an opportunity to study and evaluate the character and diversity of the various regions of the United States and Canada. The influence of both cultural and physical environments upon people and their use of the land is emphasized. Cities are observed as the dominant feature of the technological-industrial complex. Problems are considered on both a national and regional basis.

Geog 3111 GEOGRAPHY OF MINNESOTA (4407)

14 lessons—\$185—4 degree credits—text price \$13-18—Hickey

The quality of life in Minnesota is observed within the context of the American Dream and the Good Life. Minnesota's resources—its people, physical environment and economic activities—provide the materials necessary for gaining knowledge and understanding of the state. The development of Minnesota's urban service centers is studied. **Also see GC 3841. Students may not receive credit for both Geog 3111 and GC 3841.**

Geog 3121 GEOGRAPHY OF LATIN AMERICA (4450)

14 lessons—\$185—4 degree credits—text price \$24-29—Hickey

Provides an opportunity to study and evaluate the character and diversity of Mexico, Central America, the Caribbean, and South America. Individual countries and major regions within them are analyzed. The influence of both cultural and physical elements upon people and their use of the land is emphasized. Problems are considered on both a national and regional basis.

Geog 3181 GEOGRAPHY OF THE U.S.S.R. (4452)

14 lessons—\$185—4 degree credits—text price \$35-40—Hickey

Provides an opportunity to study and evaluate the character and diversity of the regions of the Soviet Union. The major regions are observed from a cultural, physical, and economic viewpoint. Following the study of the regions, the Soviet Union is presented by topical analysis of cultural and economic phenomena including foreign trade, aid, and international relations.

Geog 3355 ENVIRONMENTAL PROBLEMS (4454)

4 lessons—\$185—4 degree credits—text price \$9-14—Squires

Environmental problems associated with human activities.

GC 3841 MINNESOTA RESOURCES (4407)

14 lessons—\$183—4 degree credits—text price \$13-18—Hickey

See Geog 3111. Course available for credit in either Geography or General College. **Students may not receive credit for both Geog 3111 and GC 3841.**

Geology and Geophysics (IT)

Geo 1001 PHYSICAL GEOLOGY (4501)

18 lessons—\$221.25—5 degree credits—text price \$37-42—Sloan

An introduction to general geology. Survey of the main features of the physical world and the processes that have evoked them. Topics include: maps, rock formation, weathering, soils, deserts, oceans, and the phenomena of earthquakes, glaciers, and volcanoes.

Geo 1002 HISTORICAL GEOLOGY (4503)

13 lessons—\$177—4 degree credits—text price \$36-41—Sloan

Evolution of the earth and its inhabitants from their origins to the present, with emphasis on the past 600 million years. The first part of the course outlines the fundamentals of geology, evolution, and paleontology.

German (CLA)

Ger 1101 BEGINNING GERMAN I (5805)

15 lessons—\$221.25—5 degree credits—text price \$32-37—1 audio cassette \$3—Peters

Introduction to the basic structures of the German language and its most frequently used vocabulary. Intended to give a student a foundation in the skills of reading, writing, and listening.

Course Descriptions

Ger 1102 BEGINNING GERMAN II (5806)

15 lessons—\$221.25—5 degree credits—text price \$32-37—2 audio cassettes \$5—Peters
Continuation of Ger 1101. (Prerequisite: Ger 1101 or 1 year of high school German)

Ger 1103 BEGINNING GERMAN III (5807)

16 lessons—\$221.25—5 degree credits—Peters
Review of selected high-frequency grammar points; emphasis on vocabulary building, reading of edited texts, and introduction to composition. (Prerequisite: German 1102 or 2 years of high school German).
This course is now in preparation; please inquire before enrolling.

Ger 1104 INTERMEDIATE GERMAN (5808)

15 lessons—\$221.25—5 degree credits—text price \$25-30—O'Brien
This course is designed to help students expand their basic knowledge of German. By reading selections of German prose in German, students will assimilate more of the structures and vocabulary of German. This is not, however, a course in translation. (Prerequisite: Ger 1103 or 3 years of high school German)

Ger 3610 GERMAN LITERATURE IN TRANSLATION: POST-WAR DEVELOPMENTS AS SEEN THROUGH THE WORKS OF HEINRICH BÖLL (5809)

10 lessons—\$185—4 degree credits—text price \$61-66—Weiss
Through reading Böll's novels and short stories, students will gain an understanding of the development of West German society since 1945. In addition to reading Böll's fiction, students will learn about post-war Germany through extensive study notes and some outside reading. Students will also be asked to use media resources (films, magazines, video tapes, as available) to round out their knowledge of contemporary Germany.

Scott Joplin (1868-1917) American ragtime pianist and composer, Joplin is best known for his "Maple Leaf Rag," "The Sting," and the ragtime opera *Treemonisha*.



Greek (CLA)

Grk 1101 BEGINNING CLASSICAL GREEK I (5901)

15 lessons—\$221.25—5 degree credits—text price \$13-18—1 audio cassette \$3—K. Baldwin
An introduction to Homeric and Classical Greek language: alphabet, vocabulary, and idioms. Selected readings from *Iliad* and *Odyssey* of Homer and Classical Greek selections of moderate difficulty. Written translation exercises, oral exercises, and introduction to scansion and meter.

Health Science Units (Public Health)

HSU 5008 SOCIAL AND PSYCHOLOGICAL ASPECTS OF PHYSICAL DISABILITY (T466)

10 lessons—\$251—4 degree credits—study guide \$10—text price \$45-50—Athelstan
Communication barriers often exist between able-bodied people and those with physical disabilities. By understanding the psychological and social impact of various sensory and motor disabilities, course participants should be better equipped to interact with disabled persons on a professional or personal level. Particularly directed toward nurses, physicians, therapists, counselors, teachers, and health administrators with the goal of helping them to provide more effective services. Employers, family members,

Course Descriptions

friends, and disabled individuals may also find this course useful. Course content will include information about common disabling conditions, the process of psychological adjustment to disability, the impact on families, societal attitudes, new advances related to independent living, educational and vocational programs for the disabled, and medical rehabilitation and long term care. Course co-author is Dr. Nancy Crewe. Also available as PMed 5445. Students may receive credit for only one of the following: HSU 5008 or PMed 5445. **This course will be broadcast Fall 1988 on KTCI-TV (Channel 17) and KWCM-TV (Channel 10), Winter 1989 on KTCI-TV (Channel 17), and Spring 1989 on KAWE-TV (Channel 9) (see the blue section).**

HSU 5008 SOCIAL AND PSYCHOLOGICAL ASPECTS OF PHYSICAL DISABILITY (V466)

Video Cassette Course—\$251—4 degree credits—text price \$45-50—study guide \$10—Athelstan
See above. **Enrollment limited to students who can view the cassettes at Walter Library, Duluth Center, or the Morris Center, or on their Home VCR (see the blue section).**

HSU 5009 MULTIDISCIPLINARY PERSPECTIVES ON AGING (V822)

Video Cassette Course—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

HSU 5009 MULTIDISCIPLINARY PERSPECTIVES ON AGING (T822)

10 lessons—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

History (CLA)

Hist 1001 INTRODUCTION TO MODERN EUROPEAN HISTORY I (4737)

12 lessons—\$177—4 degree credits—text price \$47-52—S. Anderson
A survey of European history to the 18th century. Emphasis is on the rise of the nation state and the role of Christianity and exploration in its development. Hist 1001, 1002, 1003 need not be taken in sequence.

Hist 1002 INTRODUCTION TO MODERN EUROPEAN HISTORY II (4738)

12 lessons—\$177—4 degree credits—text price \$47-52—S. Anderson
A survey of European history in the 18th and 19th centuries. Emphasis is on the struggle for control of the state, the Age of Reason, the French Revolution. Hist 1001, 1002, 1003 need not be taken in sequence.

Hist 1003 INTRODUCTION TO MODERN EUROPEAN HISTORY III (4739)

12 lessons—\$177—4 degree credits—text price \$47-52—S. Anderson
A survey of 19th-century civilization and the development of the international problems of the 20th century. Hist 1001, 1002, 1003 need not be taken in sequence.

Hist 1051 HISTORY OF ANCIENT CIVILIZATION I (4761)

12 lessons—\$132.75—3 degree credits—text price \$24-29—T. Jones
Survey of the rise of civilization in the Ancient Near East from the earliest times to 500 B.C. Emphasis is on the origin of culture and its development in complexity from the primitive to the civilized stage. Special attention is given to the civilizations of Babylonia, Egypt, Indus Valley, Syria, Palestine, and Crete. Students must have access to a large library to successfully complete this course.

Hist 1052 HISTORY OF ANCIENT CIVILIZATION II (4762)

12 lessons—\$132.75—3 degree credits—text price \$30-35—T. Jones
History of the rise and flowering of Greek civilization from the earliest times to the death of Alexander the Great in 323 B.C. Special emphasis is placed on Greek civilization in the fifth century (Age of Pericles) with attention to the political, social, literary, artistic, and philosophic achievements of that period. (No prerequisite; Hist 1051 helpful in providing background for the Greek period) Students must have access to a large library to successfully complete this course. **Also see Hist 1062.**

Hist 1053 HISTORY OF ANCIENT CIVILIZATION III (4763)

12 lessons—\$132.75—3 degree credits—text price \$30-35—T. Jones
The climax of ancient civilization during the Hellenistic Age (323-133 B.C.) and the Roman Imperial Period, followed by the decline of Rome and of ancient civilization (to about A.D. 300). The three main topics to be considered are civilization of the ancient world at its peak, rise and flowering of Roman culture, and reasons for the decline of ancient civilization. Special attention will be paid to political institutions, art,

Course Descriptions

literature, economics and society, philosophy, and ancient science. (No prerequisite; Hist 1051 and 1052 recommended for background) **Also see Hist 1063.** Students must have access to a large library to successfully complete this course.

Hist 1062 BASIC READINGS IN ANCIENT CIVILIZATION II (4718)

12 lessons—\$88.50—2 degree credits—text price \$48-53—T. Jones

An introduction to the major authors of the Classical Greek period. Selections from poets, dramatists, Herodotus, Thucydides, Xenophon, orators, Plato, and Aristotle. Students must have access to a large library to complete this course. (Prerequisite: Hist 1052 or concurrent registration)

Hist 1063 BASIC READINGS IN ANCIENT CIVILIZATION III (4719)

8 lessons—\$88.50—2 degree credits—\$63-68—T. Jones

An introduction to the literature of the Hellenistic and Roman periods. Selections from poetry, drama, history, biography, science, philosophy, oratory, and letters. The New Testament and early Christian writings will be considered in their relation to pagan literature. Students must have access to a large library to complete this course. (Prerequisite: Hist 1053 or concurrent registration)

Hist 1151/3151 ENGLISH HISTORY I (4709/4710)

12 lessons—\$177/\$185—4 degree credits—text price \$65-70—D. Bachrach

Part one of a two-part sequence covers the history of England from earliest times to the death of Queen Elizabeth I. Students enrolling in the 3000-level course will be expected to do extra work.

Hist 1152/3152 ENGLISH HISTORY II (4711/4712)

12 lessons—\$177/\$185—4 degree credits—text price \$68-73—D. Bachrach

Part two of this two-part sequence covers the period from the Stuart Accession through the Cold War. Students enrolling in the 3000-level course will be expected to do additional work.

Hist 1301 AMERICAN HISTORY I (4728)

12 lessons—\$177—4 degree credits—text price \$33-38—Pearson

United States history from colonial times to Reconstruction. A survey course emphasizing political, economic, social, and diplomatic history of the U.S. to 1877.

Hist 1301 AMERICAN HISTORY I (A472)

Audio Cassette Course—\$177—4 degree credits—text price \$57-62—study guide \$6—Lindman

See above. Funding for production provided by The Annenberg/CPB Project—providing opportunities for higher education through telecommunications. Under the project, audio cassettes will be provided free to all enrolled students.

Hist 1302 AMERICAN HISTORY II (4729)

12 lessons—\$177—4 degree credits—text price \$33-38—Pearson

United States history survey course from 1865 to the present.

Hist 1451/3451 ASIAN CIVILIZATIONS I (4741/4744)

15 lessons—\$177/\$185—4 degree credits—text price \$25-30—Kopf

Ancient societies in East, South, and West Asia. Students enrolling in the 3000-level course will be expected to do extra work.

Hist 1452/3452 ASIAN CIVILIZATIONS II (4742/4745)

12 lessons—\$177/\$185—4 degree credits—text price \$25-30—Kopf

Fifth through the 18th centuries. Students enrolling in the 3000-level course will be expected to do extra work.

Hist 1453/3453 ASIAN CIVILIZATIONS III (4743/4746)

15 lessons—\$177/\$185—4 degree credits—text price \$25-30—Kopf

The modern era. Students enrolling in the 3000-level course will be expected to do extra work.

Hist 3224 EUROPE DURING WORLD WAR II (A474)

Audio Cassette Course—\$185—4 degree credits—text price \$11-16—study guide \$6—10 cassette tapes \$20.75—Munholland

Origins and diplomatic background of World War II, strategic objectives and campaigns, and the political and social impact of the war. Also see Hist 3722. **Students may not receive credit for both Hist 3224 and Hist 3722.**

Course Descriptions

Hist 3700 TRAVELERS AND THEIR JOURNALS (K475)

Audio Cassette Course—\$185—4 degree credits—text price \$55-60—study guide \$9—J. Parker
A study of the journals of major explorers and travel writers from ancient to modern times, emphasizing changes in motives, points of view and literary style. Students will have an opportunity to present their own travel journals.

Hist 3700 COLUMBUS AND THE NEW WORLD (4758)

8 lessons—\$185—4 degree credits—text price \$33-38—M. A. Nelson
This course places the familiar figure of Christopher Columbus in the context of the world of the late fifteenth century. Readings examine Europe and the rest of the known world, the New World of the Western Hemisphere, the motives and means through which Europeans expanded their interests around the globe, and the far-reaching consequences of Columbus's voyages.

Hist 3700 THE LIFE AND TIMES OF PETER THE GREAT (4787)

18 lessons—\$185—4 degree credits—text price \$21-26—T. Noonan
A study of tsar Peter the Great of Russia and his impact both on his country and on Europe as a whole. In looking at Peter's 43 year reign, two major themes will be explored—Peter's efforts to westernize Russia and his constant wars against neighboring countries, especially Sweden. Topics that will be studied include Peter's early years, his various wars, battles, and peace treaties, and the reforms he introduced into Russian life.

Hist 3700 SWEDEN, 1560-1721: EXPERIMENT IN EMPIRE (4809)

8 lessons—\$185 (plus texts and study guide)—4 degree credits—Metcalf
Study of the formation and dismantling of Sweden's Baltic empire between 1560 and 1721 highlights the administrative, economic, demographic, and social foundations of the experience, as well as the politics and diplomacy of the period. Students will work with primary sources in translation as well as several scholarly texts. **This course opens in conjunction with the "Sweden: A Royal Treasury, 1550-1700" exhibition at the Minneapolis Institute of Arts, October 9, 1988—January 1, 1989, but is available throughout the year.**

Hist 3722 EUROPE DURING WORLD WAR II (4713)

10 lessons—\$185—4 degree credits—text price \$40-45—Munholland
See Hist 3224. **Students may not receive credit for both Hist 3224 and Hist 3722.**

Hist 3812 CIVIL WAR AND RECONSTRUCTION (4755)

11 lessons—\$185—4 degree credits—text price \$36-41—C. Miller
Politics and society from 1848 to 1877. The Compromise of 1850 and the "finality" period; nativism and the Know-Nothing movement; party realignment and the rise of the Republican Party; the West, Dred Scott, John Brown, and the coming of the Civil War; Lincoln, Douglas, and the crisis of secession; the rise and fall of the Confederacy; Grant, Sherman, and the politics of total war; emancipation; presidential and radical reconstruction; the Ku Klux Klan; the origins of the Gilded Age; redemption and the Compromise of 1877.

Hist 3822 THE UNITED STATES IN THE 20TH CENTURY: 1932-1960 (V473)

10 lessons—\$185 (plus texts and study guide)—4 degree credits—Berman
The Great Depression and the New Deal; the challenge of fascism and the coming of World War II; the origins of the Cold War; the great red scare; the politics and culture of the Eisenhower era; the origins of the civil rights movement; labor relations. Includes a documentary narrated by Berman. **This course is available only through the Home VCR Library (see the blue section). This course is now in preparation; please inquire before enrolling.**

Hist 3841 AMERICAN BUSINESS HISTORY (V476)

Video Cassette Course—\$185—4 degree credits—text price \$40-45—study guide \$16—Green
This course explores the role of business leaders such as James J Hill, Carnegie, Rockefeller, Morgan, and Ford, the development of business institutions, and the interaction of business with economic developments, social values, and government economic policies. **Enrollment restricted to students who can view the cassettes at Walter Library and Morris Center.**

Hist 3841 AMERICAN BUSINESS HISTORY (T476)

10 lessons—\$185—4 degree credits—text price \$40-45—study guide \$16—Green
See above. **This course will be broadcast Fall 1988 on WDSE-TV (Channel 8) and Spring 1989 on KTCI-TV (Channel 17) and KWCM-TV (Channel 10) (see the blue section).**

Course Descriptions

Hist 3910 A CENTURY OF AMERICAN IMMIGRATION: 1884-1984 (4756)

8 lessons—\$185—4 degree credits—text price \$39-44—Lintelman

This course presents a history of a century of American immigration. Considered are migration patterns, ethnic communities and conflict, maintenance of ethnic cultures, immigration legislation, social mobility, and the emergence of a pluralistic America. Students will compare immigrant experiences in both urban and rural settings.

Hist 5051 THE ANCIENT NEAR EAST I (4764)

10 lessons—\$138.75—3 degree credits—T. Jones

In-depth study of selected topics in early Mesopotamian history (Sumerian-Old Babylonian period to 1550 B.C.). Required reading, written assignments, and major research paper in lieu of final examination. Students must have access to a large library to complete this course. (Prerequisite: Hist 1051 or equivalent) **This course is now in preparation; please inquire before enrolling.**

Hist 5131 BYZANTINE HISTORY I (4749)

12 lessons—\$138.75—3 degree credits—text price \$47-52—T. Jones

The later Roman Empire (A.D. 284-565). Establishment of the new regime by Diocletian and Constantine the Great; founding of Constantinople and the imperial alliance with the Christians; Theodosius the Great and the two-fold division of the empire; Age of Justinian (A.D. 527-565): foreign, domestic and religious affairs, art and architecture, literature and law. Students must have access to a large library to complete this course.

Hist 5132 BYZANTINE HISTORY II (4750)

12 lessons—\$138.75—3 degree credits—text price \$16-21—T. Jones

The middle period of Byzantine history—from the death of Justinian (565 AD) to the accession of Basil II (976 AD). Heraclius and the defeat of the Sasanians; the rise of Islam; barbarian pressures in the Balkans and relations with the West; Isaurian, Amorian, Macedonian dynasties; Iconoclasm; aspects of Byzantine culture—religion, art, architecture, literature, law, and science. Students must have access to a large library to complete this course.

Hist 5284 DIPLOMATIC HISTORY OF EUROPE IN THE 19TH AND 20TH CENTURIES I (4801)

12 lessons—\$185—4 degree credits—text price \$85-90—D. Bachrach

This course covers European diplomatic history from the Congress of Vienna to the unification of Germany and the unification of Italy.

Hist 5285 DIPLOMATIC HISTORY OF EUROPE IN THE 19TH AND 20TH CENTURIES II (4802)

12 lessons—\$185—4 degree credits—text price \$83-88—D. Bachrach

Surveys the diplomatic history of Bismarck's alliance system, the impact of the Eastern Question on the Concert of Europe, Imperialism and its influence on the European Powers, and the events leading up to and including World War I.

Hist 5286 DIPLOMATIC HISTORY OF EUROPE IN THE 19TH AND 20TH CENTURIES III (4803)

12 lessons—\$185—4 degree credits—text price \$73-78—D. Bachrach

Surveys the diplomatic history of the Versailles settlement, the interwar period, the causes and events of the Second World War, and the Cold War period.

Hist 5331 AMERICAN CONSTITUTIONAL HISTORY (4804)

10 lessons—\$185—4 degree credits—text price \$39-44—Carroll

The origins and developments of constitutional government in America with emphasis on the role of constitutional politics in the evolution of public policy. This course emphasizes the English and colonial background through the Reconstruction period.

Hist 5332 AMERICAN CONSTITUTIONAL HISTORY (4805)

10 lessons—\$185—4 degree credits—text price \$47-52—Carroll

A continuation of Hist 5331. Emphasizes the Constitution and the rule of law in modern America. **This course is now in preparation; please inquire before enrolling.**

Hist 5332 AMERICAN CONSTITUTIONAL HISTORY (V474)

10 lessons—\$185—4 degree credits—text price \$47-52 (plus study guide)—Carroll

Same as Hist 5332 above, but with the addition of video tape discussions of the Constitution by eminent modern judges and scholars. **Available through the Home VCR Library (see the blue section). This course is now in preparation; please inquire before enrolling.**

Course Descriptions

History of Science and Technology (CLA)

HSci 1812 INTRODUCTION TO HISTORY OF SCIENCE: SCIENTIFIC REVOLUTION (7714)

10 lessons—\$177—4 degree credits—text price \$42-47—Zetterberg

A survey of the development of science during the Scientific Revolution (1500-1700), a period in intellectual history that spans the Renaissance and the Enlightenment. The course explores (historically) the nature of scientific creativity and examines the effect of changing visions of the natural order on traditional views of our place and uniqueness in the natural world. Topics considered include the ancient and medieval background, the work of Vesalius and Harvey in anatomy and physiology, the Copernican revolution, the physical world of Kepler, Galileo, Descartes, and Newton, the organization of scientific societies, and the impact of the Scientific Revolution on European culture and thought.

Horse Production

See Animal Science

Horticultural Science (Agriculture)

Note: Students can earn a maximum of 12 credits in Hort 1010. Hort 1010 courses **cannot** be used for a degree in Horticulture.

Hort 1010 HOME LANDSCAPE GARDENING AND DESIGN (5152)

13 lessons—\$177—4 degree credits—text price \$30-35—Hard

Working knowledge of propagation and culture of common landscape materials: turf, flowers, trees, and shrubs. Principles and practices of gardening; prepared for beginners, but also valuable for the advanced or experienced gardener. Textbook assignments and home projects in propagating plants for the garden. Topics include: planting, transplanting, seeds, soils, fertilizers, preparing beds and planting areas, selecting a good garden site, controlling garden pests, weeding, watering, cultivating. Also discusses annuals, perennials, bulbs, and roses for northern gardens. If you take this course, you **cannot** also receive credit for the Video Cassette version listed below.

Hort 1010 HOME LANDSCAPE GARDENING (V511)

Video Cassette Course—\$177—4 degree credits—text price \$30-35—study guide \$6—Hard

Basic introduction to a working knowledge of home landscape gardening and design. Topics include propagation and culture of common house plants and landscape materials—turf, flowers, trees, and shrubs. Illustration of various techniques to enable the home gardener to gain confidence in planning and caring for indoor and outdoor plants. Assumes little or no previous experience with plants. **Enrollment restricted to students who can view the cassettes at Walter Library, Morris Learning Center, or on their Home VCR (see the blue section).** If you take this course, you **cannot** receive credit for Hort 1010 (5152) listed above.

Hort 1010 HOME LANDSCAPE GARDENING (T511)

10 lessons—\$177—4 degree credits—text price \$30-35—study guide \$6—Hard

See above. **This course will be broadcast Winter 1989 on KTCI-TV (Channel 17) and Spring 1989 on KAWV-TV (Channel 9) (see the blue section).**

Hort 1010 HOME LANDSCAPE MAINTENANCE (5153)

12 lessons—\$177—4 degree credits—text price \$12-17—Hard

This course is designed to give students a better understanding of the care and maintenance of the home landscape. Emphasizes soil management and fertility, watering, weed control, lawn care, pruning, pest management, equipment, protecting plants from summer heat and winter cold, and propagation.

Hort 1010 HOME VEGETABLE GARDENING (5154)

12 lessons—\$177—4 degree credits—text price \$13-18—Hard

This course is designed to help students make good choices in the growing and care of the home vegetable garden. Topics: planning the vegetable garden, starting seeds, soil preparation, planting and transplanting, summer care, growing salad, vine, root, cole, and perennial vegetables, harvesting and storing, and herb gardening.

Course Descriptions

Hort 3030 LANDSCAPE DESIGN OF RESIDENTIAL AND SMALL COMMERCIAL SITES (5164)

14 lessons—\$260—4 degree credits—text price \$43-48—Hard

Theory and practice of design for home grounds and small commercial sites. Site analysis, needs assessment, space organization, selection of materials, and plan preparation. Course is designed in a progression of lessons that ask students to problem solve to complete design problems.

How to Study

See Study Skills

Humanities (CLA)

Hum 1001 HUMANITIES IN THE MODERN WORLD I (5205)

14 lessons—\$177—4 degree credits—text price \$39-44—Ouren

This course explores the 18th century Enlightenment and Romantic Reaction movements. The main themes discussed are reason, human nature, and the problem of evil. Authors discussed include Marlowe, Pope, Voltaire, Rousseau, and Goethe.

Hum 1002 HUMANITIES IN THE MODERN WORLD II (5202)

16 lessons—\$177—4 degree credits—text price \$30-35—Bisztray

Industrial Revolution, romanticism, socialism, individualism. Selected documents of economic and socialist theory and the romantic movement; representative works by Zola, Ibsen, Dostoevsky, Tolstoy.

Hum 1003 HUMANITIES IN THE MODERN WORLD III (5207)

15 lessons—\$177—4 degree credits—text price \$28-33—Ouren

The focus of this course is the late 19th century. The main topics are evolution (Darwinism) and the beginnings of Existentialism. Authors discussed include Kierkegaard, Nietzsche, Turgenev, Thomas Mann, and Chekhov.

Hum 1004 HUMANITIES IN THE MODERN WORLD IV (5208)

15 lessons—\$177—4 degree credits—text price \$48-53—Bisztray

Civilization between two wars; the impact of psychoanalysis; a critique of communism and national socialism; the intellectual profile of the Western world since World War II. Covers the period from World War I to the present. Authors studied include Freud, Lenin, Malraux, T. S. Eliot, Solzhenitzyn, Brecht, Sartre, and Dürrenmatt.

Hum 1111 EUROPEAN HERITAGE: GREECE (5209)

15 lessons—\$177—4 degree credits—text price \$39-44—Ouren

This course deals with Greek culture and Greece as the birthplace of Reason. The course traces the development of Greek thought and literature from the Homeric epic, through Greek tragedy and comedy, to the dialogues of Plato.

Hum 1113 EUROPEAN HERITAGE: ROME (5210)

14 lessons—\$177—4 degree credits—text price \$34-39—Ouren

This course deals with major texts of Roman culture and the early development of Christianity. The major authors read are Plutarch, Virgil, the Stoics, Lucretius, St. Augustine, and the New Testament.

Industrial Engineering/Operations Research (IT)

IEOR 0103 WORK MEASUREMENT STANDARDS (3118)

16 lessons—\$221.25—5 certificate credits—text price \$32-37—Arneson

Fundamentals of work measurement: standard work procedures, time studies, normal times, delay allowances, rest and relax allowances, standard times, predetermined time systems, standard data, discussions of performance ratings, number of cycles to study, and other factors necessary to develop an effective standard.

Course Descriptions

Industrial Relations (Management)

IR 0001 SUPERVISION I (2231)

11 lessons—\$132.75—3 certificate credits—text price \$36-41—Willford

A general discussion of basic principles of supervision in the office and factory. Survey of principles, methods, and applications for the handling of day-to-day problems of supervisors with emphasis on human relations and organizational aspects of such problems. Deals with selection, induction, and training of new employees, role of the supervisor, communication, employee appraisal, delegation, approaches to leadership, handling grievances, discipline, and employee morale.

IR 3002 LABOR MARKETS AND THE MANAGEMENT OF HUMAN RELATIONS (2252)

12 lessons—\$216—4 degree credits—text price \$30-35—Gagala

Introductory analysis of employment relationships, emphasizing economic analysis. Fundamentals of application and conservation of human resources in employment with consideration of related social and economic problems. Labor marketing, collective bargaining, unions and employer associations, industrial unrest and conflict, employment and unemployment, wage problems. (No prerequisite; introductory courses in the principles of economics [Econ 1001, 1002] will be helpful.)

IR 3007 COLLECTIVE BARGAINING (2262)

12 lessons—\$216—4 degree credits—text price \$41-46—Gagala

An introductory survey of collective bargaining and labor-management relations. The course examines the historical evolution of trade unions in the US, the structure and administration of trade unions, and the processes of collective bargaining and contract administration. The course work incorporates case exercises that provide students with insights into the real world nature of labor-management relations.

IR 3012 SYSTEMS OF INDUSTRIAL RELATIONS: HUMAN RESOURCE MANAGEMENT AND LABOR RELATIONS (2272)

13 lessons—\$216—4 degree credits—text price \$47-52—Lee

Introductory analysis of personnel management and labor relations. The strengths and weaknesses of current practices in recruiting, testing, interviewing, training, and compensation. An examination of the influence of human resource management on the organization and the individual in the context of the labor market.

Insurance (Management)

Ins 3100 RISK MANAGEMENT AND INSURANCE (2353)

20 lessons—\$216—4 degree credits—text price \$40-45—Williams

How to recognize and evaluate the property, liability, and personnel risks facing a business firm, a non-profit organization, a government unit, an individual, or a family. The tools of risk management—mainly retention, loss control, and insurance—and the conditions under which they should be used. How to select and deal with an insurer. Public policy issues, such as the availability of insurance, insurance pricing, and social insurance.

Ins 3210 ECONOMIC SECURITY (2183)

See Econ 5534.

International Relations (CLA)

IntR 3105 NUCLEAR WEAPONS AND NUCLEAR WAR (A865)

Audio Cassette Course—\$185—4 degree credits—text price \$30-35—study guide \$16—10 audio cassettes \$20.75—Markusen

Examination of development of nuclear weapons; policies and doctrines of deployment and use of nuclear weapons; social, economic, political costs of the arms race and use of nuclear weapons; and efforts to control the arms race and reduce the threat of nuclear war. **Students may receive credit for only one of the following: IntR 3105 or Soc 3960.**

Italian (CLA)

Ital 1101 BEGINNING ITALIAN (5402)

12 lessons—\$221.25—5 degree credits—text price \$47-52—8 audio cassettes \$16.50—Colaizzi
Speaking, reading, and cultural objectives based on an audiolingual approach. Students learn to understand and express fundamental ideas, to write anything they can say, and to master fundamental structures of the language.

Jewish Studies (CLA)

Also see Clas 3071

JwSt 3126 MODERN JUDAISM (8610)

12 lessons—\$185—4 degree credits—text price \$45-50—Zahavy
What is modern Judaism? How did it take shape? To answer these questions this course moves from the roots of modern American Judaism in Eastern Europe and the immigration experience to the formation of American Judaism as a distinctive religious system and its major components: the rabbi, the community, Israel, religious obligations, and theology.

JwSt 3521 THE HOLOCAUST (A861)

Audio Cassette Course—\$185—4 degree credits—text price \$23-28—study guide \$6—10 audio cassettes \$20.75—Cooperman
Nazi destruction of Jewish life in Europe, 1933-1945. Historical and social background of European communities. Anti-Semitism and Nazism. Ghettos under Nazi rule; social and cultural organization, and government. Nazi terror and destruction; Jewish resistance; historical consequences.

Journalism and Mass Communication (CLA)

Journalism majors should follow requirements for pre-journalism major as shown in the **College of Liberal Arts Bulletin**.

Jour 1001 INTRODUCTION TO MASS COMMUNICATIONS (3702)

8 lessons—\$88.50—2 degree credits—text price \$24-29—Brovald
The nature, functions, and responsibilities of communications media and agencies from the point of view of professional journalists. News, opinion, entertainment, and persuasion functions; specialized communication, aspects of advertising.

Jour 3173 MAGAZINE WRITING (3774)

13 lessons—\$185—4 degree credits—text price \$49-54—Roberts
Writing nonfiction feature articles for adult consumer and trade publications is covered, as is a study of market free-lance methods, including query letters. Students will write, revise, and submit three articles to magazines or newspaper feature sections of their choice. (Not to be taken by students who have achieved major status.)

Jour 3173 MAGAZINE WRITING (K372)

20 lessons—\$185—4 degree credits—text price \$49-54—study guide \$6—Roberts
See above. **This course will be broadcast Fall 1988 on KUOM radio (770 AM) (see the blue section).**

Jour 3173 MAGAZINE WRITING (A372)

Audio Cassette Course—\$185—4 degree credits—text price \$49-54—study guide \$6—10 audio cassettes \$20.75—Roberts
See above.

Jour 5501 COMMUNICATION AND PUBLIC OPINION I (3792)

12 lessons—\$185—4 degree credits—text price \$30-35—Carter
A study of theories of communication, public opinion, and attitude change, as well as an examination of research findings about communication, opinion, and persuasion, and some of the methods and methodological problems with which consumers of such research should be familiar.

Course Descriptions

Jour 5601 HISTORY OF JOURNALISM (3791)

12 lessons—\$185—4 degree credits—text price \$46-51—Clepper
Development of American newspapers and periodicals from beginnings in prehistoric times to present day; rise of radio and television; relation of communications developments to political, economic, and social trends; press-government credibility crises.

Latin (CLA)

Lat 1101 BEGINNING LATIN I (6201)

15 lessons—\$221.25—5 degree credits—text price \$7-12—Scott
Basic grammar and vocabulary, practice in reading and writing Latin, workbook exercises, easy Latin readings, and Roman legends.

Lat 1102 BEGINNING LATIN II (6207)

17 lessons—\$221.25—5 degree credits—text price \$6-11—Scott
Continuation of Lat 1101. Similar in content and method, leading to connected reading in Fabulae Faciles (Easy Stories). (Prerequisite: Lat 1101 or equivalent)

Lat 1103 BEGINNING LATIN III (6208)

15 lessons—\$221.25—5 degree credits—text price \$6-11—Scott
A review of the elements of Lat 1101 and Lat 1102, with a shift of emphasis to longer passages of continuous reading on Roman life. A considerable amount of historical and literary background is presented in English to orient the student to the material. (Prerequisite: Lat 1102 or equivalent)

Lat 1104 LATIN READINGS (6209)

15 lessons—\$221.25—5 degree credits—text price \$10-15—Scott
Selections from Cicero, Livy, and Ovid will be read. In addition to the review of Latin grammar, which will be incorporated in the readings, the selections will familiarize the student with the legends of Rome's founding and early heroes, the defeat of its army by Hannibal at Cannae, the first important speech of its most brilliant orator, Cicero, and his correspondence after the assassination of Julius Caesar, and Ovid's poetic interpretation of several Greek myths. Literary and historical background material is provided in English with each lesson.

Lat 3105 CICERO (6210)

16 lessons—\$231.25—5 degree credits—text price \$8-13—Scott
Readings from the most famous humanistic essays. (Prerequisite: Lat 1103 or equivalent)

Lat 3106 VERGIL: AENEID (6211)

17 lessons—\$231.25—5 degree credits—text price \$21-26—Scott
Readings of selections from Books I-II; background reading in Roman life and thought is included in the text. (Prerequisite: Lat 1103 or equivalent)

Law

See Business Law

Linguistics (CLA)

Ling 1001 THE NATURE OF HUMAN LANGUAGE (V352)

Video Cassette Course—\$177—4 degree credits—text price \$10-15—study guide \$6—Fritz
This introductory course presents a survey of the nature of human language, its properties, its possible origins, and how it differs from animal communication. Methods of describing the sounds, structures and meanings of language are also examined, along with a consideration of the relationship between language and the brain, how children acquire language, and the different roles of language in society. Whenever possible, points are illustrated with examples from the everyday use of English. Enrollment restricted to students who can view the cassettes at Walter Library, the Morris Learning Center, or on their Home VCR (see the blue section).

Ling 1001 THE NATURE OF HUMAN LANGUAGE (T352)

10 lessons—\$177—4 degree credits—text price \$10-15—study guide \$6—Fritz
See above. This course will be broadcast Fall 1988 on KTCI-TV (Channel 17) and Winter 1989 on KAWV-TV (Channel 9) and KWCM-TV (Channel 10) (see the blue section).

Management (Management)

Also see Industrial Relations and Business Studies

Mgmt 3001 FUNDAMENTALS OF MANAGEMENT (2280)

12 lessons—\$216—4 degree credits—text price \$36-41—Weber

Leadership and management functions such as those required to establish goals, policies, procedures, and plans. Motivation, planning and control systems, and concepts of organizational structure and behavior.

Marketing (Management)

Also see Business Studies

Mktg 3000 PRINCIPLES OF MARKETING (2524)

12 lessons—\$216—4 degree credits—text price \$39-44—Sielaff

Basic policy and strategy issues in marketing and the environmental factors that affect these issues. Legal, behavioral, ethical, competitive, economic, and technological factors that affect product, pricing, promotion, and marketing-channel decisions.

Mathematics (IT and GC)

It is essential that students have the prerequisite knowledge for each course, as well as credit for the courses listed as prerequisites. If there has been a time lapse since the previous course in mathematics, students should review thoroughly or repeat the prerequisite. It is impossible to make progress in mathematics without a sound knowledge of previous concepts and applications.

Note: In addition to the following noncredit courses in mathematics, certain courses available through the high school program of the Department of Independent Study also fulfill entrance requirements of I or T and other colleges. For Independent Study courses in high school mathematics, write for the **Independent Study High School Brochure**, University of Minnesota, Department of Independent Study, 25 Westbrook Hall, 77 Pleasant St. SE, Minneapolis, MN 55455.

Math 0001 BASIC MATHEMATICS I (7206)

6 lessons—\$88.50—no credit—text price \$9-14—Ekstrand

A review of basic arithmetic skills. The operations of addition, subtraction, multiplication and division are studied for whole numbers, common fractions, and decimal fractions in a way that the principles will transfer to algebra. Finally, a special application of decimal fractions known as percents is considered and applied to "real" problems.

Math 0002 BASIC MATHEMATICS II (7207)

6 lessons—\$88.50—no credit—text price \$33-38—Ekstrand

An introduction to algebra, including evaluation of algebraic expressions, arithmetic of signed numbers, and equality-inequality relations. Application of the base operations (addition, subtraction, multiplication, division, and factoring) to algebraic expressions. Use of algebraic expressions in solving equality-inequality statements. Introduction to graphing straight lines on the Cartesian coordinate system and standard equation forms for straight lines.

Math 0003 BASIC MATHEMATICS III (7208)

6 lessons—\$88.50—no credit—text price \$33-38—Ekstrand

A continuation of the study of algebraic expressions and first-degree equations and inequalities. Solutions of systems of linear equations and development of skills in manipulating algebraic expressions through the study of algebraic functions. A thorough discussion of exponents and radical expressions.

Course Descriptions

Math 0004 BASIC MATHEMATICS IV (7209)

6 lessons—\$88.50—no credit—text price \$33-38—Ekstrand

Further development of algebraic skills through extensions of the equality-inequality statements to second-degree (quadratic) equations and through a more detailed study of mathematical relations and functions. Introduction to exponential and logarithm functions and to equations and computations using logarithms. A short study of sequences, series, and the binomial formula. (Prerequisite: Math 0003 or equivalent)

GC 0631 MATHEMATICS: INTERMEDIATE ALGEBRA (7205)

16 lessons—\$221.25—no credit—text price \$26-31—Giese

Concepts and manipulative skills of algebra necessary for student to compete in a college algebra course. Topics include: discussion of the real number system, special products and factoring, exponents and radicals, linear equations in one and two variables, quadratic equations in one variable, progressions, inequalities, variation, and logarithms. (Prerequisite: Math 0004 or equivalent)

Math 1008 TRIGONOMETRY (7218)

12 lessons—\$177—4 degree credits—text price \$29-34—Varadachari

Analytic trigonometry, identities, equations, properties of functions; right and oblique triangles without logarithmic computations. (Prerequisites: plane geometry, high school higher algebra, mathematics placement score)

Math 1111 COLLEGE ALGEBRA AND ANALYTIC GEOMETRY (7217)

18 lessons—\$221.25—5 degree credits—text price \$32-37—Fessler

Functions, graphs, quadratic equations, inequalities, complex numbers, theory of equations, permutations and combinations, probability, systems of equations, graphing linear and quadratic equations, conic and standard position, logarithms. (Prerequisite: advanced high school algebra or intermediate college algebra [Math 0009 or GC 1445])

Math 1142 INTRODUCTION TO CALCULUS (7240)

16 lessons—\$221.25—5 degree credits—text price \$36-41—Varadachari

For students in pre-business administration, pre-pharmacy, and others requiring a minimal amount of calculus; students who plan to take several quarters of mathematics should register for Math 1211-1221-1231. (Prerequisite: Math 1111 or Math 1131 or Math 1201 or mathematics placement score)



Franz Kafka (1883-1924) German novelist and short story writer. Kafka wrote about modern people burdened with guilt, isolation, and anxiety making a futile search for personal salvation. **The Trial, The Castle, The Metamorphosis.**

Math 1201 PRECALCULUS (7202)

17 lessons—\$221.25—5 degree credits—text price \$37-42—Gupta

Students study inequalities, analytical geometry, complex numbers, binomial theorem, mathematical induction, functions and graphs, trigonometric, exponential, and logarithmic functions. Intended for students who need to review high school higher algebra and trigonometry before taking a calculus sequence. (Prerequisite: 4 years high school math including trigonometry)

Math 1211 ANALYSIS I (7224)

16 lessons—\$221.25—5 degree credits—text price \$39-44—Varadachari

Analytical geometry and calculus of functions of one variable. (Prerequisite: Math 1201 [with a grade of C or better] or Math 1008 and 1111 [with grades of C or better])

Course Descriptions

Math 1211 ANALYSIS I (V722)

Video Cassette Course—5 degree credits—\$221.25—study guide \$11—Kahn
Analytical geometry and calculus of functions of one variable, applications. Infinite series and sequences. Prerequisite: 4 years high school math including trigonometry, or grade of C or better in Math 1201, 1008, or 1111. **Enrollment restricted to students who can view the cassettes at Walter Library, the Duluth Center, or on their Home VCR (see the blue section).**

Math 1221 ANALYSIS II (7225)

16 lessons—\$221.25—5 degree credits—text price \$39-44—Varadachari
A continuation of Analysis I. (Prerequisite: Math 1211)

Math 1231 ANALYSIS III (7226)

16 lessons—\$221.25—5 degree credits—text price \$39-44—Varadachari
A continuation of Analysis II. Infinite series and power series. (Prerequisite: Math 1221)

Math 3066 DIFFERENTIAL EQUATIONS (7296)

16 lessons—\$227—4 degree credits—text price \$40-45—Varadachari
Equations of first order, applications; linear equations with constant coefficients, Laplace transforms, simultaneous equations, and series solutions. (Prerequisite: Math 1231 or equivalent)

Math 3211 ANALYSIS IV (7237)

16 lessons—\$283.75—5 degree credits—text price \$30-35—Varadachari
partial differentiation, chain rule, implicit functions, applications. Multiple integrals in two and three dimensions. (Prerequisite: Math 1231 or equivalent)

Math 3221 INTRODUCTION TO LINEAR ALGEBRA AND LINEAR DIFFERENTIAL EQUATIONS (7236)

16 lessons—\$283.75—5 degree credits—text price \$35-40—Varadachari
Vectors, systems of linear equations, matrices, determinants, bases, eigenvalues. Linear differential equations and systems with constant coefficients, initial value problem and general solution, variation of parameters for inhomogeneous equations, applications. (Prerequisite: Math 1231 or equivalent)

Mechanical Engineering (IT)

ME 1025 ENGINEERING GRAPHICS (3026)

12 lessons—\$177—4 degree credits—text and materials \$66-71—Berhe
Engineering representation in pictorial view and multiview; sketching techniques, size description, standard and simplified practices applied to graphical communication. Analysis of systems of projection; correlation of graphical and numerical solutions of space problems, intersections and development. (Prerequisite: Math 1211 or equivalent recommended)

Music (CLA)

Mus 1501 MATERIALS AND STRUCTURE OF MUSIC I (7311)

12 lessons (90-minute cassettes)—\$132.75—3 degree credits—text price \$49-54—19 audio cassettes \$38.75—Vandervelde
An integrated course in music theory incorporating sight singing, spelling, writing, and playing of melodic and harmonic patterns. Topics include notation, aural perception, playing of rhythms in simple and compound time, and the basic rules for four-voice part writing. Can be taken by music and music education majors (for whom it is required) and by high school students or adults who wish to augment their private music study, enhance their participation in a musical ensemble, or increase their understanding and listening enjoyment of music. Also covers the rudiments of music required of all elementary education majors. Much of the course material is on audio tapes rather than in the traditional written format. Must be taken concurrently with Mus 1511, for a total of 4 credits.

Mus 1511 EAR TRAINING AND SIGHT SINGING (7311)

12 lessons (90 minute cassettes)—\$44.25—1 degree credit—text price \$49-54—19 audio cassettes \$38.75—Vandervelde
See above. Must be taken concurrently with Mus 1501, for a total of 4 credits.

Course Descriptions

Mus 5439 KEYBOARD SIGHT-READING (V732)

Video Cassette Course—\$185—4 degree credits—study guide \$6—Guhl and Perun
For teachers who want to improve their teaching of sight reading and for readers of intermediate performance level, or lower, who want to develop their reading ability. Ten video cassette programs give specific examples and commentary; the study guide exposes students to the nature of the reading process and gives comprehensive background on the method of teaching presented on the video cassettes. Guidelines and a resource list of sight-reading materials are also included. **Enrollment restricted to students who can view the cassettes at Walter Library, Duluth Center, Rochester Center, and the Morris Learning Center.**

Mus 5702 TWENTIETH-CENTURY AMERICAN MUSIC (A731)

Audio Cassette Course—\$185—4 degree credits—text price \$20-25—study guide \$10—10 audio cassettes \$20.75—Riedel
Analysis of American music during this century: folk, popular and classical, black and Chicano, opera and symphony, contemporary music.

Mus 5711 AMERICAN POPULAR MUSIC (V731)

Video Cassette Course—\$185—4 degree credits—no required texts—study guide with one audio cassette \$8.50—Riedel
Examines music that is significant for our community life, with emphasis on ethnic and black music, social dance and theatre music, parlor songs, barber shop quartets, Civil War music, and technology of music. Ten one-hour programs available on video cassettes. **Enrollment restricted to students who can view the cassettes at Walter Library, the Rochester Center, and the Morris Learning Center.**

Mus 5950 TOPICS IN MUSIC: MUSIC APPRECIATION (A732)

Audio Cassette Course—\$185—4 degree credits—no required text—15 audio cassettes \$30.50—study guide \$6—Sutton
Analyzes music in the repertory of our culture—forms and styles from the 17th century to the present. Discusses the basic musical elements of rhythm, tonality, melody, and texture. The course is intended to increase the listener's musical vocabulary and skills in analyzing and appreciating musical forms such as: symphonies, concertos, chamber, keyboard and choral music, opera and song.

Norwegian (CLA)

Nor 1101 BEGINNING NORWEGIAN I (6303)

16 lessons—\$221.25—5 degree credits—text price \$36-41—7 audio cassettes \$15—Mishler
A survey of Norwegian grammar, plus composition and the reading of easy prose.

Nor 1102 BEGINNING NORWEGIAN II (6304)

16 lessons—\$221.25—5 degree credits—text price \$40-45—5 audio cassettes \$10.75—Mishler
Continuation of Nor 1101, but with primary emphasis on reading and writing. Short stories and folk tales are used for reading assignments. (Prerequisite: Nor 1101 or equivalent)

Operations Management (Management)

OM 3041 PROJECT MANAGEMENT (3119)

8 lessons—\$216—4 degree credits—text price \$42-47—Klietsch
Principles, concepts, and practices used in project management from origin through implementation. Topics include project design, staffing and organization, planning, scheduling, monitoring, implementation, and human factors. Manufacturing and service system contexts. Individualized learning contracts. (Students whose learning contracts entail use of a software package are provided with rental software—for a four week period—for an additional fee of \$30, which includes postage and handling.)

Pharmacy (Pharmacy)

SAHP 5009 MULTIDISCIPLINARY PERSPECTIVES ON AGING (V822)

Video Cassette Course—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

Course Descriptions

SAHP 5009 MULTIDISCIPLINARY PERSPECTIVES ON AGING (T822)

10 lessons—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

Philosophy (CLA and GC)

Phil 1001 LOGIC (7608 and 7609)

10 lessons—\$132.75—3 degree credits (or 18 lessons—\$221.25—5 degree credits)—text price \$28-33—Zanoni

Rules and procedures of sound argument and valid inference. Relationship of formal patterns of reasoning to such uses of ordinary language as argument, propaganda, and persuasion. How formal logic can be employed as a tool for critical thinking. Course can be taken for either 3 or 5 credits. Students who take the 3-credit course can register later for the additional 2 credits, pay the \$83.50 tuition, and complete eight more lessons and a final examination.

Phil 1002 INTRODUCTION TO PHILOSOPHY (7600)

15 lessons—\$221.25—5 degree credits—text price \$22-27—Bessie

Western philosophy is generally considered to have four main branches—epistemology, metaphysics, axiology, and logic. This course introduces students to the first three of these traditional areas of study. By considering specific problems from each branch, students learn both historical and contemporary methods for answering fundamental questions about the ultimate nature of reality.

GC 1355 ETHICS (7606)

14 lessons—\$177—4 degree credits—text price \$14-19—Zanoni

The course aims at providing the student with an understanding of the development of moral thought in Western civilization and the problems generated by changing views about the nature of human beings and their behavior. The emphasis of the course is on showing how thinking clearly about the various factors in the development of moral thought in the West is relevant to contemporary moral practice. **This course is now in preparation; please inquire before enrolling.**

GC 3352 PHILOSOPHY THROUGH LITERATURE

See English

Physical Medicine and Rehabilitation (Medical School)

PMed 5445 SOCIAL AND PSYCHOLOGICAL ASPECTS OF PHYSICAL DISABILITY (T466)

10 lessons—\$346—4 degree credits—study guide \$10—text price \$45-50—Atheistan
See HSU 5008.

PMed 5445 SOCIAL AND PSYCHOLOGICAL ASPECTS OF PHYSICAL DISABILITY (V466)

Video Cassette Course—\$346—4 degree credits—study guide \$10—text price \$45-50—Atheistan
See HSU 5008.

Physics (IT)

Phys 1001 THE PHYSICAL WORLD (7713)

17 lessons—\$177—4 degree credits—text price \$34-39—Cassola

Fundamental laws and principles of the physical world discussed in the context encountered in modern science and technology. Topics: motion of particles, laws of motion, momentum conservation, energy conservation, gravity, fluids, temperature, heat, wave motion, the nature of light, optics, electricity, electric circuits, and magnetism. (Prerequisite: one year high school algebra)

Phys 1003 THE CHANGING PHYSICAL WORLD (V773)

Video Cassette Course—\$177—4 degree credits—text price \$16-21—study guide \$10—R. Jones

This course introduces the nonscientist to the changing world of twentieth-century physics. It will highlight, against a background of history and philosophy, the new ideas and discoveries of relativity, cosmology, and quantum theory as seen from the vast scale of stars and galaxies, through the everyday realm of matter and energy, to the submicroscopic level of atoms and nuclei. **Enrollment restricted to stu-**

Course Descriptions

dents who can view the cassettes at Walter Library, Duluth Center, Morris Center, or on their Home VCR (see the blue section).

Phys 1003 THE CHANGING PHYSICAL WORLD (T773)

10 lessons—\$177—4 degree credits—text price \$16-21—study guide \$10—R. Jones
See above. **This course will be broadcast Fall 1988 on KTCI-TV (Channel 17), KWCM-TV (Channel 10), and KAW-TV (Channel 9) (see the blue section).**

Phys 1041 INTRODUCTORY PHYSICS I (7717)

14 lessons—\$177—4 degree credits—text price \$42-47—Cassola
Primarily for students interested in a general, non-calculus physics course, but also for CLA distribution requirements. Topics include uniformly accelerated motion, Newton's laws of motion, work, energy, motion of rigid bodies, mechanical properties of matter, temperature, gas law, thermal properties of matter, thermodynamics, vibratory motion, wave motion, and sound. Replaces old Phys 1032. **Students who have completed Phys 1031 should take Phys 1041 to complete the series.** (Prerequisites: high school algebra, geometry, and trigonometry)

Phys 1042 INTRODUCTORY PHYSICS II (7719)

14 lessons—\$177—4 degree credits—text price \$42-47—Cassola
Second course in the series. Topics: electric fields, direct current circuits, magnetism, electromagnetic induction, alternating currents, electromagnetic waves, properties of light, optical devices, interference, diffraction, atomic structure, the atomic nucleus, and physics of the universe. Replaces old Phys 1031. (Prerequisite: Phys 1041 or equivalent)

Phys 1045 INTRODUCTORY PHYSICS LABORATORY I (7718)

8 experiments—\$44.25—1 degree credit—text price \$3-8—Cassola
Laboratory experiments offered in conjunction with Phys 1041. Experiments include graphical analysis of data, geometry of motion, gravitational field, energy, power, and sound waves. S-N grading only. (Prerequisite: Phys 1041 or equivalent, or concurrent registration)

Phys 1046 INTRODUCTORY PHYSICS LABORATORY II (7720)

6 experiments—\$44.25—1 degree credit—materials price \$24-29—Cassola
Laboratory experiments offered in conjunction with Phys 1042. Experiments: probability and statistics, direct current circuits, magnetic fields, optics, optical instruments, and diffraction. S-N grading only. (Prerequisite: Phys 1042 or equivalent, or concurrent registration)

Phys 1104 GENERAL PHYSICS (7733)

16 lessons—\$177—4 degree credits—text price \$39-44—Cassola
Primarily for premedical and biological science students. Topics covered include motion, Newton's laws, work and energy, momentum and the pressure of gases, mechanical properties of matter, temperature, thermal properties of matter, thermodynamics, sound, entropy. No credit for IT students. (Prerequisite: Math 1142 and high school trigonometry or Math 1008)

Phys 1105 GENERAL PHYSICS (7734)

15 lessons—\$177—4 degree credits—text price \$39-44—Cassola
Second course in the series. Topics covered include fluid statics, fluid dynamics, elastic properties of solids, vibration, traveling waves, standing waves, sound waves, reflection and refraction of light, optical instruments, interference, electric fields, and electrical energy. No credit for IT students. (Prerequisite: Phys 1104)

Phys 1106 GENERAL PHYSICS (7735)

14 lessons—\$177—4 degree credits—text price \$39-44—Cassola
Third course in the series. Topics covered include direct-current circuits, capacitors, magnetic fields and forces, alternating-current circuits, special relativity, wave-particle duality, Bohr model of the atom, quantum mechanics, nuclear physics, and elementary particle physics. No credit for IT students. (Prerequisite: Phys 1105)

Phys 1271 GENERAL PHYSICS (7709)

16 lessons—\$177—4 degree credits—text price \$56-61—Cassola
Calculus-level general physics course. Topics covered include vectors, motion of a particle in one and two dimensions, particle dynamics, conservation of energy, conservation of momentum, collisions, rotational kinematics and dynamics, conservation of angular momentum, equilibrium of rigid bodies, oscilla-

Course Descriptions

tions, and gravitation. (Prerequisite: completion of or concurrent registration in introductory calculus course)

Phys 1281 GENERAL PHYSICS (7710)

16 lessons—\$177—4 degree credits—text price \$56-61—Cassola

Calculus-level general physics course. Topics covered include fluid statics and dynamics, waves in elastic media, sound, heat, and thermodynamics, kinetic theory of gases, electrostatics, capacitance and dielectrics, and electric circuits. (Prerequisites: Physics 1271 or equivalent, and completion of or concurrent registration in an introductory calculus course).

Phys 1291 GENERAL PHYSICS (7711)

18 lessons—\$177—4 degree credits—text price \$56-61—Cassola

Calculus-level general physics course. Topics covered include the magnetic field, Ampere's Law, Faraday's law of induction, inductance, magnetic properties of matter, electromagnetic oscillations, alternating currents, Maxwell's equations, electromagnetic waves, nature and propagation of light, reflection and refraction of plane and spherical waves, interference, diffraction, gratings and spectra, polarization, light and quantum physics, waves and particles. (Prerequisites: completion of or concurrent registration in introductory calculus course, Phys 1271 and 1281, or equivalent)

Phys 3501 MODERN PHYSICS (7704)

17 lessons—\$227—4 degree credits—text price \$41-46—Cassola

Descriptive course in modern physics. Topics: quantum mechanics, hydrogen atom, multielectron atoms, molecular structure, quantum statistics, thermal radiation, solid state physics, nuclear physics. (Prerequisite: Physics 1291 or 1106)

Polish (CLA)

Plsh 1101 BEGINNING POLISH I (6401)

27 lessons—\$221.25—5 degree credits—text price \$22-27—1 audio cassette \$3—Polakiewicz

For beginners with no previous knowledge of Polish. Covers the fundamentals of grammar, the facility to read, understand, and write simple Polish.

Political Science (CLA)

Pol 1001 AMERICAN GOVERNMENT AND POLITICS (7903)

18 lessons—\$221.25—5 degree credits—text price \$52-57—Walcott

Analysis of principles and processes of national, state, and local government in the United States. The relationships of political forces and philosophies. Topics include: the Constitution, civil liberties, public opinion, interest groups and political parties, Congress, the judiciary and the presidency.

Pol 1041 CONTEMPORARY POLITICAL IDEOLOGIES (T796)

10 lessons—\$177 (plus texts and study guide)—4 degree credits—Ball

A systematic survey of the major competing ideologies of the 20th century, including communism, conservatism, liberalism, fascism, feminism, and others. Special emphasis is placed on the historical sources, philosophical foundations, and argumentative structure of these influential ideologies. **This course will be broadcast Winter and Spring 1989 on KTCI-TV (Channel 17) (see the blue section).**

Pol 3308 THE UNITED STATES CONGRESS (7932)

14 lessons—\$185—4 degree credits—text price \$40-45—Heyrman

Internal organization, committee system, party leadership, norms, recruitment; legislative policymaking; relationship with the president and bureaucracy; interest group, political party, and constituency influences on the congressional process.

Pol 3810 UNDERSTANDING WAR: ITS CAUSES AND CONSEQUENCES (7929)

10 lessons—\$185—4 degree credits—text price \$67-72—Davis

Normative issues surrounding international violence; causes of violence and mechanisms for creating international peace; alternative structures for limiting future violence and maintaining peace.

Course Descriptions

Pol 5471 GOVERNMENT AND POLITICS OF THE SOVIET UNION (7955)

12 lessons—\$185—4 degree credits—text price \$56-61—N. Noonan

Analysis of politics in the USSR, including the Soviet political heritage, the impact of Marxism-Leninism, principal institutions, historical developments since 1917, Soviet foreign policy, political elites, the decision-making process, political socialization, and selected economic and political issues.

Pol 5473 CONTEMPORARY CHINESE POLITICAL DEVELOPMENT (7954)

12 lessons—\$185—4 degree credits—text price \$36-41—Dodge

An exploration of China since the Communist revolution and Chinese political shifts from 1950 to 1980; their attempts at modernization, achieving a high quality of life for the Chinese people, and achieving a major role in international politics. Topics: Chinese political ideology, developmental policies and plans, the political and economic impact of developmental plans, and the contemporary Chinese international role. (Prerequisite: 12 credits in social sciences or consent of instructor)

Pol 5478 GOVERNMENT AND POLITICS OF AFRICAN COUNTRIES (7979)

10 lessons—\$185—4 degree credits—text price \$86-91—Nimtz

An introduction to the political systems of sub-Saharan Africa, with some attention to North Africa. Topics: traditional political systems, the impact of colonial rule, the African response, the politics of economic development in independent Africa, and the southern African crisis. A major aim is to explain the discrepancy between the promise and performance of independent Africa. What accounts for the crisis of authority, the shortcomings of economic development? What is the appropriate model for development—capitalism or socialism?

Pol 5478 GOVERNMENT AND POLITICS OF AFRICAN COUNTRIES (T795)

10 lessons—\$185—4 degree credits—text price \$72-77—study guide \$6—Nimtz

See above. Offered in conjunction with the PBS series "The Africans." **This course will be broadcast Fall 1988 on KTCA-TV (Channel 2) (see the blue section.)** Students may not receive credit for both this course and the one above.

Pol 5737 POLITICAL PARTIES (7987)

14 lessons—\$185—4 degree credits—text price \$28-33—Heyrman

Party activities in the United States—recruiting, nominating, and campaigning. Parties in power. Party organization and membership, party identification, third parties, and independents. Party reform and the functions of parties. Attention throughout to the impact of parties on democratic government. (Prerequisite: Pol 1001 or consent of instructor)

Portuguese (CLA)

Port 3970 THE EVERPRESENT PAST IN SPANISH AND PORTUGUESE CULTURE (A684)

Audio Cassette Course—\$185—4 degree credits—study guide \$10—11 audio cassettes \$22.75—Sousa

See SpPt 3610 (Spanish). **Most readings will be in the original language.** Texts are on reserve at Wilson Library, Minneapolis campus. Must be Portuguese major.

Psychology (CLA)

Also see Child Psychology

Psy 1001 GENERAL PSYCHOLOGY (8103)

18 lessons—\$221.25—5 degree credits—text price \$30-35—Schletzer

Introduction to the study of human behavior. Prerequisite for all advanced courses in psychology. Topics include biological and developmental processes, perception and awareness, learning and thinking, motivation and emotion, personality, conflict and adjustment, and social behavior.

Psy 1001 GENERAL PSYCHOLOGY (A813)

Audio Cassette Course—\$221.25—5 degree credits—text price \$30-35—audio cassettes \$30—study guide \$6—Schletzer

See above. Funding for production provided by The Annenberg/CPB Project—providing opportunities for higher education through telecommunications.

Course Descriptions

Psy 3101 INTRODUCTION TO PERSONALITY (8188)

12-14 lessons—\$185—4 degree credits—text price \$37-42—Meadow

This course is a basic introduction to the study of personality. It will discuss major theories, personality development, empirical research, personality assessment, and several selected topics in the field of personality. (Prerequisite: 5 credits introductory psychology)

Psy 3604 ABNORMAL PSYCHOLOGY (8197)

14 lessons—\$185—4 degree credits—text price \$34-39—Weiszhaar

Focuses on the theoretical causes of human behavior, the description of behavioral disorders, the etiologies of behavioral disorders, and treatment alternatives. (Prerequisite: 5 credits introductory psychology) **Students may not receive credit for both Psy 3604 and Psy 5604.**

Psy 3911 PSYCHOLOGY OF RELIGION (8196)

12-14 lessons—\$185—4 degree credits—text price \$24-29—Meadow

This course is a basic introduction to the psychology of religion. It discusses religious variables such as conversion and prayer in psychological perspective, and such psychological variables as belief and conscience in religious perspective. In addition, religion development, measurement of religiousness, and the mental health implications of religion are explored.

Soc 5201 INTRODUCTION TO SOCIAL PSYCHOLOGY

See Sociology

Public Affairs (Humphrey Institute)

PA 5414 MULTIDISCIPLINARY PERSPECTIVES ON AGING (V822)

Video Cassette Course—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

PA 5414 MULTIDISCIPLINARY PERSPECTIVES ON AGING (T822)

10 lessons—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

PA 5810 DEVELOPMENT ADMINISTRATION (4570)

12 lessons—\$185—4 degree credits—text price \$23-28—Warp

Problems and issues in development, the aid relationship, manpower for development, administrative reform, the regional approach, public enterprise, and case studies.

PA 5943 LEADERSHIP: DEFINITIONS, DIMENSIONS, DIRECTIONS (A451)

Audio Cassette Course—\$138.75—3 degree credits—text price \$17-22—study guide \$6—10 audio cassettes \$20.75—Terry

Course explores seven current definitions of leadership; analyzes the relationship of leadership to power, ethics, self-development, gender, race, and class; assesses current leadership in the local community, the nation, and the world. Includes interviews with nationally recognized leaders and observers of leadership.

Public Health (Public Health)

PubH 3301 PERSPECTIVES: INTERRELATIONSHIPS OF PEOPLE AND ANIMALS IN SOCIETY TODAY (A461)

Audio Cassette Course—\$125.50—2 degree credits—text price \$26-31—study guide \$10—10 audio cassettes \$20.75—Quigley and Robinson

Explores the interrelationships of people and animals in society today from different perspectives. Topics include: the human-animal bond; animal awareness; animal rights and human morality; humaneness; pets, pet behavior, and pet facilitated therapy. **Students may receive credit for either PubH 3301 or CVM 3100, but not both.**

PubH 5609 TOWARD AN UNDERSTANDING OF CHILD SEXUAL ABUSE (T467)

10 lessons—\$251—4 degree credits—text price \$27-32—ten Bensel

The 10 programs of this course will deal with a historical understanding of child sexual abuse, including definitions, dynamics, effects on the victim, how society intervenes, and prevention methods. This

Course Descriptions

course is aimed at the professional in public health, health sciences, social work, education, and law. **This course will be broadcast Fall 1988 on KTCI-TV (Channel 17), and Winter 1989 on KTCI-TV (Channel 17) and WDSE-TV (Channel 8) (see the blue section).**

PubH 5609 TOWARD AN UNDERSTANDING OF CHILD SEXUAL ABUSE (V467)

Video Cassette Course—\$251—4 degree credits—text price \$27-32—ten Bensel
See above. **Restricted to students who can view the cassettes at Walter Library or on their Home VCR (see the blue section).**

PubH 5642 CHILD ABUSE AND NEGLECT (V465)

Video Cassette Course—\$188.25—3 degree credits—text price \$14-19—study guide \$10—ten Bensel

This course is a survey of the basic concepts and knowledge of child abuse and neglect. It includes a historical overview and the issue of balance of rights between children and their parents. Examples of child abuse and neglect, understanding why it occurs, its consequences, and how society can intervene and prevent it is presented. **Enrollment restricted to students who can view the cassettes at Walter Library, Duluth Center, and Morris Learning Center, or on their Home VCR (see the blue section).**

Religion

See American Studies; Classics; Humanities; Philosophy; Psychology

Religious Studies (CLA)

ReIS 1032 RELIGIONS OF EAST ASIA (5521)

12 lessons—\$177—4 degree credits—text price \$43-48—Ditmanson
An introduction to the religious traditions of China and Japan—Confucianism, Taoism, Buddhism, Shinto, and folk religion—as they historically developed and as they are practiced today. An effort is made to seek the basic assumptions underlying each tradition and the value systems involved in each tradition. **Students may not receive credit for both ReIS 1032 and EAS 1032.**

Rhetoric

Rhet 1147 EFFICIENT READING

See Study Skills

Russian (CLA)

Russ 1101 BEGINNING RUSSIAN I (6603)

17 lessons—\$221.25—5 degree credits—text price \$35-40—4 audio cassettes \$9—Prokopov
Provides a reading and writing knowledge of the Russian language. Acquaints students with Russian script, pronunciation, and essentials of grammar; translations from Russian and into Russian.

Russ 1102 BEGINNING RUSSIAN II (6604)

17 lessons—\$221.25—5 degree credits—text price \$35-40—5 audio cassettes \$10.75—Prokopov
Second part of the Beginning Russian sequence: reading, writing, pronunciation, and grammar. (Prerequisite: Russ 1101)

Russ 1103 BEGINNING RUSSIAN III (6605)

17 lessons—\$221.25—5 degree credits—text price \$35-40—5 audio cassettes \$10.75—Prokopov
Third part of the Beginning Russian sequence: reading, writing, pronunciation, and completion of the study of Russian grammar. Poetry reading. (Prerequisite: Russ 1102)

Russ 1221 SCIENTIFIC RUSSIAN I (6627)

17 lessons—\$221.25—5 degree credits—text price \$15-20—Prokopov
An introduction to the basic grammar and structure of the Russian language, using a vocabulary common to various sciences. Provides the ability to read Russian scientific texts.

Course Descriptions

Russ 1223 READINGS IN SCIENTIFIC RUSSIAN (6626)

12 lessons—\$88.50—2 degree credits—no required text—Prokopov
Reading and translating scientific articles. (Prerequisite: Russ 1221)

Scandinavian (CLA)

Also see Norwegian; Swedish

Scan 3602 THE TALES OF HANS CHRISTIAN ANDERSEN (A631)

Audio Cassette Course—\$185—4 degree credits—text price \$11-16—study guide \$6—10 audio
cassettes \$20.75—Mishler

An exploration of Andersen's stories and tales (in English).

Slavic and East European Languages

See Polish; Russian

Social Studies (GC)

GC 1283 PSYCHOLOGY OF HUMAN DEVELOPMENT (4108)

11 lessons—\$221.25—5 degree credits—text price \$30-35—Latts
The growth and development of an individual from conception through old age is explored. Aspects of development emphasized include physical, motor, social, emotional, and psychological growth. Integration of facets of development is made in order to understand a human being as a complex organism functioning in a complex environment.

Social Work (Home Economics)

Also see Social Studies

SW 1001 INTRODUCTION TO AMERICAN SOCIAL WELFARE AND COMMUNITY SERVICES (8692)

16 lessons—\$221.25—5 degree credits—text price \$32-37—Hoshino
Survey of social services and their components, including many fields of practice, multiple auspices and dependencies; numerous levels of participation, differing ideologies and methods of approach to social problems, and the dynamics of change from social movements to institutionalizations inherent in American social service delivery systems. Course is primarily about the "frames of reference" within which help is offered in American social services, public and private. The uneasy relationship between social service policies and professional social work practice. This course is equivalent to the regular course offered to on-campus students within the BA in Social Welfare Program. Course is seen as prerequisite for practice methods courses.

SW 5010 SEMINAR: SPECIAL TOPICS, TOWARD AN UNDERSTANDING OF CHILD SEXUAL ABUSE (T467)

10 lessons—\$246—4 degree credits—text price \$27-32—ten Bensel
See PubH 5609. **Students may not receive credit for both PubH 5609 and SW 5010.**

SW 5010 SEMINAR: SPECIAL TOPICS, TOWARD AN UNDERSTANDING OF CHILD SEXUAL ABUSE (V467)

Video Cassette Course—\$246—4 degree credits—text price \$27-32—ten Bensel
See PubH 5609. **Enrollment restricted to students who can view the cassettes at Walter Library or on their Home VCR (see the blue section).**

SW 5024 MULTIDISCIPLINARY PERSPECTIVES ON AGING (V822)

Video Cassette Course—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305. **Also available as a Home VCR course (see the blue section).**

SW 5024 MULTIDISCIPLINARY PERSPECTIVES ON AGING (T822)

10 lessons—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

Course Descriptions



Marie Curie (1867-1934) French chemist and physicist (born in Poland). She shared the 1903 Nobel Prize in physics for her work on radioactivity. In 1911, she was awarded the Nobel Prize in chemistry for the discovery of polonium and radium.

Sociology (CLA)

Soc 1001 INTRODUCTION TO SOCIOLOGY (8605)

13 lessons—\$177—4 degree credits—text price \$29-34—Magnuson-Martinson

A general introduction to the sociological analysis of social processes and social structure. Topics include: socialization, stratification, and social inequality; deviance and social control; and social change. General theoretical perspectives and research methods are discussed. Emphasis is placed on the application of concepts and theories to everyday life.

Soc 1002 AMERICAN COMMUNITY (8604)

12 lessons—\$177—4 degree credits—text price \$29-34—Christoforides

This course is intended to give students an opportunity to engage in an in-depth analysis of American urban life. By looking at such phenomena as the distribution of population, urban-rural differences, social factors in business systems, occupational groups, determination of social status, and minority group adjustment, American Community attempts to answer the questions: Is there an American "community," "culture," "value system," "way of life"?

Soc 3101 INTRODUCTION TO AMERICAN CRIMINAL JUSTICE (A866)

Audio Cassette Course—\$185—4 degree credits—text price \$35-40—10 audio cassettes \$20.75—Samaha

Policies and issues in American criminal justice. Focuses on problems in police, prosecution, courts, jails, prisons, and alternatives to incarceration. Includes such topics as domestic violence, plea bargaining, bail, prison crowding, career criminals, purposes of punishment, the death penalty and police patrol.

Soc 3102 SOCIOLOGY OF LAW AND SOCIAL CONTROL ORGANIZATIONS (8651)

12 lessons—\$185—4 degree credits—text price \$46-51—Heitzeg

An introductory survey of major problems and issues in the sociological study of law and society. Examination of societal consequences of legal sanctions, social forces that shape prosecution, the political processes involved in the creation of law, and the social dynamics of law enforcement.

Soc 3103 ELEMENTS OF CRIMINOLOGY (8654)

14 lessons—\$185—4 degree credits—text price \$33-38—Heitzeg

A general introduction to the study of crime and its relationship to society, including: an in-depth look at the criminal justice system in America (the police, the courts, the prisons); an examination of historical and contemporary theories of criminal behavior; and a look at several types of crime and the roles they play in society. (Prerequisite: Soc 1001)

Soc 3421 SOCIOLOGY OF WORK (8674)

15 lessons—\$185—4 degree credits—text price \$36-41—Lai

The institution of work is a growing source of conflict between the desire for a fulfilling job and the need for productivity, work and family, people and machines, unemployment and inflation. Changes in the meaning and nature of work. Government's role in shaping work and the work place. Economic and social effects of increasing numbers of working women. Analysis of values and assumptions underlying difficult personal and public choices people must make to resolve conflicts. (Prerequisite: Soc 1001)

Course Descriptions

Soc 3501 THE FAMILY SYSTEM (8675)

6 lessons—\$185—4 degree credits—text price \$36-41—Felt

The family in contemporary American society with attention to historical and cross-cultural comparisons; interrelationships with other social institutions, socialization, patterns of mate selection, life cycle processes and norms of human sexuality. (Prerequisite: Soc 1001 or consent of instructor)

Soc 3551 WORLD POPULATION PROBLEMS (8672)

14 lessons—\$185—4 degree credits—text price \$47-52—Tavakoli

This course examines the causes and consequences of rapid human population growth. Optimistic and pessimistic opinions about the balance between population and resources are examined, as are policy options that exist to manipulate future population growth. Other topics include population growth and economic development, world food shortages, industrialization and urbanization, the feminist movement, and population policies. The scope of the course is world wide, the view comparative, and the emphasis on improving students' ability to interpret current and future everyday events in light of population dynamics.

Soc 3960 NUCLEAR WEAPONS AND NUCLEAR WAR (A865)

Audio Cassette Course—\$185—4 degree credits—text price \$30-35—10 audio cassettes \$20.75—study guide and appendices \$16—Markusen

See IntR 3105. **Students may not receive credit for both IntR 3015 and Soc 3960.**

Soc 5105 CONTEMPORARY CORRECTIONS (8685)

10 lessons—\$185—4 degree credits—Heitzeg

Advanced study of correctional organizations such as prisons and jails; probation and parole, department and community corrections. Penal policies and practices in the United States compared with advanced penal systems in other countries. (Prerequisite: Soc 3101, 3102, or consent of instructor) **This course is now in preparation; please inquire before enrolling.**

Soc 5111 SOCIOLOGY OF DEVIANT BEHAVIOR (8655)

10 lessons—\$185 (plus texts)—4 degree credits—Heitzeg

The nature of deviant behavior, the social process associated with the careers of deviants, and the relationship of deviancy to problems of social control. **This course is now in preparation; please inquire before enrolling.**

Soc 5201 INTRODUCTION TO SOCIAL PSYCHOLOGY (8676)

13 lessons—\$185—4 degree credits—text price \$24-29—Magnuson-Martinson

An intensive examination of the major issues in social psychology. Covers substantive areas of self, personality, person perception, interpersonal attraction, attitudes, social influence, prosocial behavior and aggression, small groups, and collective behavior. Emphasis will be placed on application of theories and concepts to everyday life. Four major theoretical perspectives (symbolic interactionism, exchange, social learning, and cognitive consistency) are used to organize course material. Sociology majors may not receive credit for this course. (Prerequisite: 8 credits in Sociology, Anthropology, Psychology, Political Science, or Economics) **This course is now in preparation; please inquire before enrolling.**

Soc 5701 ANALYTICAL SOCIAL THEORY (8684)

11 lessons—\$185—4 degree credits—text price \$41-46—Christoforides

An introduction to the various ways sociologists have sought to explain social phenomena. Emphasis is on contemporary social theory, with some historical background. The sociological theories discussed include functionalism, conflict, exchange, symbolic interactionism, role, interactionist approaches, phenomenology, and ethnomethodology. (Prerequisite: 8 credits in social science or consent of instructor)

Soc 5960 DEATH AND DYING (8691)

15 lessons—\$185—4 degree credits—text price \$13-18—study guide \$5—Fulton and Owen

Death and Dying explores the issues and problems that mortality presents to modern American society. Topics include the dying patient, grief, the funeral, death and the child, youth and suicide, the role of caregiving professions, moral and ethical issues surrounding death, and life after death.

Soc 5960 MULTIDISCIPLINARY PERSPECTIVES ON AGING (V822)

Video Cassette Course—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

Course Descriptions

Soc 5960 MULTIDISCIPLINARY PERSPECTIVES ON AGING (T822)

10 lessons—\$228—4 degree credits—text price \$37-42—study guide \$10—Galle
See CPsy 5305.

Soc 5960 TOPICS: ISSUES IN CRIMINAL JUSTICE (V781)

Video Cassette Course—\$185—4 degree credits—no required text—study guide \$18.50—Heitzeg
Investigates major issues in criminal laws and procedure through actual cases, and the historical perspective is complemented with interviews of officials and other people directly involved in making criminal policy and administering criminal justice. Topics include: Do we have too much criminal law? How does the state discover, investigate, and process suspected criminals? Do incarcerated people have rights? The course addresses the major problem of balancing the liberty of individuals in a free society under the U.S. Constitution with the necessary amount of state power to insure the domestic tranquility.
Enrollment restricted to students who can view the cassettes at Walter Library.

Spanish (CLA)

Span 0221 SPANISH FOR GRADUATE STUDENTS (6817)

16 lessons—\$177—no credit—text price \$23-33—Sanchez
Prepares students primarily for reading, and especially for reading general and technical nonliterary prose. The department will certify to the Graduate School a reading knowledge of Spanish upon successful completion of the final examination. S-N grading only.

Span 1101 BEGINNING SPANISH I (6806)

13 lessons—\$221.25—5 degree credits—text price \$57-62—7 audio cassettes \$15—Sanchez
Fundamentals of Spanish. Students develop listening and speaking skills by means of tapes, and learn to read and write basic Spanish in the cultural context of Spain and Spanish America.

Span 1102 BEGINNING SPANISH II (6807)

13 lessons—\$221.25—5 degree credits—text price \$57-62—7 audio cassettes \$15—Sanchez
Continuation of Span 1101. (Prerequisite: Span 1101 or equivalent)

Span 1103 BEGINNING SPANISH III (6808)

15 lessons—\$221.25—5 degree credits—text price \$57-62—7 audio cassettes \$15—Sanchez
Continuation of Span 1102. (Prerequisite: Span 1102 or equivalent)

Span 1104 INTERMEDIATE SPANISH I (6809)

10 lessons—\$221.25—5 degree credits—text price \$57-62—5 audio cassettes \$10.75—Sanchez
Speaking and comprehension; development of reading and writing skills based on materials from Spain and Spanish America. Grammar review; compositions. (Prerequisite: Span 1103 or equivalent)

Span 1105 INTERMEDIATE SPANISH II (6910)

10 lessons—\$221.25—5 degree credits—text price \$57-62—5 audio cassettes \$10.75—Sanchez
Continuation of Span 1104. (Prerequisite: Span 1104 or equivalent)

Span 1502 CULTURES AND CIVILIZATIONS OF LATIN AMERICA: PRE-COLUMBIAN TIMES TO 1825 (6843)

14 lessons—\$177—4 degree credits—text price \$16-21—Jara
Provides an opportunity to study and evaluate the cultures and civilizations of Latin America from pre-Columbian times, through the discovery of America by the Spaniards and their consequent explorations, conquest and colonization (15th to 18th centuries), to the movements of independence from Spain, Portugal, and France in the first quarter of the 19th century. It is intended to illuminate the problems and revolutionary changes of modern Latin America, which are a part of its complementary course, Span 1503. Readings in English. Knowledge of Spanish not necessary. Not to be used for Spanish or Portuguese major credit.

SpPt 3610 THE EVERPRESENT PAST IN SPANISH AND PORTUGUESE CULTURE (A682)

Audio Cassette Course—\$185—4 degree credits—text price \$29-34—11 audio cassettes \$22.75—study guide \$10—Sousa
The course investigates how the concept of "regenerationism" has retained and exerted cultural force in the Iberian nations, forming a part of their cultural systems—and how it continues to exert that force to-

Course Descriptions

day. Course materials chronologically structured around the development of the notion that, in Spain and Portugal, there are no beginnings—only “re-beginnings.” Selections from literature, philosophy, and social commentary illustrate this sense of a lost past of imperial greatness and the need to recreate it. The survey begins with the Portuguese poet Luis de Camoões’ epic poem of 1578 and ends with documents about the Spanish “nationalities” of the post-Franco era. Readings in translation.

Span 3970 THE EVERPRESENT PAST IN SPANISH AND PORTUGUESE CULTURE (A683)

Audio Cassette Course—\$185—4 degree credits—study guide \$10—11 audio cassettes \$22.75—Sousa

See above. **Most readings will be in the original language.** Texts are on reserve at Wilson Library, Minneapolis campus. Must be Spanish major.

Statistics

See Education

Study Skills (GC and Agriculture)

GC 1085 HOW TO STUDY (3802)

8 lessons—\$88.50—2 degree credits—text price \$31-36—2 audio cassettes \$5—Baldwin

Guided practice in developing an efficient approach to studying, founded on research in human learning. Using this background, students are taught to develop their concentration, improve their listening and note taking by using audio tapes, schedule their time effectively for study, prepare for and take exams, and prepare research papers. The course stresses practice in all the above skills, as well as in rapid reading, vocabulary development, effective underlining. (This course does not count as part of the 180-credit degree requirement at the University of Minnesota. However, grades are included in the overall GPA.)

Rhet 1147 EFFICIENT READING (3949)

9 lessons—\$132.75—3 degree credits—texts and tapes \$117-122—Gore

Designed to increase reading rate, comprehension, and vocabulary. Includes the use of cassette tapes for instruction and pacing activities. Useful for anyone who wants to achieve and maintain superior reading improvement. Not a remedial course. Beneficial for executive training.

Swedish (CLA)

Swed 1101 BEGINNING SWEDISH I (6900)

15 lessons—\$221.25—5 degree credits—text price \$73-78—4 audio cassettes \$9—Thander

An introduction to written and spoken Swedish through basic grammar, workbook exercises, and easy composition. Vocabulary useful to everyday situations is covered.

Swed 1102 BEGINNING SWEDISH II (6902)

20 lessons—\$221.25—5 degree credits—text price \$73-78—2 audio cassettes \$5—Thander

Continuation of Swed 1101. (Prerequisite: Swed 1101).

Swed 1103 BEGINNING SWEDISH III (6903)

19 lessons—\$221.25—5 degree credits—text price \$73-78—1 audio cassette \$3—Thander

Continuation of Swed 1102. (Prerequisite: Swed 1102).

Swed 1104 INTERMEDIATE SWEDISH I (6904)

21 lessons—\$221.25—5 degree credits—text price \$73-78—1 audio cassette \$3—Thander

Continued development of reading and writing skills in Swedish. (Prerequisite: Swed 1103)

Swed 1105 INTERMEDIATE SWEDISH II (6905)

16 lessons—\$177—4 degree credits—text price \$79-84—4 audio cassettes \$9—Thander

Continued development of reading and writing skills in Swedish. (Prerequisite: Swed 1104)

Course Descriptions

Textiles and Clothing (Home Economics)

TexC 3661 CULTURAL PERSPECTIVES ON DRESS (2002)

5 lessons—\$184.50—3 degree credits—text price \$10-15—Pedersen

An examination of the influence of cultural ideals and standards on dress, this course also considers how dress evolves in response to society's needs, values, and technology.

Theatre Arts (CLA)

Th 5115 PLAYWRITING (A405)

Audio Cassette Course—\$185—4 degree credits—text price \$17-22—10 audio cassettes \$20.75—study guide \$6—Nolte

Techniques of playwriting are explored in detail by students with some playwriting competence. The craft of writing a well-made play and experimentation in more modern styles are examined in the context of each student working toward the completion of a one-act or full-length play.

Th 5186 HISTORY OF THE AMERICAN THEATRE (A401)

Audio Cassette Course—\$185—4 degree credits—text price \$37-42—11 audio cassettes \$22.75—study guide \$6—Nolte

Examines the theatre from colonial days to the present as a mirror of our society. Playwrights, performers, and productions are seen in the context of our cultural, social, and political life.

Th 5186 HISTORY OF THE AMERICAN THEATRE (V401)

Video Cassette Course—\$185—4 degree credits—text price \$50-55—study guide \$6—Nolte

See above. **Enrollment restricted to students who can view the video cassettes at Walter Library and the Rochester Center.**

Veterinary Medicine (Veterinary Medicine)

CVM 3100 PERSPECTIVES: INTERRELATIONSHIPS OF PEOPLE AND ANIMALS IN SOCIETY TODAY (A461)

Audio Cassette Course—\$173—2 degree credits—text price \$26-31—study guide \$10—10 audio cassettes \$20.75—Quigley and Robinson

See PubH 3301. **Students may receive credit for either PubH 3301 or CVM 3100, but not both.**

Women's Studies (CLA)

WS 1990 NORTHERN MINNESOTA WOMEN: MYTHS AND REALITIES (K882) (Duluth)

10 lessons—\$177 (plus texts and study guide)—3 degree credits—R. E. Martin

This course examines the stereotypes and realities of life for Northern Minnesota Indian, Yankee, and immigrant women from the times of early settlement to the present day. **This course will be broadcast on KUMD radio (103.3 FM) Winter 1989 (see the blue section).**

WoSt 3910 WOMEN BETWEEN VICTORIANISM AND EMANCIPATION (8821)

6 lessons—\$185—4 degree credits—text price \$33-38—Cahn

This course will explore continuity and change in the history of Anglo-American women from the late Victorian era to the present. Topics: the Victorian legacy, women and work, women's education, female sexuality, reproduction, and women and politics.

WoSt 5123 WOMEN IN CONTEMPORARY AMERICAN RELIGION (1412)

10 lessons—\$185—4 degree credits—text price \$62-67—Kilde

See AmSt 5123

Special Learning Opportunities

Because Independent Study wants to give you a choice of using the study method that best suits your needs, we offer several special learning opportunities. These opportunities include enrolling in our correspondence courses, computer-assisted courses, or using our contract alternative, credit-by-exam, directed study, and group study options. More information about each of these methods for earning credits through Independent Study is given below. (Also refer to the the blue section for information about our Media-Assisted Courses.)

Correspondence Courses

Most of the courses offered by Independent Study are correspondence courses. You can enroll in a correspondence course at any time, take up to a year to complete it, and study where and when you have the time. When you enroll in a correspondence course, you receive a study guide that lists the required texts and materials and contains the lessons you have to complete.

Each lesson usually has a reading assignment in the required text or texts, study notes that contain additional information about the lesson topic and examples (especially in the math and science courses), and a lesson assignment. After you send in a lesson assignment, it is evaluated by the course instructor and returned to you with a letter grade and comments.

For most courses you also have to successfully complete one or more exams. The correspondence method is most suitable for people who want an organized program of study that closely approximates the content and format of day classes at the University.

Some of the new correspondence courses that have been opened for student registration, or that will open shortly, are given below.

- AgEc 1400, Agricultural Markets and Prices**
- Anth 5141, Culture and Personality**
- BFin 3000, Finance Fundamentals**
- Comp 0011, Preparatory Composition**
- Engr 3016, Deformable Body Mechanics**
- Engl 5432, American Poetry (1890-1940)**
- Fren 1101, Beginning French I**
- Fren 1102, Beginning French II**
- GC 3115, Evolution of Life on Earth**

GC 3531, Writing for Business
GC 3560, Personnel Administration
Ger 1102, Beginning German II
Hist 5331, American Constitutional History
Hist 5332, American Constitutional History
Span 1104, Intermediate Spanish I
Span 1105, Intermediate Spanish II

Computer-Assisted Courses

Early in 1989 the Department of Independent Study will have a new computer system. In addition to making registration and record keeping more efficient, the new computer system will enable Independent Study to offer courses to students through their personal computers and modems. Two projects are currently being developed.

Independent Study, in collaboration with the Department of Computer Science, General College, and the Office of Disabled Students, has been awarded a WOK-SAPE grant to develop a correspondence course on Perspectives on Computers and Society (CSci 3001). This course, which introduces the power and potential of computers to novices, will be taught from the University by computer to disabled students who gather at Courage Center in Golden Valley, Minnesota. Courage Center computers will be connected to the Department of Independent Study by modem. This course will be available early in 1989.

The second project involves teaching written French to graduate students who want to prepare for the foreign language examination. Through modems, students enrolled in French 0001 can receive instruction and communicate with the instructor without leaving home. In the future, Independent Study hopes to develop similar courses in three additional western European languages.

Independent Study also offers several other courses about computers and data processing that are now available for student registration or will be available soon.

EE 3351, Logic Design
EE 3352, Microprocessors
GC 1571, Introduction to BASIC Programming and Microcomputers
GC 3571, Computer Approach to Problem Solving

Contract Alternative

If you enroll under contract alternative, you are exempt from submitting a course's lesson assignments. You complete a project in lieu of the lesson assignments. Enrollment procedures for contract alternative can be obtained by writing to the Department of Independent Study. Enrollment under this method carries full tuition and may only be used with the correspondence courses listed in this bulletin. To receive credit, you will be expected to complete your project, pass a final exam, and/or, in some way chosen by the course instructor, demonstrate your mastery of the course content.

Group Study

For groups of 20 or more students, the Department of Independent Study will, on request, investigate the possibility of coordinating a group study program. Group study consists of the basic correspondence course supplemented by lectures by an instructor, video and/or audio tapes. This method adds the dimension of group interaction without diminishing the flexibility or personal nature of Independent Study instruction. Group meetings will be arranged at a time and place convenient for the students involved. Students who want to discuss the possibility of group study should call or write the Department of Independent Study.



Pablo Picasso (1881-1973) Spanish painter, sculptor, graphic artist, and ceramicist. Worked in the forefront of the cubist and abstractionism movements. *The Old Guitarist, The Three Musicians, Guernica.*

Credit by Examination

Credit by examination is an alternative method of earning credits. Under this method, you prepare on your own for course exams for any correspondence course listed in this bulletin. When you pass the final exam, you receive credit for the course. You will not be allowed to submit work for your instructor's evaluation before writing the exams. This method is primarily recommended for students who want to earn credit for their extensive knowledge in a specific subject area.

To enroll under credit by exam, you must send (1) a letter describing your background and reason for choosing this method, (2) a transcript of all college-level work, and (3) a completed Independent Study registration form to the Department of Independent Study. The Department, in consultation with an appropriate instructor, will decide either to approve your registration under the credit by exam method or recommend the correspondence lesson method. As with other Independent Study methods, you will receive a study guide on acceptance of your registration, even though you will not be required to complete the lesson assignments in it.

The tuition for credit by exam is \$50 (\$40 for exams, plus \$10 for materials). You may take your exams either at the Department of Independent Study or under the supervision of an approved proctor (see Examinations). If you cancel within three months of registering under credit by exam, a \$20 cancellation fee plus the \$10 for materials is nonrefundable.

Directed Study (Individual Study)

This method is suggested for courses not listed in this bulletin and not available through departmental reading courses. Projects requiring cross-disciplinary study are most appropriate for this method. Directed study lets you undertake and complete academic work of your own design. Before registering for directed study, you need to secure the approval of an instructor in whose field the course is relevant. It is the student's responsibility to find an appropriate instructor. To apply for registration under this method, write to the Department of Independent Study and request an Individual Study Proposal Form. The form will be mailed to you along with further instructions for directed study registration. You will have one year to complete your work before your registration expires.

Media-Assisted Courses

Because some courses can be more interesting and intellectually stimulating with a visual or audio component, Independent Study offers several kinds of media-assisted courses. These include radio, television, audio cassette, video cassette, and Home VCR courses.

Our radio and television courses, which are offered with the cooperation of University Media Resources, public radio stations, and public and cable television stations, are broadcast each quarter of the academic year. After one of these degree-credit courses has been broadcast, it is converted to an audio cassette, a video cassette, or a Home VCR course so that students may continue to enroll in it.

Each media-assisted course consists of the media component, a course study guide, and texts. The study guide integrates all of the course components—it details the reading assignments from the required texts, gives the viewing or listening assignments, and contains study notes, written assignments, and/or exam information. The media component highlights the major themes of the course and helps pace student work. Instructor feedback usually occurs through comments and grades on the written assignments; instructors for some media-assisted courses maintain telephone office hours (given in the course study guide). All course assignments and exams for media-assisted courses can be completed by mail.

The broadcast schedule for this year's radio and television courses, plus information specific to each type of course, is given below. Most radio and television courses follow the University's quarter schedule. Students, however, may take up to three additional months to complete the course requirements. Information about our audio cassette, video cassette, and Home VCR courses is given on the next pages. Descriptions of all of these courses are given in the Course Descriptions section of this bulletin. (Refer to the Special Learning Opportunities section for information on other ways to earn credits through Independent Study.)

Radio Courses

The radio courses we will offer this year are given below according to University quarter. Descriptions of these courses can be found in the Course Descriptions section of this bulletin. If you enroll in one of these courses and miss a program when it is broadcast, you can go to the following locations to listen to a tape of that program.

Twin Cities: Learning Resources Center
15 Walter Library
Minneapolis campus

Duluth: Learning Resource Center
248 Library
Duluth campus

Registration Dates

Twin Cities: Fall Aug. 26—Oct. 7, 1988
Late: Oct. 8—Oct. 21, 1988
Winter Dec. 9, 1988—Jan. 20, 1989
Late: Jan. 21—Feb. 3, 1989
Spring Feb. 27—April 7, 1989
Late: April 8—April 21, 1989

Duluth: Fall July 25, 1988 (mail-in registration opens)
Aug. 15, 1988 (in-person registration opens)
Winter Oct. 17, 1988 (mail-in registration opens)
Nov. 7, 1988 (in-person registration opens)
Spring Jan. 23, 1989 (mail-in registration opens)
Feb. 13, 1989 (in-person registration opens)

Radio Stations

Twin Cities: KUOM Radio, 770 AM
Duluth: KUMD Radio, 103.3 FM

Starting this year, courses offered on weekdays over KUOM radio will take advantage of KUOM's new call-in format. Students and other listeners will be able to telephone the station and ask questions of the instructor and receive prompt and personal feedback. The call-in feature is **not** available for Saturday repeats or other Saturday courses.

Courses

Fall 1988

Prime Time Women, Comm 5900

KUOM: Saturdays, 12-1 p.m.
Sept. 24-Dec. 3, 1988
(No broadcast Thanksgiving weekend)

Magazine Writing, Jour 3173

KUOM: Saturdays, 1-2 p.m.
Sept. 24-Dec. 3, 1988
(No broadcast Thanksgiving weekend)

Winter 1989

Eroticism and Family Life in Greece and Rome, Clas 5004

KUOM: Fridays, 1:30-2:30 p.m.

Jan. 6-March 10, 1989

Saturdays, 12-1 p.m. (repeats)

Jan. 7-March 11, 1989

Fiction Writing, Engl 3101

KUOM: Saturdays, 1-2 p.m.

Jan. 7-March 11, 1989

Northern Minnesota Women: Myths and Realities, WS 1990

KUMD: Tuesdays, 9-10 a.m.

Dec. 6, 1988-Feb. 7, 1989

Spring 1989

D. H. Lawrence and Freud, Engl 3910

KUOM: Fridays, 1:30-2:30 p.m.

March 31-June 2, 1989

Saturdays, 12-1 p.m. (repeats)

April 1-June 3, 1989

Modern Science Fiction and Fantasy, Engl 1020

KUOM: Saturdays, 1-2 p.m.

April 1-June 3, 1989

Prime Time Women, Comm 5900

KUMD: Wednesdays, 9-10 a.m.

March 15-May 17, 1989

Television Courses

The broadcast schedule for 1988-89 includes several popular courses that have been broadcast in previous years and several new courses. The schedule is given below according to University quarter. If you take one of these courses and miss a television program, video tapes of the programs are available for viewing at some campus learning resources centers (they are given in the course study guide).

Registration Dates

Please refer to the listing for Radio

Television Stations

Twin Cities—KTCA-TV, Channel 2

KTCL-TV, Channel 17

Bemidji—KAWE-TV, Channel 9

Appleton—KWCM-TV, Channel 10

Duluth—WDSE-TV, Channel 8

Courses

Fall 1988

The Changing Physical World, Phys 1003

- KTCI: Mondays, 5-5:30 p.m.
Sept. 26-Nov. 28, 1988
Tuesdays, 9-9:30 p.m. (repeats)
Sept. 27-Nov. 29, 1988
KAWE: Saturdays, 9-9:30 a.m.
Sept. 24-Nov. 26, 1988
KWCM: Tuesdays, 7:30-8 a.m.
Sept. 27-Nov. 29, 1988

Introduction to Technical and Business Communication, Comp 1031

- KTCI: Mondays, 5:30-6 p.m.
Sept. 26-Nov. 28, 1988
Tuesdays, 9:30-10 p.m. (repeats)
Sept. 27-Nov. 29, 1988
KAWE: Saturdays, 9:30-10 a.m.
Sept. 24-Nov. 26, 1988

Toward an Understanding of Child Sexual Abuse, PubH 5609/SW 5010

- KTCI: Mondays, 9-9:30 p.m.
Sept. 26-Nov. 28, 1988
Wednesdays, 5-5:30 p.m. (repeats)
Sept. 28-Nov. 30, 1988

Education of the Gifted and Talented, EPsy 5690

- KTCI: Mondays, 9:30-10 p.m.
Sept. 26-Nov. 28, 1988
Wednesdays, 5:30-6 p.m. (repeats)
Sept. 28-Nov. 30, 1988

The Nature of Human Language, Ling 1001

- KTCI: Tuesdays, 5-5:30 p.m.
Sept. 27-Nov. 29, 1988
Wednesdays, 9-9:30 p.m. (repeats)
Sept. 28-Nov. 30, 1988



Georgia O'Keeffe (1887-1986) An American painter, O'Keeffe produced works with organic abstract forms using clear, strong colors. She lived much of her life in New Mexico and frequently used Southwest motifs. **Cow's Skull, Red, White, and Blue.**

Social and Psychological Aspects of Physical Disability, HSU 5008/PMed 5445

KTCI: Tuesdays, 5:30-6 p.m.
Sept. 27-Nov. 29, 1988
Wednesdays, 9-9:30 p.m. (repeats)
Sept. 28-Nov. 30, 1988
KWCM: Thursdays, 7:30-8 a.m.
Sept. 29-Dec. 1, 1988

American Business History, Hlst 3841

WDSE: Wednesdays, 6:30-7 a.m.
Sept. 14-Nov. 16, 1988
Saturdays, 8:30-9 a.m. (repeats)
Sept. 17-Nov. 19, 1988

Government and Politics of African Countries, Pol 5478

KTCA: Broadcast dates and times to be determined
Call 624-4393 for information

Winter 1989

Introduction to Social and Cultural Anthropology, Anth 1102

KTCI: Mondays, 5-5:30 p.m.
Jan. 9-March 13, 1989
Tuesdays, 9-9:30 p.m. (repeats)
Jan. 10-March 14, 1989

Family Relationships, FSoS 5200

KTCI: Mondays, 5:30-6 p.m.
Jan. 9-March 13, 1989
Tuesdays, 9:30-10 p.m. (repeats)
Jan. 10-March 14, 1989
KWCM: Tuesdays, 7:30-8 a.m.
Jan. 10-March 14, 1989

Toward an Understanding of Child Sexual Abuse, PubH 5609/SW 5010

KTCI: Mondays, 9-9:30 p.m.
Jan. 9-March 13, 1989
Wednesdays, 5-5:30 p.m. (repeats)
Jan. 11-March 15, 1989
WDSE: Wednesdays, 6:30-7 a.m.
Dec. 7, 1988-Feb. 8, 1989
Saturdays, 8:30-9 a.m. (repeats)
Dec. 10, 1988-Feb. 11, 1989

Home Landscape Gardening, Hort 1010

KTCI: Mondays, 9:30-10 p.m.
Jan. 9-March 13, 1989
Wednesdays, 5:30-6 p.m. (repeats)
Jan. 11-March 15, 1989

Social and Psychological Aspects of Physical Disability, HSU 5008/Pmed 5445

KTCI: Tuesdays, 5-5:30 p.m.
Jan. 10-March 14, 1989
Wednesdays, 9-9:30 p.m. (repeats)
Jan. 11-March 15, 1989

Contemporary Political Ideologies, Pol 1041

KTCI: Tuesdays, 5:30-6 p.m.
Jan. 10-March 14, 1989
Wednesdays, 9:30-10 p.m. (repeats)
Jan. 11-March 15, 1989

Education of the Gifted and Talented, EPsy 5690

KAWA: Saturdays, 9-9:30 a.m.
Jan. 7-March 11, 1989

The Nature of Human Language, Ling 1001

KAWA: Saturdays, 9:30-10 a.m.
Jan. 7-March 11, 1989
KWCM: Thursdays, 7:30-8 a.m.
Jan. 12-March 16, 1989

Spring 1989

Introduction to the Visual Arts, Arth 1001

KTCI: Mondays, 5-5:30 p.m.
March 27-May 29, 1989
Tuesdays, 9-9:30 p.m. (repeats)
March 28-May 30, 1989

Multidisciplinary Perspectives on Aging, CPsy 5305/Educ 5440/HSU 5009/PA 5414/SAHP 5009/Soc 5000/SW 5024

KTCI: Mondays, 5:30-6 p.m.
March 27-May 29, 1989
Tuesdays, 9:30-10 p.m.
March 28-May 30, 1989

Introduction to Social and Cultural Anthropology, Anth 1102

KTCI: Mondays, 9-9:30 p.m.
March 27-May 29, 1989
Wednesdays, 5-5:30 p.m. (repeats)
March 29-May 31, 1989

The Meanings of Place, AmSt 3920/5920/Arch 5956

KTCI: Mondays, 9:30-10 p.m.
March 27-May 29, 1989
Wednesdays, 5:30-6 p.m. (repeats)
March 29-May 31, 1989
KWCM: Tuesdays, 7:30-8 a.m.
March 28-May 30, 1989

American Business History, Hist 3841

KTCL: Tuesdays, 5-5:30 p.m.
March 28-May 30, 1989
Wednesdays, 9-9:30 p.m. (repeats)
March 29-May 31, 1989
KWCM: Thursdays, 7:30-8 a.m.
March 30-June 1, 1989

Contemporary Political Ideologies, Pol 1041

KTCL: Tuesdays, 5:30-6 p.m.
March 28-May 30, 1989
Wednesdays, 9:30-10 p.m. (repeats)
March 29-May 31, 1989

Family Relationships, FSoS 5200

WDSE: Wednesdays, 6:30-7 a.m.
March 15-May 17, 1989
Saturdays, 8:30-9 a.m. (repeats)
March 18-May 20, 1989

Social and Psychological Aspects of Physical Disability, HSU 5008/PMed 5445

KAWE: Saturdays, 9-9:30 a.m.
April 1-June 3, 1989

Home Landscape Gardening, Hort 1010

KAWE: Saturdays, 9:30-10 a.m.
April 1-June 3, 1989

In addition to courses produced jointly by Independent Study and University Media Resources, we also offer some television-assisted courses in conjunction with miniseries or broadcasts on public or commercial TV networks. During past years, for example, we offered courses along with "Peter the Great," "The Day After," "Christopher Columbus," and "Bleak House." Courses planned for 1988-89 include "War and Remembrance" and others that will be announced at various times during the year.

Programs for Independent Study television courses are usually aired on the following cable systems. Call for specific dates and times.

Bloomington Cable, Channel 17D
Cablesystems Southwest, Twin Cities area, Channel 3
Columbia Heights Cable, Channel 12
Fridley Cable, Channel 13
Minneapolis Television Network, Channel 8 (MTN)
St. Louis Park Cable, Channel 22
Brooklyn Park Cable, Channel 18

Audio and Video Cassette Courses

After courses are broadcast over radio and television, they become available as audio cassette and video cassette courses. The courses that have been adapted as audio and video cassette courses in the past year are listed below. Descriptions of these courses and other audio and video cassette courses are given in the Course Descriptions section of this bulletin. Please inquire if the course description indicates that cassettes are not available in the outstate center near you; special arrangements can sometimes be made to provide them. Cassettes of selected video courses are available for registered students to borrow for six months (see Home VCR Courses).

CPsy 5305/Educ 5440/HSU 5009/PA 5414/SAHP 5009/Soc 5960 or SW 5024, Multidisciplinary Perspectives on Aging
FSoS 5230, American Families In Transition
FSoS 5240, Family Stress and Coping
AmSt 3920/5920, Arch 5956, The Meanings of Place
HSU 5009, Social and Psychological Aspects of Physical Disability
EPsy 5690, Education of the Gifted and Talented

Students who register for an audio cassette course can purchase the cassettes through the Department of Independent Study. Audio and video cassettes are available for use at the Learning Resources Center, 15 Walter Library, Minneapolis campus; tapes for some courses are also available at Morris, Duluth, and Rochester. Since not all courses are available at all locations, call the appropriate location for information on viewing hours and courses available.

Learning Resources Center, 15 Walter Library, Minneapolis campus (612) 624-0283

MacPhail Center for the Performing Arts, 1128 LaSalle Avenue, Minneapolis MN 55403, (612) 627-4020

Duluth Center, 165 Library, Duluth campus, (218) 726-6121

Morris Learning Center, 232 Community Services Building, Morris campus, (612) 589-2211, ext. 6456

Rochester Center, 1200 South Broadway, Rochester, MN (507) 288-4584

Home VCR Courses

The programs for selected video cassette courses are now available on VHS video cassettes and can be borrowed for six months from Independent Study by students registered for those courses. Students who own a VHS format video cassette recorder or have access to one can now watch the programs for these courses at their own convenience.

All 10 programs for a video course are available on one or more VHS cassettes. **Note: to play these tapes you must have a VHS format video cassette recorder.** To borrow a cassette you must indicate **Home VCR Course** on your registration form and include a \$20 deposit fee when you register. Cassettes may be borrowed only when you register for a course and may be kept for a maximum

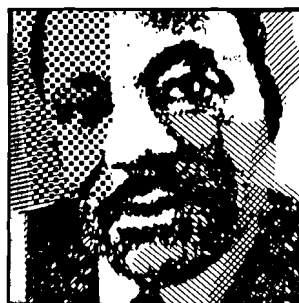
of six months. The \$20 deposit will be refunded after you return a cassette to Independent Study in good condition. If you lose or damage a cassette, you will be required to pay the cost of replacing it (approximately \$100). Home VCR courses are available only within the continental United States.

Students who register for a Home VCR course have six months to complete all course requirements and return the cassette. Because the supply of cassettes is limited, there can be no extensions, reinstatements, or transfers to Home VCR courses from other Independent Study courses or from Home VCR courses to other courses. Home VCR courses are not available for graduate credit.

The following courses are available as Home VCR courses. Other courses will be added in the future. For information about courses available in this format, call (612) 624-9008.

PubH 5642, Child Abuse and Neglect
FSoS 5240, Family Stress and Coping
CPsy 5305/Educ 5440/HSU 5009/PA 5414/SAHP 5009/Soc 5960/SW 5024,
Multidisciplinary Perspectives on Aging
HSU 5008, Social and Psychological Aspects of Physical Disability
Phys 1003, The Changing Physical World
EPsy 5960, Education of the Gifted and Talented
PubH 5609, Toward an Understanding of Child Sexual Abuse
FSoS 5200, Family Relationships
Arch 5956/AmSt 3920/AmSt 5920, The Meanings of Place
Comp 1031, Introduction to Technical and Business Communication
Hist 3841, American Business History
Hort 1010, Home Landscape Gardening
Ling 1001, Nature of Human Language
Math 1211, Analysis I
EPsy 5400, Career Development and Planning

Martin Luther King, Jr. (1929-1968) American clergyman and civil rights leader. Gained national prominence by advocating passive resistance to segregation. In 1964 King was awarded the Nobel Peace Prize.



Upcoming Courses/Programs

In the coming year, Independent Study will continue to develop media-assisted short courses for professionals in business and industry. See Updates for Professionals Program (below).

Courses that will make use of the "Video Encyclopedia of the 20th Century," a 75-hour collection of film clips and newsreel footage from the turn of the century to the present, are also being planned. A course covering American history from 1932 to 1960 is now being prepared and meetings are scheduled with faculty in other departments to discuss how they could use this learning-enhancement tool to enrich the courses they offer through Independent Study.

Updates for Professionals Program (UPP)

The courses in this program are designed to help professionals in business and industry maintain their expertise in a climate of rapid technological change. UPP courses reflect cutting-edge research in a variety of disciplines, including computer science, chemical and electrical engineering, and statistical theory.

They were developed as intensive, non-credit short courses that can be used by groups or individuals. Course materials consist of video or audio tapes, printed materials, and occasionally computer software or other instructional tools.

UPP courses currently available include:

Supercomputer Architecture and Programming—A nine hour discussion of the properties of supercomputer components and architectures. Specific emphasis is placed on multitasking, the advantages and problems of pipeline structure, and programming of science algorithms for optimal computation.

Making Decisions In Industry—Six hours of training in quantitative thinking that will enhance a person's ability to maximize decision options. Topics include ways to modify strategies as information accumulates and how to trade immediate payoffs for information that will improve overall payoffs.

In preparation for fall and winter 1988-89 are courses exploring the use of supercomputer **simulations in astrophysics**, the GKS system of **computer graphics**, **power electronics**, and research techniques in **interfacial engineering**.

For further information on UPP courses, please call **612/624-9303**.

General Information

Admission

There are no entrance requirements for admission to Extension Independent Study, although registration in specific programs or courses may require prerequisite study or experience. Prerequisites are noted in the course descriptions in this bulletin. Most Independent Study courses may be started at any time and should be completed within one year from the date of registration.

Audio Cassette Courses

See the blue section

Cassette Tapes

See Tapes

Computer-Assisted Courses

See the green section

Contract Alternative

See the green section

Counseling and Advising Services

The Extension Counseling Office offers counseling, academic advising, and financial aid advising services, without fee, to all students registered or planning to register in courses offered by Continuing Education and Extension. Academic advising can help you determine prerequisites and academic standing, evaluate transcripts, choose courses, and evaluate the applicability of Independent Study credits to specific degree and certificate programs.

Professional counseling services are available to assist persons with exploration, choice, planning, and implementation of career and educational goals. Counselors can help students learn more about their interests, values, abilities, and personal characteristics related to students' goals; identify career options and

General Information

major fields of study; develop educational and career plans; and assess problems related to academic performance. Career/educational testing and other career and educational planning programs are offered for a fee. Students may call 612/625-2500 to arrange for day or evening appointments or to consult with an adviser by phone. Advisers can also be contacted by mail at the following address:

Department of Extension Counseling
314 Nolte Center
315 Pillsbury Drive SE
Minneapolis, MN 55455

Credit Card Payment Plan

If you want to, you can use your Visa or MasterCard to pay for the tuition, fees, and materials (texts, tapes, etc.) for an Independent Study course. To determine what your total credit card payment should be, fill out a registration form, listing the tuition of the course or courses you want to enroll in, the cost of texts (if you want to purchase them at the time you register), the cost of tapes (if necessary for a course), and fees (see Postage). Be sure to fill in both the box labeled Full Payment Plan and the box labeled Credit Card Payment on the registration form. When you fill in the Credit Card Payment box, check whether you're using Visa or MasterCard and have the credit card holder sign on the appropriate line. You **cannot** use your credit card to pay for a course on the Partial Payment Plan.

Credit by Examination

See the green section.

Credits

The University of Minnesota uses the quarter hour as the basis of credit evaluation. A quarter hour equals approximately 2/3 of a semester hour. All credits listed in this bulletin are quarter-hour credits.

The following credit designations are used in the course descriptions.

Degree credit may be used in a degree program. Officials at colleges or universities determine which Independent Study courses will be accepted to fulfill degree requirements at their institutions. To receive degree credit for Independent Study courses, you should obtain approval from that institution before enrolling. University of Minnesota students should consult an advisor in their major department. (See University Degree Programs section.)

Certificate credit may be used in appropriate Continuing Education and Extension certificate programs. Certificate credit courses are college level but do not carry degree credit and have no counterpart in day classes at the University of Minnesota. (For more information, see Extension Certificate Programs section.)

No credit is given for some courses, although grades may be assigned. (Also see Enrolling in Credit Courses on a Noncredit Basis.)

Resident Credit

Degree courses described in this bulletin parallel or are equivalent to courses with the same title and course number offered in day sessions at the University of Minnesota. Through action of the University Senate, Extension Independent Study credits are considered resident credits.

Graduate Credit

See University Degree Programs section, Graduate School

Enrolling in Credit Courses on a Noncredit Basis

Any course listed in this bulletin may be taken on a noncredit basis by simply indicating "NC" in the "Credits" column of the registration form. Usually, instructors will expect the same quality of work and will grade both credit and noncredit students on the same basis. You may change from a noncredit to a credit registration anytime before submitting Lesson 3. Enrollment in a credit course on a noncredit basis requires the payment of full tuition.



Sylvia Plath (1932-1963) American poet. Her finely crafted, intensely personal poems are known for their sharp, often violent, imagery (**The Colossus**, **Ariel**). She also wrote an autobiographical novel, **The Bell Jar**.

DANTES

The Defense Activity for Non-Traditional Education Support (DANTES) was established in June 1974 to provide educational support for voluntary education programs for military organizations. Military personnel on active duty should contact their Education Officer for additional information concerning enrollment through this program.

Degree Candidates

See University Degree Programs

Directed Study

See the green section

General Information

Discontinued Courses

The unavailability of materials, books, or instructors sometimes makes it necessary to discontinue accepting enrollments in an Independent Study course. If you mail in a registration form for a course that has been discontinued, your tuition will be returned or, if requested, applied to another course with the same tuition cost.

Examinations

Most Independent Study courses include a final examination and one or more midcourse examinations. They are usually supervised and may be taken at the following offices or under the supervision of the following individuals.

1. Department of Independent Study, 45 Wesbrook Hall, Minneapolis campus of the University. Office hours are from 7:45 a.m. to 4:30 p.m., Monday through Friday. No appointment is necessary during regular hours. If you wish to take your examination on the first or second Tuesday evening of the month, you should call 624-0000. During July, August, and September, you can take an exam in the evening only on the first Tuesday of the month. You must call and make an appointment to take an exam in the evening.

Students in the Twin Cities area are urged to take their examinations at the offices of the Department of Independent Study.

2. Continuing Education and Extension Offices (by appointment only):

Crookston:	Academic Affairs, 302 Selvig Hall, 281-6510, ext. 439 Arts and Sciences, 153 Dowell Annex, 281-6510, ext. 377
Duluth:	104 Darland Administration Building, 726-8113
Morris:	Morris Learning Center, 232 Community Services Building, 589-2211, ext. 6456
Rochester:	Friedell Building, 1200 South Broadway, 288-4584

3. The Independent Study department of any member institution of the National University Continuing Education Association. (A list is available on request.)
4. A school superintendent, principal, or counselor; a college instructor or administrator; a head librarian.
5. A commissioned officer whose rank is higher than your own (for students in the military only).
6. A corporate education director.

The Department of Independent Study reserves the right to reject any supervisor. Regardless of academic qualifications, no relative may proctor an examination. No proctor fees are authorized.

General Information

A Request for Examination form for each exam is included in the study guide. To take your examinations at locations other than the offices of the Department of Independent Study, you must contact the individual who will proctor your examination before sending the Request for Examination form to the Department of Independent Study. Examinations are mailed directly to the supervisor at his or her business location.

Extension Certificates

See Extension Certificate Programs section

Faculty

Instructors for all Independent Study courses are approved by the University academic departments through which the courses are offered. In most cases, Independent Study instructors are faculty members at the University, although faculty from other colleges and universities, or specialists in professional and business fields, also teach Independent Study courses. A complete faculty list is given at the end of this bulletin.

During the past several years, faculty from various departments have taken part in course review and evaluation seminars that critically analyzed Independent Study courses and course materials. The first seminar, funded by a grant from the National Endowment for the Humanities, examined existing courses in the humanities and considered the design of effective undergraduate instruction. Seminars held each summer since then have analyzed courses and course instruction in the social sciences, humanities, and natural sciences.

Fees

See Tuition, Postage, Credit Card Payment Plan

Financial Aid

Independent Study students may be eligible for the financial aid programs listed below. Students **cannot** use Pell Grant, Guaranteed Student Loan and other educational loans, or campus-based aid (College Work-Study, Supplemental Educational Opportunity Grant, Perkins Loan, University grants, loans and scholarships administered by the Office of Student Financial Aid) for Independent Study.

Minnesota Part-Time Student Grant Program—The MPTSGP provides funds primarily for students enrolled for five credits or less per quarter. (Students registered for 6-11 credits will be considered for MPTSGP for **one quarter only** if they

General Information

have not been enrolled at the University or elsewhere during the prior quarters of the academic year and have not been awarded Minnesota State Scholarship and Grant funds.) Eligibility requirements are: U.S. citizen or permanent resident of the United States, Minnesota residency; enrollment in undergraduate coursework applicable to a degree or certificate program and maintenance of satisfactory academic progress; no prior bachelor's degree; and demonstration of financial need.

Financial need criteria are based on the previous year's income (1987 income for the 1988-89 academic year or, under some circumstances, on the present year's estimated income). An applicant's total federally-adjusted gross income and untaxed income must not exceed the following levels: one-person family, \$10,975; two-person family, \$14,675; three-person family, \$18,225; four-person family, \$22,600; five-person family, \$24,275; six-person family, \$26,100; seven-person family, \$28,100; eight-person family, \$29,975; nine-person family, \$32,125.

Awards can be used for tuition and fees, books and supplies, transportation and childcare costs incurred while students are attending classes. The grant may supplement other aid, including scholarships and employer tuition reimbursement. Awards are contingent on state funding. Applications will be accepted until all funds for each quarter have been committed. Information is available at Extension Counseling, 314 Nolte Center, 612/625-4334.

Business Firms—Many business firms help subsidize the education of their employees. Before enrolling, you are urged to talk with your company's personnel or education officer about possible tuition assistance for Independent Study.

Minnesota State Scholarship and Grant Program—The MSSGP is administered by the Minnesota Higher Education Coordinating Board. It provides funds for part-time enrollment through Independent Study. Eligibility requirements are: U.S. citizen or permanent resident of the United States, Minnesota resident; enrollment in coursework applicable to a degree or certificate program and maintenance of satisfactory academic progress; registration exclusively through Independent Study for 6-11 credits per quarter (no additional registration through Extension classes, day school, or at another institution); and demonstration of financial need. In addition, applicants must not already have earned a bachelor's degree and must not have completed four years of education on a full-time basis beyond high school. MSSGP checks must be picked up on campus unless geographical distance or extenuating circumstances make it difficult to travel to campus. Students who live more than 50 miles from campus or have other barriers should contact Extension Counseling. Applicants use the ACT application, which is available at Financial Aid, 210 Fraser Hall, or at Extension Counseling, 314 Nolte Center. Call Extension Counseling (612/625-4334) for a set of procedures outlining the steps that must be followed.

Aid For Students With Disabilities—Funds are available through most State Departments of Education. Minnesota residents can obtain information about the Minnesota Department of Rehabilitation Services (DRS) from the DRS Liaison, Room 12, Johnston Hall (624-4037), or from local Department of Rehabilitation Services offices.

Tuition Assistance Program—Grants are available through the Continuing Ed-

General Information

ucation and Extension Tuition Assistance Program for low-income adults who are not eligible for other financial aid. Applicants must be U.S. citizens or permanent residents, and must not have a prior bachelor's degree. Priority is given to students who are Minnesota residents. Awards cover full tuition for a maximum of two courses a quarter, plus a book allowance. Eligibility is based on current monthly income, number of dependents, and special expenses. Applications will be accepted until all funds for each term have been committed. For information, call (612) 625-4334 or write to the Extension Counseling Office.

The Remington Scholarship—The Gilford W. and Esther F. Remington Scholarship Fund has been established by Mrs. Remington to provide financial assistance each year to one or two students enrolled through Continuing Education and Extension (CEE) on the Twin Cities campus and through the Duluth Extension Center on the UMD campus. For an application form, write to the Extension Counseling Office. Preference will be given to students in the fields of history, education, art, and audio-visual education. Applications are considered each July for the academic year.

Military Veterans—To satisfy Veterans Administration requirements, veterans registering under the G.I. Bill must enroll in courses that are applicable to degree, certificate, or other educational objectives approved by the Veterans Administration. Eligible students may apply under: **Cold War Veterans (Chapter 34, Title 38, U.S. Code)**; **VEAP (Chapter 32, the Post-Vietnam Era Veterans' Educational Assistance Program)**; or **Selected Reserve Educational Program (Chapter 106 of Title 10, U.S.C.)**. Educational plans and transcripts of all college work must be reviewed with an Extension Counselor before the Department of Independent Study can certify registration to the Veterans Administration. Counselors can be reached at 612/625-2500 or by writing Veterans Counselor, Extension Counseling Department, 314 Nolte Center, 315 Pillsbury Drive SE, University of Minnesota, Minneapolis, Minnesota 55455.

Dates of Registration—The 1988-89 academic year is defined as June 13, 1988, through June 9, 1989. **If you register for any Independent Study coursework during the 1988-89 academic year using financial aid, you must complete that coursework by June 30, 1989.** Exceptions: (1) students who are making up an academic progress deficiency at their own expense for the 1987-88 academic year must submit summer Independent Study grades to the Student Financial Aid Office no later than October 14, 1988; and (2) students on Financial Aid probation must complete their coursework within one quarter (e.g., students on fall quarter 1988 probation must submit fall Independent Study grades no later than January 20, 1989).

The following dates define quarter of registration:

- 6/13/88 through 8/31/88—summer
- 9/1/88 through 12/9/88—fall
- 12/12/88 through 3/17/89—winter
- 3/20/89 through 6/9/89—spring

Academic Progress—To be eligible for financial aid, you must meet specific academic progress standards. These standards require that you complete a pre-

General Information

scribed number of credits within a quarter or academic year with a minimum grade point average of 2.0 (C). For three quarters of registration at 6-11 credits, you must successfully complete 18 credits (successful completion means grades of A, B, C, D, or S). If you are registered for 1-5 credits per quarter, you must successfully complete all credits attempted. Normally, you must also complete your educational objective within a prescribed eligibility period. For exceptional cases, such as a late change in major, you may appeal the eligibility period.

Registration With Delayed Payment (MSSGP)—If your Minnesota State Scholarship and Grant (MSSGP) check will not be available to you in time to pay tuition and fees, contact a financial aid adviser in Extension Counseling for information about delayed payment. Requests for delayed payment will be accepted from the first day of the quarter through the end of the second week of classes. Example: fall quarter 1988 requests will be taken from Sept. 1 through Oct. 7.

To be considered for delayed payment, your record at the University of Minnesota must indicate that you are eligible for aid and that you have no holds on your record. You will also need to submit a copy of your award letter from the Minnesota Higher Education Coordinating Board that shows eligibility for MSSGP at the University, Twin Cities.

Repayment of Educational Loans (Enrollment Verification)—You may defer repayment of a Guaranteed Student Loan, or other educational loan awarded in a previous year, provided that you enroll for at least six credits per quarter and you have not exceeded the six-month grace period. (Example: if you enroll for six credits for fall quarter, you must register for six additional credits winter quarter and six more credits for spring quarter.) If you have exceeded the grace period and have begun repayment of an educational loan, you can regain deferment eligibility by enrolling full-time (12 credits minimum) each quarter.

Financial Aid Advising—Independent Study students who have questions or problems about financial aid are encouraged to call or write Extension Counseling, 314 Nolte Center, 315 Pillsbury Drive SE, University of Minnesota, Minneapolis, MN 55455 (612/625-4334). Financial aid workshops for CEE students will be offered throughout the year. Information about times and locations are available from Extension Counseling.

Grades

The University uses the A-F and the S-N grading systems. Indicate on your registration form which system you wish to be graded on. You may change to another system at any time before submitting Lesson 3. If there is a grading system restriction for a course, it is indicated in the course description. Your final grade is sent to you upon completion of each Independent Study course.

Grading procedures and requirements are left largely to the discretion of the instructor, who is in the best position to evaluate a student's skill, knowledge, and progress. Grading policies employed in specific courses are usually outlined in

the study guide for each course. Questions or problems concerning grades earned in Independent Study should be sent to the Office Supervisor, Department of Independent Study.

A-F Grading System

There are four passing grades in the A-F system: A, B, C, and D. A grade of F indicates unsuccessful completion of the course. A grade of D, while a passing grade, reflects substandard work and must be balanced by grades of A or B in order to maintain the C average required by the University.

S-N Grading System

The S-N system is an alternative to the A-F system. S represents achievement that is satisfactory to the instructor. (The standards for S may vary from one course to another.) The symbol N, which stands for no credit, is assigned when a student does not earn an S. Each college determines which courses or what proportion of courses may be taken on the S-N system. Students who intend to apply Independent Study credits taken on the S-N system toward a degree or certificate at the University should contact their college office or the Extension Counseling Office before enrolling.

Students not working on a degree or certificate program, and not intending to apply credits toward such a program later, may use the S-N system for any number of courses.

Grade Point Average

To determine grade point average, grade points are assigned to course grades as follows: for each credit of A, four grade points; B, three grade points; C, two grade points; D, one grade point; F, zero grade points. Your grade point average is determined by dividing the sum of grade points by the sum of credits successfully completed (with grades of D or better). Credits earned in classes taken on the S-N grading system are not included in determining grade point average.

Withdrawals, Cancellations, and Incompletes

No grade will be recorded for a student who does not complete his/her Independent Study course. Students who formally cancel (see Tuition, Refunds) will receive a grade of W (withdrawal). A grade report is issued from the Office of Admissions and Records only upon completion of all course requirements.

Course Completion

Students must take full responsibility for meeting graduation or certification deadlines. Allow at least three weeks from the date a course is completed for the course grade to be recorded on the transcript in the Office of Admissions and Records. Students with special time limitations should check with the Department of Independent Study **before** enrolling, about the feasibility of meeting their particular credit deadline.

General Information

Group Study

See the green section.

Health Care Courses and Programs

The Department of Independent Study administers a number of special programs in the health care field. For more information, contact the programs below.

ISP Graduate Level Study Programs for Health Care Administrators, Project Coordinator, D305, Box 97, Mayo Building, 420 Delaware St. SE, Minneapolis, MN 55455; telephone 612/624-1411.

Programs: Ambulatory Care
Hospital and Health Care
Nursing and Patient Care
Nutrition

Tracks: Long Term Care
Mental Health

High School Courses

Extension Independent Study offers approximately 45 high school credit courses approved by the State Department of Education, and they satisfy University of Minnesota entrance requirements. These courses are suitable for students who need specific credits for college entrance, students who have dropped out of school but wish to complete their diploma, handicapped students who cannot attend public high school, above-average students who have permission to accelerate their high school completion. For more information and a complete list of courses, write to the Department of Independent Study for a High School Brochure.

Minnesota residents 19 years or older who left school are eligible to take the General Education Development (GED) tests for high school equivalency. Certificates are issued by the Minnesota Department of Education. Independent Study high school courses in English, mathematics, social studies, and other subjects can serve as a valuable review. For details about the GED program, contact the High School Certificate (GED) office, State Department of Education, 681 Capitol Square Building, St. Paul, MN 55101; phone (612) 296-4057.

High school students may, with permission of their local school authorities, take college-level Independent Study courses for high school credit. This would apply to students who want to take, for example, math or foreign language courses not offered by their high schools. Students who need advising regarding course or curriculum choice should contact Darryl Sedio at (612) 626-1666.

High School Students—PSEO College Enrollment

In 1985 the Minnesota state legislature enacted the Post-Secondary Enrollment Options Act (PSEO). Under the PSEO, high school juniors and seniors can take college courses and earn high school units and, subsequently, college credits for courses they successfully complete. Tuition, fees, and books are paid for by the Minnesota State Department of Education. PSEO can be used for Independent Study courses.

High school students interested in taking courses under the PSEO **must** contact the Advanced High School Student Services office at Extension counseling for information regarding selection criteria, acceptable courses, and enrollment forms. Please call or write the Advanced High School Student Services office, Extension Counseling, 337 Nolte Center, 315 Pillsbury Drive SE, Minneapolis, MN 55455, telephone (612) 626-1666.

Home VCR Courses

See the blue section.

Lesson Service

You should allow approximately two weeks between the time an assignment is received by the Department of Independent Study and the time it is placed in the return mail. Insufficient postage, no zip code, or no lesson form may delay the processing of lessons beyond the two-week period. You are urged to contact the Department of Independent Study regarding any lesson not returned within three weeks from the date on which it was submitted. Also, you should make a copy of each lesson before you submit it so that if it is lost in the mail you can easily resubmit it to Independent Study. Do **not** send a lesson directly to your instructor. If your instructor asks you to redo a lesson for re-evaluation, you must send a **\$6.00 re-submission fee** with that lesson.

Library and Audio-Visual Facilities

In addition to the required textbooks you may purchase for your Independent Study course, you are urged to use the University libraries and your local public, school, or college library for supplemental and required reading.

University of Minnesota Libraries—Independent Study students can borrow books from University libraries. These include the St. Paul Campus Library and Walter Library (East Bank) and Wilson Library (West Bank) on the Minneapolis campus. Independent Study students are subject to all library regulations including loan periods, fines, book recalls, and course reserves. Students borrowing books in person must present a current fee statement (the student's copy of the registration form). Students who reinstate in a course must present proof of reinstatement at the library to withdraw books. Students wishing to borrow by mail should fill out the request form included with their course materials and return it to

General Information

Mark Twain (1835-1910) An American writer, Twain is best known for his memorable characters (Tom Sawyer, Huckleberry Finn), the realistic picture he created of 19th century American life, and his revolution of the language of fiction by using vernacular speech.



the Interlibrary Loan Division, 179 Wilson Library, 309—19th Ave. S, University of Minnesota, Minneapolis, MN 55455. Library loans by mail are subject to all library regulations and must be returned on demand. No library books can be sent overseas.

University Film and Video—This office provides audio-visual materials as learning resources for student use on a fee basis. Limited preview facilities and equipment are available on the departmental premises. For information and a catalog of available resources, contact University Film and Video, 1313 5th St. SE, Suite 108, Minneapolis, MN 55414; telephone (612) 627-4270.

Learning Resources Center—The University of Minnesota Learning Resources Center, Minneapolis campus, has cassette and reel-to-reel audio and video tapes for use in languages, music, social sciences, and other disciplines. Independent Study students are eligible to use the listening and viewing facilities upon presentation of the student's copy of the completed registration form. Please call for information on relevant course materials and hours.

Learning Resources Center
15 Walter Library
Minneapolis campus
Telephone (612) 624-1584

Minnesota College Libraries—Many Minnesota colleges and universities will extend library privileges to Independent Study students who show a fee statement (the student's copy of the registration form). Students must abide by the regulations of these libraries. Course grades will not be issued or transferred for students who ignore library regulations.

MINITEX—Most Minnesota libraries are participants of MINITEX (Minnesota Interlibrary Telecommunications Exchange), a legislatively funded program that shares library resources. If your local library does not have a needed resource, it can generally be secured from another library. Students needing assistance in identifying or locating community library resources may call (612) 624-4002.

National University Continuing Education Association (NUCEA)

The Department of Independent Study is a member of the Independent Study Division of the National University Continuing Education Association. The division publishes an **Independent Study Catalog** that lists Independent Study courses offered by 72 colleges. It is available from Peterson's Guides, N.U.C.E.A. Book Order Department, Box 2123, Princeton, NJ 08543-2123. Write to Peterson's Guides for the cost of the Catalog. You can look at a copy of this Catalog at the Department of Independent Study, 45 Wesbrook Hall, if you wish.

Office Hours

The Department of Independent Study office is open Monday through Friday, 7:45 a.m. to 4:30 p.m., throughout the calendar year. The Department does not observe regular academic holidays except for the following:

July 4, 1988	Independence Holiday
September 5, 1988	Labor Day
November 24, 1988	Thanksgiving Day
November 25, 1988	Friday After Thanksgiving
December 23, 1988	Christmas Holiday
December 26, 1988	Christmas Holiday
January 2, 1989	New Year's Holiday
January 16, 1989	Martin Luther King Holiday
May 29, 1989	Memorial Day

Overseas and Foreign Students

The Department of Independent Study accepts registrations from students living or traveling in foreign countries. Since courses are available only in English, students must have sufficient knowledge of English to be able to read and write assignments without difficulty.

The Department of Independent Study does not employ commercial agents abroad. You must pay all fees in American currency. The student must mail his/her registration form along with payment for fees, books, and other materials directly to the Department of Independent Study. Library materials, records, and certain other supplementary materials cannot be sent overseas. For complete information regarding overseas lesson service, see Postage.

Partial Payment Plan

See Tuition

General Information

Postage

Students pay postage on all mail sent to the Department of Independent Study. The Department pays for the return of corrected lessons at first class rates and the delivery of texts and materials at fourth class book rates. Overseas students should arrange for lessons, texts, and materials to be sent airmail by enclosing special fees with their registration. Overseas students who do not arrange for airmail postage will encounter considerable delay and possible loss in delivery. Students must assume financial responsibility for the loss of shipments of texts and materials sent overseas.

Overseas students who wish corrected lessons returned by airmail **must** remit \$12 per course. This fee is nonrefundable. Overseas students who wish texts and materials sent airmail should remit no less than \$30 per course in addition to tuition and the \$12 airmail lesson service fee. Any balance under \$1, after postage has been paid, will not be refunded. **INDICATE CLEARLY ON THE REGISTRATION FORM THE PURPOSE FOR WHICH ADDITIONAL PAYMENT OF POSTAGE IS INCLUDED.**

Students in the United States and Canada who wish texts and supplies sent first class should remit an additional \$7 per course when ordering. (See Textbooks and Supplies for instructions on ordering.) Any balance under \$1, after postage has been paid, will not be refunded.

Purchase of Study Guides

Study guides for individual courses can be purchased. To obtain the price of a study guide, mail the name of the course to Accounts Specialist, Department of Independent Study.

Radio Courses

See the blue section

Refunds

See Tuition

Reinstatements

See Tuition

Senior Citizens in Minnesota

Minnesota residents, 62 years of age or older, may register in Extension Independent Study noncredit courses at no cost, and in credit courses for a tuition fee of \$6 per credit. Senior citizens who enroll in credit courses for no credit (see Enrolling in Credit Courses on a Noncredit Basis) must also pay the \$6 per credit fee. Reg-

General Information

istrants are required to pay for the study guide, texts, and other required materials. For further information, telephone (612) 624-0000 or write to the Department of Independent Study.

Social Security Number

Beginning this year, Independent Study is required to obtain a student's Social Security number when he or she registers in a course. The Social Security number is now used as a common identifier for all University record systems. Use of a common identifier will make it easier if you want to have your Independent Study grade transferred to your day school transcript. You should put your Social Security number on the first line of the Independent Study registration form. If you don't have a Social Security number, Independent Study can assign a nine-digit number (not a real Social Security number) that you can use as your identifying number.

Student Services

Many student services are available to Independent Study students. Participation in some of these activities is dependent on credit load per academic quarter. A list of services is given below. For more information about participating in these programs, contact the Department of Independent Study. Students who are also enrolled in Extension Classes may count Independent Study credits as part of their total credit load. You **cannot** use your credit card to pay for student services.

Recreational facilities

Athletic tickets

Health service

Library (see Library and Audio-Visual Facilities)

Parking and bus service (inter-campus)

CEE student board/University Senate

Tapes

Also see Audio and Video Cassette Courses and Home VCR Courses (the blue section)

Many Independent Study courses (e.g., language courses, music courses) use cassette tapes. If cassettes are required for a course, they are listed (with an order form) in the course study guide and/or with the course description in this bulletin. A student must have access to a cassette recorder in order to enroll in these courses or must be able to listen to the tapes in the Learning Resources Center, Walter Library, Minneapolis campus. Tapes are not returnable for a refund. Minnesota residents must pay sales tax on tapes.

Tax Deductible Educational Expenses

An income tax deduction may be allowed for the expenses of University Continuing Education and Extension programs undertaken to maintain and improve pro-

General Information

essional skills. For more information about tax deductible educational expenses, persons in the Twin Cities area can call the Internal Revenue Service at (612) 291-1422. Persons living outside the Twin Cities area can call (toll free) 1-800-424-1040.

Teacher Certification

See University Degree Programs section, College of Education

Television Courses

See the blue section

Textbooks and Supplies

Textbooks and supplies needed for a course, and the procedure for ordering them, are explained in the study guide sent to you upon registering. Tuition does not cover the cost of books and materials. Course descriptions in this bulletin list approximate book prices. Exact prices are given in the study guide introduction. Because text editions are frequently updated by publishers, you are encouraged to order the texts that are used in a course when you register. To do so, add the amount for the texts (given in the course description) plus a \$4 service charge per course to your tuition check. Overpayments of \$1 or more will be refunded. Lab kits, tapes, and special equipment are **not** returnable for refunds. Students who wish to sell their books should contact the Minnesota Book Center, Williamson Hall, University of Minnesota, 231 Pillsbury Dr. SE, Minneapolis, MN 55455; telephone (612) 625-6000. Only books in current use will be purchased. Full refunds for books will be given only if a student cancels his/her course registration within **three months** of the date of registration and has **not** submitted any course assignments. If a student cancels a course after three months, he/she will only receive a buyback refund from the Book Center.

Toll-Free Information Number

Independent Study now has a toll-free 800 number for use by students who live outside the Twin Cities area.

Students **outside** the Twin Cities area who want information on registration and course availability should call: 1-800-234-6564. If those students want information on partial payments, texts, lessons, grades, etc., they must call the Independent Study general number: 612/624-0000.

Students who live **within** the Twin Cities should call the Independent Study general number for all information.

Transcripts and Records

A grade slip is sent to you upon completion of each Independent Study course. To have your Independent Study credits transferred to your day school University of Minnesota transcript, you must write Student Relations, Office of the Registrar, 150 Williamson Hall, or fill out a request form in person at the Certifications Unit, 155 Williamson Hall (the complete address is given below). Credits will be transferred only if you are enrolled in a University degree program and have a day school record.

To obtain a copy of your official transcript (certified and embossed with the University's seal) or to have it sent to another institution, submit a written request, along with a check or money order for each copy (payable to the University of Minnesota). The charge is \$2 a copy for regular service; \$6 a copy for rush service. Processing time for regular service is 2-3 work days; after processing, your copies will be mailed to the places you have specified. Rush service guarantees your transcript will be issued to you in person or mailed to a specific address on the same day it is requested. You must have a picture ID (student ID or driver's license) to receive over-the-counter rush service. Official transcripts can be requested by mail from or dropped off in person at:

Office of the Registrar
Certifications Unit
155 Williamson Hall
231 Pillsbury Drive SE
University of Minnesota
Minneapolis, Minnesota 55455

You cannot telephone and ask for a copy of your official transcript. When you submit a request in writing, include your full name, student ID number, name of the college you are enrolled in, last quarter and year in attendance, and the complete address where you want the transcript sent (including zip code). If you want a transcript with your grade on it, do not request a transcript until you have received your Independent Study grade slip.

You may pick up an unofficial copy of your record by presenting your student ID at the quick-service window in 155 Williamson Hall (8:00 a.m. to 6:30 p.m., Monday; 8 a.m. to 4 p.m., Tuesday through Friday). There is no charge for the quick-service; there is, however, a limit of one copy per day.

Access to Student Educational Records

In accordance with regents' policy on access to student records, information about you generally may not be released to a third party without your permission. The policy also permits you to review your educational records and to challenge the contents of those records.

Some student information—name, address, telephone number, dates of enrollment and enrollment termination, college and class, major, adviser, academic awards and honors received, and degrees earned—is considered public or direc-

General Information

tory information. To prevent release of such information outside the University while in attendance at the University, you must notify the records office on your campus.

The regents' policy, including a directory of student records, is available for review at Williamson Hall, Information Center, Minneapolis campus, 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.

Transferring to Another Course

You may transfer from one Extension Independent Study course to another providing you do so within three months from the date of registration and prior to completing half of the lessons in the course. Transfers are **not** permitted for Home VCR courses. The transfer fee is \$10, plus the cost of the study guide for the old course and \$6.00 for each lesson evaluated. The original tuition is applied to the tuition for the new course. For students who enrolled under the partial payment plan, the remaining payments must be paid at the time of transfer to the second course. The second course must be completed within one year from the original registration date unless the enrollment is reinstated (see Tuition, Reinstatement). When a transfer is recommended by the Department of Independent Study, you are charged only for lessons evaluated by the instructor.

Transfers are allowed only once per registration and cannot be made from one individual to another.

Tuition

Tuition for Independent Study courses is \$44.25 per credit for 0000 and 1000 level courses. The tuition for 3000 and 5000 level courses varies by school. The tuition for each course is listed with the course description. Books and materials are not included in the tuition and must be purchased separately (see Textbooks and Supplies). Checks or money orders should be made payable to the University of Minnesota. You must register for Independent Study courses directly with the Department of Independent Study; Independent Study has no commercial agents in this country or abroad. You must pay all fees in American currency.

Students registering for graduate credit (see University Degree Programs section, Graduate School) pay Independent Study tuition rates. However, when credits are transferred to a student's Graduate School record, that student will be charged the difference—if any—between Independent Study and Graduate School tuition for credits accepted on his/her program. The tuition difference charged will be the difference between the tuition rates in effect at the time the course is transferred.

General Information

Returned Check—If your tuition check is returned because of insufficient funds or a stop payment request:

1. your registration in the course will be cancelled, and
2. a hold will be placed on your record until you pay:
 - a. a \$15 check handling fee,
 - b. the \$20 course cancellation fee,
 - c. the cost of the study guide,
 - d. \$6.00 for each lesson evaluated,
 - e. the \$5.00 partial payment fee (if applicable)

Tuition and fees are subject to change without notice, and also subject to approval by the Board of Regents.

Partial Payment Plan

The Department of Independent Study offers a partial payment plan for those who cannot pay full tuition at the time of registration. This plan does not apply to television, radio, or Home VCR courses or to tuition paid for by credit card. Texts and materials ordered through the Department of Independent Study must be paid in full at the time of purchase.

Under this plan, one-third of the total tuition, plus a service charge of \$5 per course, is paid at the time of registration. The remaining two-thirds is payable in two equal monthly payments due 30 and 60 days after the date of registration.

Sample payment schedule (including \$5 service charge) for a 1000-level course is given below.

Tuition	1st pmt	2nd pmt	3rd pmt
	(at registration)	(30 days)	(60 days)
\$132.75 (3 cr @ \$44.25/cr)	\$49.25	\$44.25	\$44.25
\$177 (4 cr @ \$44.25/cr)	\$64	\$59	\$59
\$221.25 (5 cr @ \$44.25/cr)	\$78.75	\$73.75	\$73.75

Lessons will be accepted only through that third of the course for which tuition has been paid. For example, a student enrolled in a 12-lesson course will not receive instruction beyond lesson four if he/she has made only the first payment.

Registration will be cancelled if total tuition has not been paid within 90 days of the original registration date unless special permission has been obtained from the Associate Administrator of the Department of Independent Study. Once registration has been cancelled, you may continue a course only by reenrolling.

Students wishing to use the partial payment plan should fill in the appropriate space on the regular registration form and send it, along with the service charge, the first payment, and any other special fees, to the Department of Independent Study.

General Information

Refunds

Correspondence—If you want to cancel your course registration, part of your tuition can be refunded if you cancel within three months of the date of registration and before you complete half the lessons in the course. A \$20 cancellation fee plus the cost of the study guide and \$6.00 for each lesson evaluated are nonrefundable. For students who use the partial payment plan, the \$5.00 service charge is nonrefundable.

Media-Assisted—The refund policy for media-assisted courses is slightly different. A \$20 cancellation fee is withheld for withdrawal before the first broadcast. A refund of 75 percent of tuition is granted if the request is postmarked or submitted in person through the second week of the course; a 50 percent tuition refund is granted if requested through the fourth week of the course. No refunds will be made beyond that date. The cost of the study guide and late fees are not refundable.

Reinstatements

You have one year from the date of registration to complete most courses. In most cases, if you cannot complete the course in that year, you may extend your enrollment for **one** additional year with a reinstatement fee of \$25. Sometimes, however, reinstatements are **not** possible because of a change of instructor, changes in course requirements, changes in course texts, etc. Reinstatements should be requested before enrollment expires, and the reinstatement fee must be paid before additional lessons can be submitted. This policy does **not** apply to Home VCR courses, which must be completed within six months of registration.

University Without Walls and Inter-college Program

See Degree Programs, University College

Video Cassette Courses

See the blue section

Withdrawals

See Tuition, Refunds

Students who wish to withdraw from a course after three months from the date of registration may do so by simply not submitting lessons for evaluation. No grade is recorded unless all work for the course is completed. If you officially cancel a course **within two weeks** of the date of registration, that course will not appear on a transcript. If you formally cancel a course after two weeks, a grade of W (withdrawal) is recorded.

Extension Certificate Programs

Degree and certificate programs **may change or be discontinued**. The University will make every reasonable effort to assist admitted students in completing a program.

Some certificate programs are regarded by business and industry as valuable professional and technical preparation for employment and promotion. Students whose career plans require college training, but who cannot devote the time necessary to earn a degree, may want to consider a certificate program. Students are encouraged to consult with employers regarding the usefulness of the certificate in seeking new employment or possible promotional opportunities. With careful planning, some certificates can be a stepping-stone to a degree program. Work on most certificates may be done through a combination of Extension Independent Study, Extension Classes, day school, or summer session.

Continuing Education and Extension offers over 20 certificate programs consisting of degree-credit courses or a combination of degree and certificate-credit courses. Students entering these programs should have adequate educational preparation or other experience that qualifies them to work with college-level material. The certificate-credit courses represent an accelerated and specialized approach to subject matter. They are not, however, usually transferable to a degree program.

Students may transfer credits from other accredited institutions, although a minimum of 25 percent of the credits required for any certificate must be earned through the University of Minnesota. The residency requirement cannot be met by repeating courses at the University of Minnesota that have already been successfully completed at another institution. Courses need not be taken in order except as prerequisites make it necessary.

Certificate requirements are subject to modification. There is no time limit on the use of credits. Students may not be enrolled in more than three certificates at one time.

Students interested in taking courses toward certificate programs on the S-N grading system should first consult an Extension counselor.

Application—Students can obtain a copy of "Procedures for Obtaining a Continuing Education and Extension Certificate" with an application form by contacting the Extension Counseling Department, 625-2500, 314 Nolte Center. A non-refundable \$15 application fee will be required with all applications. Students are urged to consult with an adviser early in their programs, before completing an application for admission, regarding application time, admissibility to a certificate

Certificate Programs

program, residency requirements, and specific admission information for each certificate.

Admission criteria vary among certificate programs. Admission decisions are based on previous college performance (usually better than a C average is required), educational objectives, and patterns of coursework completed. Students will be notified of admission status by mail approximately three weeks after all transcripts and application materials are received.

Completion—A student nearing completion of the required work and expecting to receive a certificate, must file a Certificate Completion form when registering for his/her last course. A \$16 nonrefundable certificate fee is required at the time the Certificate Completion form is filed. Upon completion of a specified program with at least a C (2.0) overall grade average (including a 2.00 grade point average in University of Minnesota coursework), the student is awarded a certificate. Certificates are awarded by Continuing Education and Extension, not by individual colleges of the University of Minnesota. All certificates are dated and awarded as of each quarter of the academic year.

All Extension certificates may be earned with honors. A student earning a 3.00 to 3.49 grade point average, in University of Minnesota credits within the certificate, will be awarded a certificate "with distinction." A student earning a 3.50 grade point average, or better, in University of Minnesota credits within the certificate will be awarded a certificate "with high distinction." At least 60 percent of the requirements for a certificate with honors must be earned at the University of Minnesota and must be taken on the A-F grading system. Colleges at the University retain the right to determine honors requirements for a degree; earning a certificate with honors does not automatically gain a student entry into a college's honors program.

For information about certificate programs, including transfer of credits, contact the Extension Counseling Office, 314 Nolte Center, 315 Pillsbury Drive SE, University of Minnesota, Minneapolis, MN 55455.

Courses or course sequences now or soon to be available through Extension Independent Study are followed by an asterisk (*).

Extension Certificates—Group I

Group I certificates can be earned entirely through Independent Study.

General Studies Certificate (45 credits)

The General Studies Certificate will be **discontinued as of II summer session, 1991**. Students who wish to complete this certificate must complete all required coursework and file a formal application for completion **by that time**.

Certificate Programs

The General Studies Certificate program is designed to recognize students' achievement after the completion of one year of college coursework. There are no required courses in the program, but students are encouraged to take at least two courses from each of the general education curriculum areas of the General College—natural sciences, social sciences, humanities, and communications. Of the 45 credits required, a minimum of 30 credits must be earned through General College courses. (A list of General College courses offered through Extension Independent Study is found in the Course Descriptions section.) Also, a minimum of **75 percent** of all coursework (34 credits) must be taken on the A-F grading system.

Students wishing to pursue a human services emphasis within the General Studies Certificate should contact an Extension counselor.

All credits in this program, if carefully planned, will be accepted toward the Associate in Arts degree from General College. However, students should be aware that the AA degree will **not** be awarded after September 15, 1991. For AA degree requirements, see University Degree Programs section, General College.

Liberal Arts Certificate (45 credits)

The Liberal Arts Certificate program offers students an introduction to a liberal arts education and is equivalent to one year of University study. The certificate can constitute the freshman year of a degree program in liberal arts or business, if carefully planned. A minimum of **50 percent** of all coursework (23 credits) must be taken on the A-F grading system.

Students transferring credits to this program from other accredited institutions must take a minimum of 12 credits at the University.

English Requirement (5-8 credits)

Comp 1011—Writing Practice I* or Comp 1001-1002—Introductory Composition

Core Requirement (32 credits) Eight credits in each of the following groups:

Group A—Language, Logic, Mathematics, and the Study of Argument

Group B—Physical and Biological Universe

Group C—Individual and Society

Group D—Literary and Artistic Expression

Electives: Additional liberal arts courses are required for a total of 45 credits for the certificate. Before taking courses applicable to this certificate, students should obtain a copy of CLA courses offered through Continuing Education and Extension that meet the Group Distribution Requirements. Contact the Extension Counseling Department, 314 Nolte Center, 315 Pillsbury Dr. SE, Minneapolis, MN 55455; telephone (612) 625-2500.

Certificate Programs

Mathematics and Science Certificate (45 credits)

The Mathematics and Science Certificate provides students with the fundamentals of mathematics and science, and is the equivalent of one year of University study. The credits earned in this certificate program can be used toward a degree in either the College of Liberal Arts or the Institute of Technology (depending on the choice of electives).

A minimum of **50 percent** of all coursework (23 credits) must be taken on the A-F grading system. Students transferring credits to this program from other accredited institutions must take a minimum of 12 credits at the University.

Prerequisite: Two years of algebra and two years of geometry, including trigonometry

Core Requirement (25-28 credits)

Comp 1011—Writing Practice I* or Comp 1001-1002—Introductory Composition
Math 1211—Analysis I*

Math 1221—Analysis II*
Math 1231—Analysis III*
Math 3211—Analysis IV*

Electives: Additional credits for a total of 45 credits, selected from the following areas

Aerospace Engineering and Mechanics
Astronomy
Biology
Botany
Chemistry

Ecology
Engineering
Geology
Microbiology
Physics

Virginia Woolf (1882-1941) English novelist who had an innovative influence on the 20th century novel. Her writing concentrated on the stream of consciousness technique. **To The Lighthouse, The Waves, A Room of One's Own.**



Extension Certificates—Group II

Group II certificates can be partially completed through Independent Study, but require additional credits from day school, Extension classes, or transferred credits.

Undergraduate Development Certificates in Accounting

The accounting certificates can be of value to individuals in junior accounting po-

Certificate Programs

sitions in industry, to management personnel who are required to deal with common finance and accounting data, and to business people who wish to have a basic understanding of the elementary principles of accounting and corporation finance. The Level II certificate provides a background for additional study in preparation for the Certified Public Accountant and Certified Management Accountant examinations. In most cases, students who work toward the certificate have already completed a bachelor's degree. Students who do not have a bachelor's degree should consider the accounting program in the Bachelor of Science in Business degree as a preferable alternative.

Admission to Undergraduate Development Certificates in Accounting—To be considered for admission, students must have completed the equivalent of a minimum of 90 quarter college credits with a minimum of a B – grade average. Students who have completed a bachelor's degree will be individually reviewed, with particular emphasis on coursework in their junior and senior years.

Note—Upper division management courses (i.e., 3000 or 5000 level) in CEE are taught with the expectation that, in addition to having completed all pre-management coursework, students either will have earned a B – grade average in 90 credits of college level work or will have already completed a bachelor's degree.

Level I (61-64 credits)

Students transferring credits to this program from other accredited institutions must take a minimum of 16 credits in accounting at the University.

Core Requirements

Comp 1011—Writing Practice I* or Comp 1001-1002—Introductory Composition
Comp 1027—Intermediate Expository Writing
Econ 1101, 1102—Principles of Microeconomics and Macroeconomics*
Acct 1024-1025—Principles of Financial Accounting I-II*
Acct 3001—Managerial Accounting
Acct 3101-3102—Accounting Theory and Practice I-II
Acct 3201—Cost Accounting

Math 1111—College Algebra and Analytic Geometry*
Math 1142—Short Calculus* or Math 1211—Analysis I*
MIS 1010—Fundamentals of Computers and Information Technology in Organizations and MSci 1020—Data Analysis and Statistical Inference for Managers**
MSci 3030—Information Systems and Information Management**

**Students who eventually plan to pursue a degree through the Carlson School of Management or who have already taken DSci 1050 or MIS 3100 should consult an Extension counselor regarding this requirement.

Level II (89-92 credits)

Students transferring credits to this program from other accredited institutions must take a minimum of 24 credits in accounting at the University.

Core Requirements (77-80 credits)

Comp 1011—Writing Practice I* or Comp 1001-1002—Introductory Composition

Econ 1101, 1102—Principles of Microeconomics and Macroeconomics*

Certificate Programs

Comp 1027—Intermediate Expository Writing
Math 1111—College Algebra and Analytic Geometry*

Math 1142—Short Calculus* or Math 1211—Analysis I*

MSci 1010—Fundamentals of Computers and Information Technology in Organizations and
MSci 1020—Data Analysis and Statistical Inference for Managers**

IR 3002—Labor Markets and the Management of Human Resources*

Acct 1024-1025—Principles of Financial Accounting I-II*

Acct 3001—Managerial Accounting

Acct 3101-3102—Accounting Theory and Practice I-II

Acct 3201—Cost Accounting
12 credits of accounting electives

MSci 3030—Information Systems and Information Management**

**Students who eventually plan to pursue a degree through the Carlson School of Management or who have already taken DSci 1050 or MIS 3100 should consult an Extension counselor regarding this requirement.

Electives (12 credits)

BFin 3000—Finance Fundamentals*

BGS 3004—International Business*

BLaw 3058—Business Law: Contracts*

Ins 3100—Risk Management and Insurance*

LM 3000—Introduction to Logistics Management

Mktg 3000—Principles of Marketing*

Econ 3105—Managerial Economics

Mgmt 3001—Fundamentals of Management

Mgmt 3004—Business Policy: Strategy Formulation and Implementation

OM 3000—Introduction to Operations Management

BGS 3002—Business and Society

Undergraduate Development Certificates in Business Administration

The Undergraduate Development Certificates in Business Administration have been approved by the Carlson School of Management and arranged under the supervision of its faculty. They present integrated, high-quality, university-level programs of shorter length and scope than four-year degree programs. They are designed for students who need an understanding of the principles and theories of business administration, and for those who want training or an opportunity for advancement in some specific field of business.

Students admitted to Undergraduate Development Certificates in Business Administration are usually working toward a Bachelor of Science in Business degree or have already completed a bachelor's degree in another area. It is possible for a student to move from a course of study for a certificate into a planned program leading to a Bachelor of Science in Business degree. Anyone who contemplates such a long-range objective should consult an Extension adviser before proceeding further so as to avoid any loss of credits or possible future rejection from the degree program.

Admission to Undergraduate Development Certificates in Business Administration—To be considered for admission, students must have completed the equivalent of a minimum of 90 quarter college credits with a minimum of a B—grade average. Students who have completed a bachelor's degree will be individually reviewed, with particular emphasis on coursework in their junior and senior years.

Certificate Programs

Note—Upper division management courses (i.e., 3000 or 5000 level) in CEE are taught with the expectation that, in addition to having completed all pre-management coursework, students either will have earned a B – grade average in 90 credits of college level work or will have already completed a bachelor's degree.

Level I Business Administration Certificate (49-52 credits)

This certificate represents the equivalent of one academic year of study in business. It offers a background in the basic fields of business administration. All the credits received in completing the Level I Certificate are credited toward a Level II Certificate and represent half of its required work load.

All courses must be taken on the A-F grading system. Students transferring credits from other accredited institutions to this program must take a minimum of 12 credits in business courses from the Core Requirement at the University.

Pre-management Requirement (37-40 credits)

Comp 1011—Writing Practice I* or Comp 1001-1002—Introductory Composition
Econ 1101, 1102—Principles of Microeconomics and Macroeconomics*
Acct 1024-1025—Principles of Financial Accounting I-II*
Math 1111—College Algebra and Analytic Geometry*

MSci 1010—Fundamentals of Computers and Information Technology in Organizations and MSci 1020—Data Analysis and Statistical Inference for Managers**
Psy 1001—General Psychology*

**Students who eventually plan to pursue a degree through the Carlson School of Management or who have already taken DSci 1050 should consult an Extension counselor regarding this requirement.

Core Requirement (12 credits) At least three courses selected from the following to total 12 credits

Acct 3001—Managerial Accounting
BLaw 3058—Business Law: Contracts*
IR 3002—Labor Markets and the Management of Human Resources*
Ins 3100—Risk Management and Insurance*
Mgmt 3004—Business Policy: Strategy Formulation and Implementation
Econ 3105—Managerial Economics
BGS 3002—Business and Society
BGS 3004—International Business*
MIS 1077—Elementary FORTRAN

MSci 3030—Information Systems and Information Management
Mgmt 3001—Fundamentals of Management
Math 1142—Short Calculus* or Math 1211—Analysis I*
LM 3000—Introduction to Logistics Management
BFin 0001C—Introduction to Investments
BFin 3000—Finance Fundamentals*
Mktg 3000—Principles of Marketing*

Level II Business Administration Certificate (90 credits)

The Level II Business Administration Certificate is a continuation of the Level I Certificate. The completion of the certificate approximates the second and third years of a four-year degree program, with emphasis on the basic principles and theories of business administration.

Students who are contemplating continuing toward a degree from the Carlson School of Management should consult an Extension adviser **before** they begin working toward the Level II Business Administration Certificate.

Only nonbusiness electives may be taken on the S-N grading system. Students

Certificate Programs

transferring credits to this program from other accredited institutions must take a minimum of 24 credits in business courses (not including the pre-management requirement) at the University.

Pre-management Requirement (42-45 credits)

Comp 1011—Writing Practice I* or Comp 1001-1002—Introductory Composition

Econ 1101, 1102—Principles of Microeconomics and Macroeconomics*

Acct 1024-1025—Principles of Financial Accounting I-II*

Math 1111—College Algebra and Analytic Geometry*

Math 1142—Short Calculus* or Math 1211—Analysis I*

MSci 1010—Fundamentals of Computers and Information Technology in Organizations and MSci 1020—Data Analysis and Statistical Inference for Managers**

Psy 1001—General Psychology**

**Students who eventually plan to pursue a degree through the Carlson School of Management or who have already taken DSci 1050 should consult an Extension counselor regarding this requirement.

Core Requirement (24 credits) At least six courses selected from the following to total 24 credits

Acct 3001—Managerial Accounting
IR 3002—Labor Markets and the Management of Human Resources*

Ins 3100—Risk Management and Insurance*

LM 3000—Introduction to Logistics

BGS 3002—Business and Society

BGS 3004—International Business*

BFin 0001C—Introduction to Investments

BFin 3000—Finance Fundamentals*

BLaw 3058—Business Law: Contracts*

Econ 3015—Managerial Economics

Mktg 3000—Principles of Marketing*

MIS 1077—Elementary FORTRAN

Mgmt 3001—Fundamentals of Management

Mgmt 3004—Business Policy: Strategy Formulation and Implementation

MSci 3030—Information Systems and Information Management

OM 3000—Introduction to Operations Management

Electives in the Carlson School of Management: At least 16 additional credits in business administration. These should be selected in consultation with an Extension Counselor.

Other Electives: Satisfactory completion of pre-management degree requirements in Physical and Biological Sciences, Individual and Society, or Literary and Artistic Expression, for a total of 90 credits.

Note: Students considering a degree from the Carlson School of Management should choose electives that could become part of the degree program. Such students should contact the Department of Independent Study for a list of the pre-management courses offered through Independent Study that meet the requirements of the Carlson School of Management and should also contact the Extension Counseling Office early in their program.

Credit and Financial Management Certificate (66-67 credits)

The Credit and Financial Management Certificate program was developed cooperatively by Continuing Education and Extension, the Carlson School of Management, and the National Association of Credit Management. The program prepares students for careers in trade credit management, loan management, and financial management.

All courses must be taken on the A-F grading system, with the exception of Composition and Speech, which may be taken on the S-N grading system. Students transferring credits to this program from other accredited institutions must take a minimum of 16 credits at the University.

Certificate Programs

Admission to the Credit and Financial Management Certificate—To be considered for admission, students must have completed the equivalent of a minimum of 90 quarter college credits with a minimum of a B – grade average. Students who have completed a bachelor's degree will be individually reviewed, with particular emphasis on coursework in their junior and senior years.

Completion of the certificate qualifies students for the Associate and Fellow Awards of the National Institute of Credit. Persons interested in these awards should contact Lois M. Bell, City Place Building, Suite 600, 730 Hennepin Ave., Minneapolis, MN 55403; telephone (612) 341-9615.

Note—Upper division management courses (i.e., 3000 or 5000 level) in CEE are taught with the expectation that, in addition to having completed all pre-management coursework, students either will have earned a B – grade average in 90 credits of college level work or will have already completed a bachelor's degree.

For more information about working toward this certificate, contact Extension Counseling.

Core Requirement (58 credits)

Acct 1024-1025—Principles of Financial Accounting I-II*
Acct 3001—Managerial Accounting
Acct 3160—Analysis of Financial Statements
BFin 0002C—Credit and Financial Management Problems**
BLaw 3058-3078, 3088—Business Law*
Econ 1101, 1102—Principles of Microeconomics and Macroeconomics*

IR 0001C—Supervision I*
Mgmt 3002—Psychology in Management
Mktg 3000—Principles of Marketing*
GC 1548—Credits and Collections
Comp 0004C—Business Correspondence, or GC 1531—Business Writing*
Spch 0001C—Beginning Speech: Communication

Electives (8 credits)

Acct 3102—Accounting Theory and Practice I
Acct 3201—Cost Accounting
BFin 0001C—Introduction to Investments
BFin 3000—Finance Fundamentals*
BFin 3100—Financial Management

Econ 3701/5721—Money and Banking*
Ins 3100—Risk Management and Insurance*
Mgmt 3001—Fundamentals of Management
LM 3000—Introduction to Logistics Management
Comp 0003C—Review of Business English

**BFin 0002C is offered on a limited basis through Extension Classes. Students are urged to complete this course early in their program.

Industrial Relations Certificate (45 credits)

The Industrial Relations Certificate was developed by the Industrial Relations Center of the Carlson School of Management. It provides technical training in industrial relations and in the use of specialist techniques. Advanced professional training in industrial relations is available only through the day and evening M.A. program and the Ph.D. program.

Students may use S-N grading for Psy 3801 and nonbusiness electives, up to a **maximum of 12 credits** toward the certificate. Students transferring credits to this

Certificate Programs

program from other accredited institutions must take a minimum of 12 credits in Industrial Relations at the University.

Note—Upper division management courses (i.e., 3000 or 5000 level) in CEE are taught with the expectation that, in addition to having completed all pre-management coursework, students either will have earned a B – grade average in 90 credits of college level work or will have already completed a bachelor's degree. Courses at the 3000-level are primarily for juniors and seniors. Courses at the 5000-level are primarily for juniors, seniors, and graduate students.

Core Requirement (33 credits)

Econ 1101, 1102—Principles of Microeconomics and Macroeconomics*
IR 3002—Labor Markets and the Management of Human Resources*
IR 3007—Collective Bargaining and Labor Relations*

IR 3010—The Individual and the Organization
Psy 1001—General Psychology*
Psy 3801—Introduction to Statistical Methods
Soc 1001—Introduction to Sociology*

Electives (12 credits)

Econ 3501 or 5531—Labor Economics
Econ 5541—Contemporary Labor Issues
Econ 5534—Economics Security*
Econ 5537—Labor Market Behavior and Regulations*
Econ 5561—Wages and Employment
IR 0001C—Supervision I*
IR 3012—Systems of Industrial Relations: Human Resource Management*
IR 3000—Topics in Industrial Relations
MIS 3101—Introduction to Management Information Systems
Mgmt 3002—Psychology in Management
DSci 3055—Introduction to Management Science

Psy 3124—Psychology of Individual Differences
Psy 3201—Introduction to Social Psychology
Psy 5045—Psychology of Motivation
Psy 3011—Introduction to Psychology of Learning
Psy 5501—Vocational Psychology
Psy 5701—Personnel and Industrial Psychology
Psy 5703—Psychology of Organizational Training and Development
Soc 5201—Introduction to Social Psychology*
Soc 5411—Formal Organizations

Management of Administrative Services Certificates

The Management of Administrative Services Certificate programs have been developed by Continuing Education and Extension with the Carlson School of Management and the Administrative Management Society.

These college-level certificate programs provide management training. Their purpose is to assist employees to become more competent in their present positions and improve their opportunity for advancement.

Admission to the Management of Administrative Services Certificate—To be considered for admission, students must have completed the equivalent of a minimum of 90 quarter college credits with a minimum of a B – grade average. Students who have completed a bachelor's degree will be individually reviewed, with particular emphasis on coursework in their junior and senior years.

Note—Upper division management courses (i.e., 3000 or 5000 level) in CEE are taught with the expectation that, in addition to having completed all pre-manage-

Certificate Programs

ment coursework, students either will have earned a B – grade average in 90 credits of college level work or will have already completed a bachelor's degree.

Associate in Management of Administrative Services Certificate (54 credits)

Students transferring credits to this program from other accredited institutions must take a minimum of 12 credits in business courses at the University.

Core Requirement (43-47 credits)

Comp 1011—Writing Practice I*, or GC 1531—Business Writing*, or Comp 0003C—Review of Business English

Econ 1101, 1102—Principles of Microeconomics and Macroeconomics*

Math 1111—College Algebra and Analytic Geometry*

Math 1131—Finite Mathematics

MIS 1075—Elementary COBOL, or MIS 1077—Elementary FORTRAN

Acct 1024-1025—Principles of Financial Accounting I-II*

Acct 3001—Managerial Accounting

BLaw 3058—Business Law: Contracts*

Psy 1001—General Psychology*

DSci 1050—Elementary Managerial Statistics or MSci 1010-1020—Fundamentals of Computers and Technology in Organizations; Data Analysis and Statistical Inference for Managers

Electives: An additional course selected from the Requirements or Electives for the Fellow Certificate (below) for a total of 54 credits.

Fellow in Management of Administrative Services Certificate (90 credits)

Students transferring credits to this program from other accredited institutions must take a minimum of 24 credits in business courses at the University.

Core Requirement (43-47 credits)

Comp 1011—Writing Practice I*, or Comp 0003C—Review of Business English and GC 1531—Business Writing*, or Comp 1001-1002—Introductory Composition

Math 1131—Finite Mathematics

MIS 1075—Elementary COBOL, or MIS 1077—Elementary FORTRAN

Psy 1001—General Psychology*

Hans Christian Andersen (1805-1875) Danish writer of fairy tales, whose writing contains a great sense of fantasy, powerful descriptions, and acute sensitivity. "The Ugly Duckling," "The Red Shoes," "The Little Match Girl," "The Emperor's New Clothes."



Certificate Programs

Econ 1101, 1102—Principles of Microeconomics and Macroeconomics*
Acct 1024-1025—Principles of Financial Accounting I-II*
Acct 3001—Managerial Accounting
BLaw 3058—Business Law: Contracts*
Math 1111—College Algebra and Analytic Geometry*

DSci 1050—Elementary Managerial Statistics or MSci 1010-1020—Fundamentals of Computers and Technology in Organizations; Data Analysis and Statistical Inference for Managers

Group Requirements (36 credits)

Group I: At least four courses from the following (16 credits)

IR 3002—Labor Markets and the Management of Human Resources*
Mgmt 3002—Psychology in Management
BFin 0001C—Introduction to Investments

BFin 3000—Finance Fundamentals*
Ins 3100—Risk Management and Insurance*
Mktg 3000—Principles of Marketing*

Group II: At least five courses from the following (20 credits)

BFin 3100—Financial Management
LM 3000—Introduction to Logistics Management
Acct 3001—Managerial Accounting
Acct 3255—Managerial Costs, or Acct 3201—Cost Accounting
Acct 3160—Analysis of Financial Statements

IR 3010—Human Relations and Applied Organization Theory
IR 3012—Systems of Industrial Relations: Human Resource Management*
Mgmt 3001—Fundamentals of Management
BLaw 3088—Business Law*

Electives: Additional credits from the following courses or areas for a total of 90 credits

IR 0001C-0002C—Supervision I*-II
Psy 5751—Psychology of Advertising*
Accounting
Economics
Finance
Production
Management
Industrial Relations

Insurance
Marketing
Real Estate
Logistics Management
English
Humanities
Social Science
Speech

Undergraduate Development Certificate (UDC) Series

Developed with the Institute of Technology, the UDC Series provides a plan for continuing education in particular disciplines and recognizes completion of an educational program indicative of increasing levels of technical capability. With departmental approval, degree-credit courses offered in certificate programs may be applied toward a subsequent baccalaureate degree. This requires early contact with the academic department and application for admission to the Institute of Technology.

The UDC in Engineering and Science—45 Credits (described below) is the initial required program in the UDC Series. It indicates familiarity with basic science and engineering topics and is equivalent to the first year of college study. After completing the UDC in Engineering and Science—45 Credits, students can continue in particular disciplines through the UDC—90 Credits or the UDC—135 Credits. (The UDC—135 Credits is only available in Electrical Engineering.)

Certificate Programs

Students interested in a listing of the Undergraduate Development Certificates or in additional information concerning them, should contact the Extension Counseling Office.

Undergraduate Development Certificate in Engineering and Science—45 Credits

The UDC in Engineering and Science—45 Credits provides students with the fundamentals of mathematics, physics, and broad technical communications skills that enable them to handle support assignments in any engineering field. In addition, it gives them background for more specialized or advanced study either as an engineer or engineering technician. All courses in the UDC in Engineering and Science—45 Credits carry degree credit and are applicable to a baccalaureate degree.

Students transferring credits to this program from other accredited institutions must take a minimum of 12 credits from the Core Requirements at the University.

Prerequisite: High school graduate or equivalent; 2 years of algebra and 2 years of geometry, including trigonometry.

Core Requirements (34-37 credits)

Math 1211—Analysis I*

Math 1221—Analysis II*

Math 1231—Analysis III*

ME 1025—Engineering Graphics*, or CSci 3101—A Fortran Introduction to Computer Programming* or CSci 3104—Introduction to Programming and Problem Solving

Phys 1271*-1275-1281*-1285—General Physics and Lab

Comp 1011—Writing Practice I* or Comp 1001-1002—Introductory Composition

Electives: Courses from nontechnical electives for a total of 45 credits. Nontechnical electives may be chosen from the following fields: anthropology, biological sciences, botany, classics, economics, geography, history, humanities, languages (except scientific language courses), literature, music theory, philosophy, political science, psychology, religion, social science, sociology, speech, zoology, and others. (See the current bulletin of the Institute of Technology.)

University Degree Programs

Through Extension Independent Study, it is possible to earn credits that can be used in a variety of degree programs at the University. **There are limitations, however, on the use of Independent Study credits in degree programs in certain departments or individual schools.** If you wish to apply credits earned through Independent Study to a University degree program, you are urged to consult an academic advisor or your college office before enrolling.

It is important to plan coursework and to follow University procedures when working on a degree. If you have never been admitted to the University but wish to work toward a University degree, you should contact the Extension Counseling Office early in your planning. It is also essential to read the official bulletin of the college to which you wish to be admitted. College bulletins can be obtained by writing the Bulletin Room, 110 Williamson Hall, 231 Pillsbury Dr. SE, University of Minnesota, Minneapolis, MN 55455.

College of Education

1425 University Ave. SE

Because of the variety of programs offered in the College of Education, it is not possible to present a specific curriculum or to indicate appropriate Extension Independent Study courses.

Students can use the two-year program listed under the College of Liberal Arts as a guide in completing many of the preprofessional requirements of the College of Education. Some Extension Independent Study courses in education are acceptable in College of Education programs. For more information, write to the College of Education, 1425 University Ave. SE, Minneapolis, MN 55414.

Teacher's Certificate

Most Independent Study courses can be used in the acquisition and renewal of teachers' certificates. However, the Department of Independent Study **does not evaluate teaching or education experience for a certificate or recommend courses.**

Questions concerning teacher certification should be directed to the State Department of Education or a similar agency (in Minnesota—Director of Certification and Placement, Capitol Square Building, 550 Cedar St., St. Paul, MN 55101, (612) 296-2046).

General College

10 Nicholson Hall, Minneapolis campus

In January 1986, the Regents of the University of Minnesota voted to discontinue the awarding of 2-year degrees at all University campuses except Crookston and Waseca. The General College will continue to offer the Associate in Arts degree for students who have been formally admitted to the General College, but such students **must** have completed all requirements for the degree by **September 15, 1991**. By Regents' action also, certificate programs at the University are to be reduced and many phased out altogether.

For students admitted to the General College who intend to work toward an associate's degree, the following guidelines continue to be in force.

Associate in Arts Degree (A.A.)

In the belief that an Associate in Arts (A.A.) degree should give students the basic tools, general knowledge, desire, and confidence to continue learning, prepare for a career, and behave responsibly in society, the faculty of the General College, in June 1981, adopted recommendations made by the curriculum committee for a new definition of the degree. Beginning in fall 1983, students admitted to the General College who plan to complete an A.A. degree must fulfill these requirements, designed to enable them to attain three outcomes:

Outcome I: Reading, Writing, Mathematics, and Research Skills. Competence may be demonstrated by any of the following: satisfactory achievement on diagnostic examinations; completion of General College courses emphasizing these skills, with a grade of C6 or better; completion of certain degree credit courses demonstrating minimum proficiency in these skills, with a grade of C6 or better.

Outcome II: Liberal Education. At least 60 of the 90 credits required for an A.A. degree must be distributed throughout the liberal arts and sciences as defined by the Council on Liberal Education (CLE). Some of these credits may also be used to fulfill requirements for Outcomes I and III. Broad understanding and general knowledge of the liberal arts and sciences and their integrative nature, unique language and structure, and unifying principles and concepts may be demonstrated by the following: completion of at least 8 credits with a grade of C6 or better in each of the four CLE groups, with at least 15 credits in General College courses, and/or completion of two quarters of interdisciplinary studies courses (e.g., *Toward a Good Life*, *Conflict Resolution*), which are designed to introduce students to the broad, integrative nature of knowledge, with a grade of C6 or better.

Outcome III: Knowledge Use and Application. The ability to use information and apply principles, techniques, and skills in actual or simulated experiences or processes may be demonstrated by satisfactory completion of a total of 10 credits, drawn from a variety of experiences in the following areas: internships (community service, co-op education, or counseling); career/personal/educational exploration and development courses; specialty courses in postsecondary certificate programs; courses that emphasize applying or acquiring knowledge by engaging a student in actual or simulated experiences or processes; major projects demon-

Degree Programs

strating practical application of concepts or problem-solving documented by a student and an instructor in a relevant field; and/or documented, assessed prior life experience, such as experiential learning and training, or other life activity (direct involvement in community agencies, businesses, civic endeavors) accepted by the General College.

Ruth Benedict (1887-1948) American anthropologist whose field work among American Indians and studies of contemporary European and Asian cultures led her to stress the role of culture in personality formation. **Patterns of Culture, Race, The Chrysanthemum and the Sword.**



Bachelor of Applied Studies (B.A.S.)

Bachelor of General Studies (B.G.S.)

In January 1986, the Regents of the University of Minnesota voted to discontinue baccalaureate degree programs in the General College, effective at the end of the second summer session, 1991. In accordance with that action, students are no longer being accepted into either the Bachelor of Applied studies (B.A.S.) or the Bachelor of General Studies (B.G.S.) programs.

Students admitted to the General College by fall, 1985, who have been accepted into the B.A.S. or B.G.S. program and who are currently pursuing studies toward those degrees, must complete all program requirements for their degrees by the end of second summer session, 1991.

Independent Study courses do apply toward the B.A.S. or the B.G.S. degrees; however, because of the limited number of courses offered at this time, **it is not possible to earn a B.A.S. or B.G.S. degree entirely through Independent Study.**

Graduate School

316 Johnston Hall, Minneapolis campus

Credits earned through most Department of Independent Study courses are not accepted for graduate credit in the University of Minnesota Graduate School. Specified broadcast television courses, at the graduate level, are available for graduate credit (information is given in the course study guide). Exceptionally, FSoS 5230 (American Families in Transition) can be used toward the

Degree Programs

M.Ed. Home VCR courses do **not** carry graduate credit. Independent Study courses may be used, however, to satisfy undergraduate prerequisites for Graduate School admission, to complete the graduate language requirement, or to acquire additional background in particular subject areas.

Institute of Technology

105 Lind Hall, Minneapolis campus

The Institute of Technology grants degrees in approximately 11 fields of engineering and architecture, plus geophysics, geology, chemistry, physics, mathematics, and environmental design. In addition to required mathematics and science courses, the Institute of Technology requires 36 credits of liberal education distributed as outlined in the **Institute of Technology Bulletin**. In addition to some of the technical courses, Department of Independent Study courses may be used to satisfy the liberal education requirement. A minimum of 90 credits of on campus coursework would be necessary for any IT degree. **It is not possible to complete an entire degree in the Institute of Technology through the Department of Independent Study.**

Assistance in planning a course of study, and in securing acceptance or transfer of credits, is available from the Extension Counseling Office.

Carlson School of Management

90 Hubert H. Humphrey Center, Minneapolis campus

Many of the pre-management course requirements for the Bachelor of Science in Business (BSB) are available through the Department of Independent Study. **It is not possible to complete the entire BSB degree through the Department of Independent Study.** The Carlson School of Management will accept a maximum of 16 credits of upper division business course work completed through correspondence study toward the BSB degree. Interested students should arrange for early consultation by contacting the Extension Counseling Office.

Both the accounting and the regular business programs are outlined in the **School of Management Bulletin**. For a list of the pre-management and management courses offered through Independent Study that meet Carlson School of Management requirements, write to Extension Counseling. A copy of Procedures for Obtaining the Bachelor of Science in Business Degree through Extension may also be obtained through Extension Counseling.

Note—Students taking Carlson School of Management upper division undergraduate courses (3000 or 5000 level) are expected to have completed the equivalent of 90 quarter credits with a minimum of a B – grade average.

Degree Programs

College of Liberal Arts

214 Johnston Hall, Minneapolis campus

A copy of the **College of Liberal Arts Bulletin** is essential for students planning to earn B.A., B.S., B.F.A., B.M., or B.I.S. degrees. Students should contact the Extension Counseling Office for a list of Extension Independent Study courses that can be used to satisfy CLA distribution requirements or for further information on any of the CLA programs.

The Department of Independent Study offers sufficient courses to earn approximately the first 90 credits toward a B.A., B.S., or B.I.S. degree. **It is not possible to complete these degrees entirely through Independent Study.**

Associate in Liberal Arts (A.L.A.)

The College of Liberal Arts no longer offers the A.L.A. degree as a primary goal for students entering the college. Students already admitted to CLA who are currently pursuing an A.L.A. must complete their degrees by **August 31, 1988**. After that date, the degree may be granted only by special petition. Students who want information about the A.L.A. degree should contact 114 Johnston Hall (624-4545).

Bachelor of Arts (B.A.)

Candidates for the Bachelor of Arts degree must complete a minimum of 180 acceptable credits, 75 in 3000 and 5000-level courses (45 credits graded A, B, or C in CLA courses). No more than 12 credits of D may be applied toward the 180-credit degree requirement. They must also satisfy the English Composition, second language, world studies, U.S. cultural pluralism, and group distribution requirements. Finally, B.A. candidates must complete a major sequence in the field of their choice and complete at least 30 credits in 3000 and 5000-level courses from areas outside their majors. The Department of Independent Study offers sufficient courses to earn at least the first 90 credits toward a B.A. degree.

Bachelor of Science (B.S.)

The Bachelor of Science degree is offered in CLA by the Departments of Child Psychology, Communication Disorders, Economics, Geography, Sociology, and the Urban Studies Program. Its requirements are substantially those of the B.A. program except that the second language requirement is not included, and the major may be more extensive and concentrated. For further information contact the Extension Counseling Office.

Bachelor of Individualized Studies (B.I.S.)

The Bachelor of Individualized Studies degree is offered for students who want to propose an individualized program of studies based on personal academic objectives. Proposals must be evaluated and approved by at least two faculty advisers. Candidates for the Bachelor of Individualized Studies degree must complete a

Degree Programs

minimum of 180 acceptable credits. The Department of Independent Study offers sufficient courses to earn at least the first 90 credits toward a B.I.S. degree. For further information contact the Extension Counseling Office.

University College

317 Walter Library, Minneapolis campus

University College offers two bachelor's degree programs, each of which enables students to design their own Bachelor of Arts or Bachelor of Science degree and to incorporate large amounts of learning done through the Department of Independent Study. Information is available from the college office or from the appropriate program office (see below).

Inter-College Program (ICP) is a student-designed, credit-based alternative to traditionally structured degree majors. Since 1930 it has allowed students to design an intercollegiate or interdisciplinary program suited to their individual objectives. There is no fixed curriculum, and a student may draw on the entire University for courses to prepare a degree plan leading to a BA or BS degree. With careful planning, it is possible to complete a baccalaureate degree in Inter-College Program through the Department of Independent Study. ICP works best with students who have already completed 2-3 years of college or have about 120-130 credits. A limitation to completing an ICP degree via Independent Study is the number of courses available.

The Inter-College Program application process includes preparing a carefully conceived statement of objectives and a proposed course list. Students generally spend several weeks planning their degree programs, a process that requires meetings with ICP academic advisers and University faculty advisers.

The Program for Individualized Learning (formerly University Without Walls) serves students with clear educational goals who wish to design and carry out individualized B.A. or B.S. degree programs. Students tend to select the program because they value the freedom to make significant choices about what and how they learn, because they have experiences they can use as foundations for fur-



Sigmund Freud (1856-1939) Austrian psychiatrist, founder of psychoanalysis. Freud devised the technique of free association, which allowed material repressed in a person's unconscious to emerge to conscious recognition.

Degree Programs

ther learning, and because they want to use a variety of educational resources at the University and in the community.

Students are admitted on the basis of evidence that they have the attributes and academic skills needed to pursue a self-directed degree program, e.g., skills in writing, project design, and educational planning. A degree program can incorporate a variety of learning resources, including University classes, Independent Study courses, and self-designed projects. Knowledge gained from independent learning prior to admission may be applied if it can be demonstrated and evaluated as college-level learning.

Individualized Learning students design their degree programs around a set of standards, called graduation criteria. The criteria combine learning in a major area of study with learning in the liberal arts. Students pursue programs in a wide variety of fields, often studying in many disciplines and creating new and innovative areas of study. Examples of recent degree programs include: Chinese Language and Culture, Zoo Management, Urban Development Administration, Preservation of Historic Architecture, and Cardiovascular Health and Disease.

For more information about the Program for Individualized Learning, students should read the University College bulletin and arrange to attend an information session.

Residents of west central Minnesota can learn more about the program by contacting the Learning Center at the University of Minnesota-Morris, 231 Community Services Building, Morris, Minnesota 56267. All others should contact the Minneapolis office.

For further information, contact:

Inter-College Program
7 Wulling Hall
86 Pleasant St. SE
University of Minnesota
Minneapolis, MN 55455
(612) 624-2004

Program for Individualized Learning
201 Wesbrook Hall
77 Pleasant St. SE
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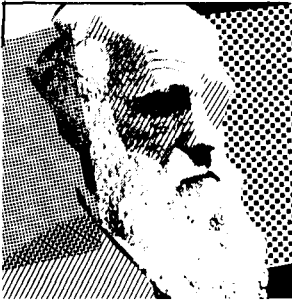
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Charles Darwin (1809-1882) English naturalist who firmly established the theory of organic evolution and natural selection. **Origin of Species, The Descent of Man.**

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Index

- Abnormal Psychology 51
 Academic Year 79
 Access to Student Educational
 Records 89-90
 Accounting 11, 15, 16
 Accounting Certificates 96-98
 Admission 73
 Adolescents 17, 51-52
 Advising Services 73-74
 Aerospace Engineering & Mechanics . 11
 African Countries, Government of ... 50
 Afro-American Literature 27
 Aging 17
 Agricultural Economics 11
 Agriculture 12
 Airmail Postage 86
 American Literature 12, 24-27
 American Studies 12
 A-F Grading 81
 Animal Science 12
 Anthropology 12-13
 Applied Studies, Bachelor of 108
 Architecture 12, 13
 Art 13-14
 Arts, Bachelor of 109
 Associate in Arts Degree 107-108
 Associate in Liberal Arts
 Degree 110
 Astronomy 14
 Audio Cassette Courses 70
 Audio-Visual Facilities 70, 84

 Bachelor of Applied Studies 108
 Bachelor of Arts 110
 Bachelor of General Studies 108
 Bachelor of Individualized
 Studies 110
 Bachelor of Science 110
 Beekeeping 28
 Biology 14
 Bulletin User's Guide 6-10
 Business 14
 Business Administration
 Certificates 98-100
 Business, Government and Society . 14
 Business History 36
 Business Law 15

 Business Studies 15-16
 Business Writing 19, 20, 21

 Cancellations 81, 91
 Carlson School of Management 109
 Cassette Tapes 87
 Certificate Credit 74
 Certificate Programs 93-105
 Chemistry 16
 Child Abuse 51-52
 Child Psychology 17
 Chinese Government 50
 Civil Engineering 17
 Classics 18-19
 Cold War Veterans 79
 College of Education 106
 College of Liberal Arts 110-111
 Communication 19
 Comparative Literature 28
 Composition, English 19-21
 Computer-Assisted
 Courses 60
 Computer Programming 21
 Concrete 17
 Congress 49
 Conservation 30
 Contract Alternative 60-61
 Correspondence Lesson Method 59-60
 Course Completion 8-10, 81
 Course Numbering 6-7
 Counseling Services 73-74
 Credit by Examination 61-62
 Credit Card Payment 74
 Credit and Financial Management
 Certificate 100-101
 Credits 74-75
 Criminal Law 54, 55
 Criminal Justice 54
 Criminology 54, 55

 DANTES 75
 Death (Sociology) 55
 Decision Sciences 21
 Degree Candidates 106-112
 Degree Credits 74
 Degree Programs 106-112
 Detective Fiction 12

Index

- Directed Study 62
Discontinued Courses 76
Drafting 45
Drama 25, 58
- East Asian Studies 22
Ecology 22
Economics 11, 22-23
Education 23-24
Education, College of 106
Electrical Engineering 24
Engineering 24
Engineering Certificates 104-105
Engineering Graphics 45
English as a Second Language 28
English Literature 24-28
Enrolling in Credit Courses on a
 Noncredit Basis 75
Enrollment Procedures 7-8
Entomology 28
Ethics 47
Evolution 22
Examination for Credit 61-62
Examinations 76-77
Extension Certificates 93-105
Extension Offices 4-5
Extra bulletins (form) 125, 127
- Faculty 77, 113-120
Family Studies 28-29
Fantasy 25
Fees 86, 90-92
Fiction Writing 20-21
Finance 29
Financial Aid Advising 80
Financial Assistance 77-80
Folk Tales 28, 53
Food Science and Nutrition 30
Foreign Students 85
Forestry 30
French 30
- Gardening 38-39
General College 107-108
General College Courses 31
General Information 73-92
General Studies, Bachelor of 108
General Studies Certificate 94-95
Geography 32
Geology and Geophysics 32
German 32-33
G.I. Bill 79
Government 49-50
Grade Point Average 81
Grades 80-81
Graduate Credit 108-109
Graduate Language Courses
 French 30
 Spanish 56
Graduate School 108-109
Grammar, English 19
Greek 33
Group Study 61
- Health Care Courses, Programs 82
Health, Public 51-52
Health Science Units 33-34
High School Students 82-83
History 34-37
History of Science 38
Home VCR courses 70-71
Horse Production 12
Horticultural Science 38-39
Hours, Office 85
How to Study 57
Human Development 53
Human Language 42
Human Origins 12
Humanities 39
- Income Tax Accounting 11
Incompletes 81
Individualized Learning, Program
 for 111-112

Margaret Mead (1901-1978) American anthropologist. Mead won fame for her studies of child-rearing, personality, and culture. **Coming of Age in Samoa, Male and Female, Culture and Commitment.**



Index

Individualized Studies, Bachelor of	110	Mathematics	43-45
Industrial Engineering/Operations Research	39	Mathematics and Science Certificate	96
Industrial Relations	40	Mechanical Engineering	45
Industrial Relations Certificate ..	101-102	Media-Assisted Courses	63-72
Institute of Technology	109	Memoir Writing	21
Insurance	40	MINITEX	84
Inter-College Program	111	Music	45-46
International Relations	40	Mystery Fiction	12
Italian	41	 National University Continuing Education Association	 85
 Jewish Studies	 41	Noncredit Enrollment	75
Journal Writing	21	Norwegian	46
Journalism and Mass Communication	41	Nutrition	30
 Landscape Design	 38-39	 Office Hours	 85
Languages	38-39	Operations Management	46
French	30	Overseas Students	85
German	32-33	 Parenting	 29
Greek	33	Partial Payment Plan	91
Italian	41	PSEOA Enrollment	83
Latin	42	Pharmacy	46-47
Norwegian	46	Philosophy	27,47
Polish	49	Physical Disability	33
Russian	52-53	Physics	47-49
Spanish	56-57	Playwriting	58
Swedish	57	Poetry Writing	21
Latin	42	Polish	49
Law	15	Political Science	49-50
Learning Resources Center	84	Portuguese	50
Lesson Service	83	Postage	86
Liberal Arts Certificate	95	Program for Individualized Learning	111-112
Liberal Arts, College of	110-111	Psychology	17, 50-51
Library Facilities	83	Public Affairs	51
Linguistics	42	Public Health	51-52
Literature, Afro-American	27	Purchase of Study Guides	86
American	12, 24-27	 Radio Courses	 63-65
English	24-28	Reading, Efficient	57
French	30	Refunds	92
German	33	Registration Form	3
Latin	42	Registering	7-8
Portuguese	50	Reinstatements	92
Spanish	56-57	Religion	12, 18, 39, 41, 51
Logic	47	Religious Studies	52
 Magazine Writing	 41	Resident Credit	75
Management	43	Returned Check	91
Management of Administrative Services Certificate	102-104	Rhetoric	57
Management, Carlson School of ...	109	Rules and Regulations	9-10
Map	inside back cover	Russian	52-53
Marketing	16, 43	Russian Government and Politics	50
Mass Communication	41		

Index

- Scandinavian Languages . . . 46, 53, 57
Scholarships 77-80
Science, Bachelor of 110
Science Fiction 25
Science, History of 38
Scientific Russian 52-53
Selecting a Course 6-7
Senior Citizens 86
Shakespeare 25
S-N Grading System 81
Slavic and East European
Languages 49, 52-53
Social Security Number 3, 87
Social Studies 53
Social Work 53
Sociology 54-56
Spanish 56-57
Special Learning Opportunities . . 59-62
Statistics 23
Student Services 87
Study Skills 57
Supplies 88
Swedish 57

Tapes 87
Tax Deductible Educational
Expenses 87-88
Technical Writing 20-21
Television Courses 65-69
Textbooks 88

Textiles and Clothing 58
Toll-Free Phone 3, 88
Theatre Arts 58
Time Management 23
Transcripts 89-90
Transferring to Another Course 90
Tuition 90-92

Undergraduate Development
Certificate Series 104
Undergraduate Development
Certificate in Engineering
and Science 105
University College 111-112
University Degree Programs . . 106-112
University Film/Video 84
University Libraries 83
Upcoming Courses/Programs . . . 71-72
Updates for Professionals 3, 72

VCR courses 70-71
Veterans, Tuition Assistance for 79
Veterinary Medicine 58
Video Cassette Courses 70

Withdrawals 81, 92
Women's Studies 58
Work Measurement Standards 39
Writing 19-21, 41, 58

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 a college bulletin current radio/TV course listing
 bulletin for University College
 the introduction to the following course(s):
 a book order form/registration form

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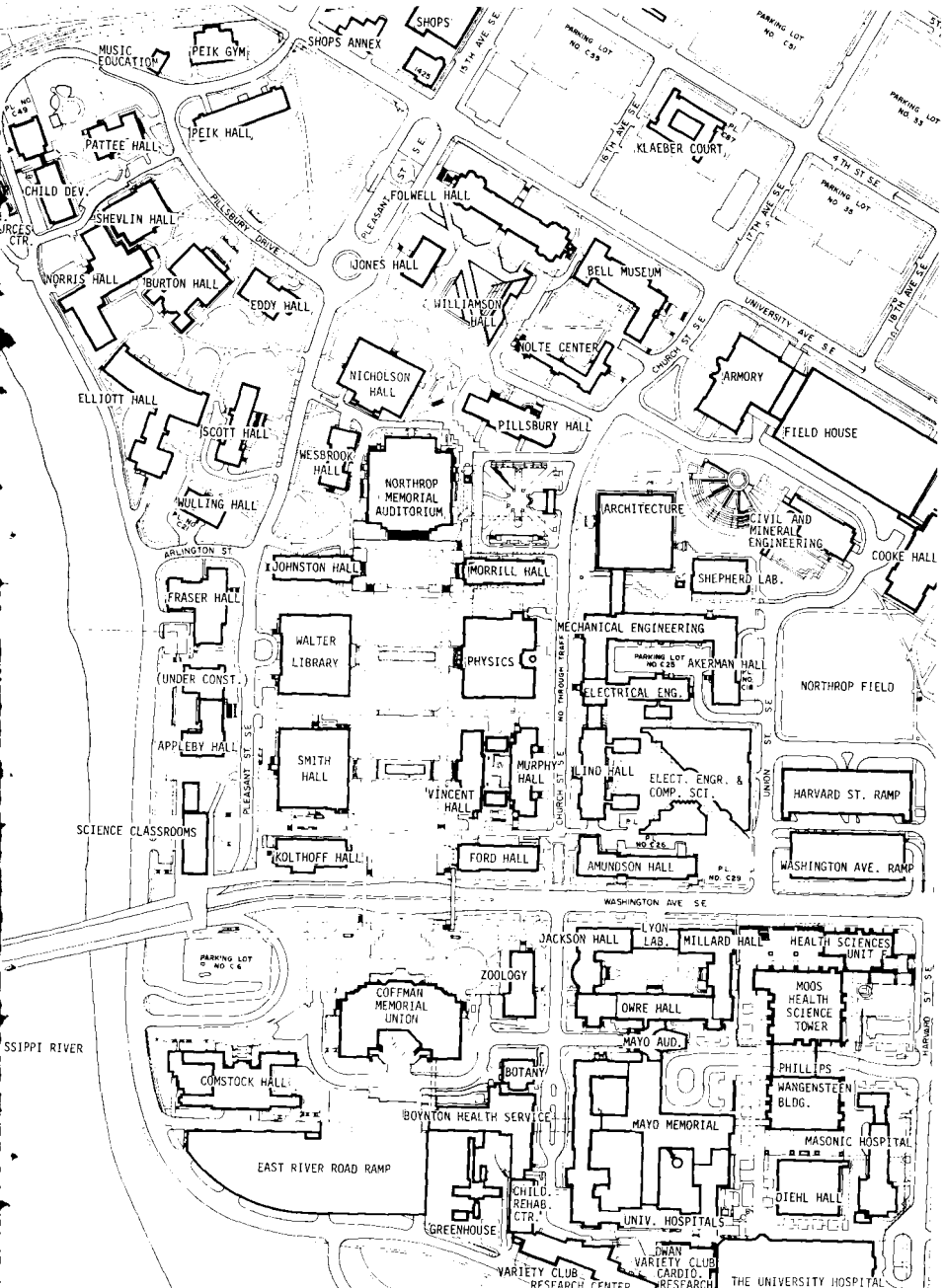
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