# **DESCRIPTIONS of COURSES 1982**

This section provides descriptions of all courses given by the University at both the undergraduate and graduate levels. The courses are listed in the schools and departments which give the instruction. The schools and departments are arranged in alphabetical sequence.

## **COURSE NUMBERS**

#### 001-099 Non-Credit Courses

Courses with these numbers are offered by the University to permit students to make up deficiencies in previous training or to improve their facility in certain basic skills without earning credit.

For information about remedial-developmentalpreparatory courses, consult the *Academic Programs* section of the catalog.

### 100-299 Undergraduate Courses

Courses with these numbers are for undergraduate students. They carry no graduate credit, although graduate students may be admitted to such courses in order to make up prerequisites or to gain a foundation for advanced courses.

For information about remedial-developmentalpreparatory courses, consult the *Academic Programs* section of the catalog.

#### **300-499 Advanced Undergraduate Courses**

Courses with these numbers are for advanced undergraduate students. They constitute the advanced portion of an undergraduate program leading to the bachelor's degree. A graduate student may carry 400 level courses for credit upon approval of the student's major department and the department offering the course. In exceptional cases, a graduate student may petition the dean of his or her college, in writing, for approval of a 300 level course for graduate credit.

#### 500-699 Graduate-Professional Courses

Courses with these numbers are courses in the graduateprofessional programs. A graduate student may carry these courses for credit with approval of the major department.

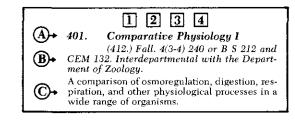
#### 800-899 Graduate Courses

Courses with these numbers are for graduate students. Advanced undergraduates with a 3.00 or better gradepoint average in their total programs may be admitted to 800-899 level courses; others, if recommended by their academic adviser and approved by their dean. At least 23 credits of the total required for a master's degree shall be taken at the 800 and 900 level except as specifically exempted by the dean of the college.

#### 900-999 Advanced Graduate Courses

Courses with these numbers are exclusively for graduate students and primarily for advanced graduate students. A master's degree candidate may take these courses with the approval of the major department.

## **COURSE LISTINGS**



This material has three categories.

A The course number and title including:

The course number and ti	tle including:
The course number suffix	:
H — Honors Course	
I — Туре I	
2 — Type II	Remedial-Develop-
3 — Type III	mental-Preparatory
4 — Type IV	Courses.
5 — Type V	
For additional inform	ation about remedial-
developmental-prenarat	ory courses, consult the

developmental-preparatory courses, consult the *Academic Programs* section of the catalog.

The General Education designation code in parentheses following the title:

- (A) Arts and Humanities
- (N) Biological, Physical, or Mathematical Sciences
- (S) Social and Behavioral Sciences.

For additional information, refer to the section on *Courses Approved for General Education Designation* beginning on page A-2.

(B) The material in italics which includes:

1 The former course number in parentheses if the course number has been changed within the past 5 years.

2 The term or terms the course is authorized to be given. Lack of staff or low student enrollment may preclude offering the course, particularly at the advanced level, every term for which it is authorized.

**3** The term credits are designated to include class hours a week as follows: A(B-C) where:

- A =Number of term (quarter) credits.
- B = Number of class hours a week in lecture, recitation, quiz, etc., sections.
- C = Number of class hours a week in laboratory.

If the credit is indicated to be variable, the number of credits is to be determined at the time of enrollment. If the course is a non-credit course, the credit-equivalent is given in brackets.

**[4]** The course number(s) or other information indicates the preparation or classification prerequisite to enrollment in the course. If a department code and course

number are listed, the reference is to a course in the department indicated by the code. The department codes and the corresponding department names are listed on this page. The prerequisite may be satisfied by the course or courses indicated or equivalent background. If a class standing such as juniors is listed, only students with that or a higher class level are eligible for enrollment. A student who is unsure of eligibility for enrolling in a course should contact the administering department, school, or college.

**(**A brief description of the course.

# Department Codes Used in Course Prerequisites

Codes are listed in alphabetical order by the code. The departments are listed in alphabetical sequence by their names in the pages which follow.

DEPT.	DEPARTMENT
CODE	NAME
AE	Agricultural Engineering
AH	Animal Husbandry—See Animal Science
A L	Arts and Letters
AS	Aerospace Studies
ADV	Advertising
AEC AET	Agricultural Economics
ALI	Agricultural Engineering Technology—See Agricultural Engineering
AFA	Accounting and Financial Administration
AFR	African Languages—See Linguistics and Oriental and
AL IC	African Languages
AMS	American Studies
ANP	Anthropology
ANR	Agriculture and Natural Resources
ANS	Animal Science
ANT	Anatomy
ARB	Arabic—See Linguistics and Oriental and African
	Languages
ART	Art—See History of Art and Studio Art
ASC	Audiology and Speech Sciences
AST	Astronomy and Astrophysics American Thought and Language Building Construction—See Agricultural Engineering
ATL	American Thought and Language
BC	Building Construction—See Agricultural Engineering
BS	Biological Science
BCH	Biochemistry
BIM	Biomechanics
BME	Biomedical Engineering
BOA	Business Law and Office Administration
BOT	Botany and Plant Pathology
BPY	Biophysics
CE	Civil Éngineering Criminal Justice
C J CAS	Communication Arts and Sciences (College of)
CEM	Chemistry
CHE	Chemical Engineering
CHS	Chinese—See Linguistics and Oriental and African
0110	Languages
CLA	Classical Studies—See Romance and Classical Languages
0111	
CMS	Community Health Science
COM	Communication
CPS	Computer Science
CSS	Crop and Soil Sciences
DRY	Dairy Science—See Animal Science
ЕE	Electrical Engineering
ES	Earth Science
EC	Economics
ED_	Education
EGR	Engineering
ENG	English
ENT	Entomology
FM	Family Medicine
FW	Fisheries and Wildlife
FCE	Family and Child Ecology
FMP FOR	Family Practice
FRN	Forestry French—See Romance and Classical Languages
FSC	Food Science
FSM	Food Systems Economics and Management—See
1.014	Agricultural Economics
GR	German and Russian
GEN	Genetics
GEO	Geography
ĞĹĞ	Geology
ĞŔK	Greek—See Romance and Classical Languages
GRM	German-See German and Russian
HA	History of Art-See Art
НМ	Human Medicine (College of)
HEB	Hebrew—See Linguistics and Oriental and African
	Languages
HEC	Human Ecology (College of)
HED	Human Environment and Design
HNF	Human Nutrition and Foods—See Food Science and
нрв	Human Nutrition

HPR	Health,	Physical	Education	$\operatorname{and}$	Recreation
HPR	Health,	Physical	Education	and	Recreati

DEPT. CODE	DEPARTMENT NAME
HRI	Hotel, Restaurant and Institutional Management
HRT HST	Horticulture History
HUM	Humanities
IM IS	Internal Medicine Improvement Service
IDC	Interdisciplinary Courses
ITL J M	Italian—See Romance and Classical Languages Justin Morrill Inter-College Programs
JAP	Japanese—See Linguistics and Oriental and African
JRN	Languages Journalism
L A	Landscape Architecture—See Urban Planning and
LBS	Landscape Architecture Lyman Briggs School
LIN	Linguistics—See Linguistics and Oriental and African Languages
LIR	Labor and Industrial Relations
LOA LSM	Linguistics and Oriental and African Languages Large Animal Surgery and Medicine
LTN	LatinSee Romance and Classical Languages
M C M E	James Madison College Mechanical Engineering
M S M T	Military Science Medical Technology
MED	Medicine
MGT MMM	Management Metallurgy, Mechanics and Materials Science
MPH	Microbiology and Public Health
MTA MTH	Marketing and Transportation Administration Mathematics
MUS	Music
N E N S	Nursing (College of) Natural Science
NSC	Natural Science (College of)
O M OGR	Osteopathic Medicine Obstetrics, Gynecology, and Reproductive Biology
OST	Osteopathic Medicine (College of)
P S PAM	Poultry Science—See Animal Science Public Affairs Management—See Agricultural Economics
PED	Pediatrics
PHD PHL	Pediatrics and Human Development Philosophy
PHM	Pharmacology and Toxicology
PHS PHY	Physical Science Physics
PKG PLS	Packaging Political Science
PRR	Park and Recreation Resources
PRT PSC	Portuguese—See Romance and Classical Languages Psychiatry
PSL	Physiology
PSY PTH	Psychology Pathology
R D	Resource Development
RAD REL	Radiology Religious Studies
RES ROM	Racial and Ethnic Studies Romance Languages—See Romance and Classical
	Languages
RUS S E	Russian—See German and Russian Sanitary Engineering—See Civil and Sanitary
	Engineering
S S S W	Social Science Social Work
SAL	South Asian Languages—See Linguistics and Oriental
SOC	and African Languages Sociology
SPN	Spanish—See Romance and Classical Languages
SSC SSM	Social Science (College of) Small Animal Surgery and Medicine
STA STT	Studio Art—See Art Statistics and Probability
SUR	Surgery
SYS	Systems Science—See Electrical Engineering and Systems Science
TC	Telecommunication
THR U D	Theatre Urban Development (College of)
ŬP	Urban Planning—See Urban Planning and Landscape
UMS	Architecture Urban and Metropolitan Studies
V M	Veterinary Medicine (College of)
ZOL	Zoology

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# COURSES APPROVED FOR GENERAL **EDUCATION DESIGNATION**

Each student must earn a minimum of 45 credits in courses approved for general education or in approved substitutes. Beginning in the fall of 1979, students may meet the University general education requirements in the three general knowledge areas either by completing

A-2

appropriate courses in the departments of Humanities, Natural Science, and Social Science, or by combining courses in these three departments with courses approved for General Education designation outside of these three departments. Nine of the required 45 credits in general education must be earned by completing appropriate courses in American Thought and Language or an approved substitute.

Beginning in the fall of 1979, in addition to completing the American Thought and Language courses or an abproved substitute, each student must complete a minimum of three courses representing a total of 36 credits, including any substitution option, in the three general knowledge areas: arts and humanities; biological, physical, or mathematical sciences; and social and behavioral sciences. Temporarily, for each of the three general knowledge areas; two of the three courses must be in the department of Humanities; Natural Science, or Social Science, while the third may be elected from courses approved for General Education designation outside of the department. If after completing the prescribed three courses in each of the three general knowledge areas the General Education credits do not total 36, the student may complete the 36 credit requirement by electing a course approved for General Education designation from any of the three general knowledge areas.

The courses approved for General Education designation are listed below by general knowledge areas. The courses that are offered this term are included in the appropriate departmental listings in the Schedule of Courses. For additional information concerning the University's general education requirements and the courses that may be used to fulfill them, refer to the Academic *Programs* section of the catalog.

#### Arts and Humanities

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	mini	irumumtes .	102.011
ENG	241	Introduction to Popular Culture (A)	
ENG	344	Jewish-American Literature (A)	
GRM	243	German Literature in English Translation (A)	
HST	111	The Roots of European History (A)	
HST	112	Maturing of European Civilization (A)	
HST	113	Europe in the Modern Age (A)	
HST	121	Union to Disunion: America, The First Hundred Years	
		(A)	
HST	122	History of the United States: The Nation State (A)	
HUM	199	Humanitics: The Greek World (A)	
HUM	200	Humanities: The Roman World (A)	
HUM	201	Humanities in the Western World: Ancient (A)	
HUM	202	Humanities in the Western World: Medieval and Early	
		Modern (A)	
HUM	203	Humanities in the Western World: Modern (A)	
HUM		Great Books of Western Culture, Ancient (A)	
HUM	212	Great Books of Western Culture, Medieval and Early	
		Modern (A)	
HUM		Great Books of Western Culture, Modern (A)	
HUM		The Visual Arts and Western Culture, Ancient (A)	
HUM	222	The Visual Arts and Western Culture, Medieval and	
		Early Modern (A)	
HUM		The Visual Arts and Western Culture, Modern (A)	
HUM		Music and Western Culture, Ancient (A)	
HUM	262	Music and Western Culture, Medieval and Early	
		Modern (A)	
HUM		Music and Western Culture, Modern (A)	
HUM		Honors Course: Ancient World (A)	
HUM	282H	Honors Course: Medieval and Early Modern Periods	
		(A)	
HUM		Honors Course: Modern World (A)	
HUM	291	The Cultural Traditions of China (A)	
HUM	292	The Cultural Traditions of India (A)	
HUM	293	The Cultural Traditions of Japan (A)	
HUM	294	The Cultural Traditions of the Islamic World (A)	
HUM	295	The Cultural Traditions of Sub-Saharan Africa (A)	

HUM	311	Great Cities, Arts, and Ideas: The Western Classical	
		Age (A)	4
HUM	312	Great Cities, Arts, and Ideas: The Renaissance (A)	4
HUM	313	Great Cities, Arts, and Ideas: The Modern World (A)	4
HUM	341	The Humanities in the Contemporary World (A)	4
HUM	345	Jewish Humanities in the Twentieth Century (A)	4
IT <b>L</b>	341	Italian Literary Masterpieces in English Translation (A)	-
			3
PHL	101	Introduction to Philosophy: Ethics and Value (A)	3
PHL	102	Introduction to Philosophy: Knowledge and Reality (A)	3
PHL	120	Classics of Philosophical Literature (A)	4
PHL	211	Ancient Philosophy (A)	3
PHL	212	Medieval and Early Modern Philosophy (A)	3
PHL	213	Modern Philosophy (A)	3
PHL	390	Philosophy in Literature (A)	3
REL	150	Understanding Religious Man (A)	3
REL	151	Western Religions (A)	3
REL	152	Eastern Religions (A)	3
REL	220	Old Testament (A)	3
REL	220		3
	370	Old Testament (A)	
REL REL		Religion in American Culture (A)	3 3
	371	Religion in American Culture (A)	
REL	372	American Civil Religion (A)	3
ROM	241	Masterpieces of the Romance and Classical Literatures	
BOM	a 40	in English Translation (A)	4
ROM	242	Masterpieces of the Romance Literatures in English	
ROM	243	Translation (A) Masterpieces of the Romance Literatures in English	4
100,00	240	Translation (A)	4
STA	101	How to Look at Art (A)	4
	101		
Biolo	gical	l, Physical, or Mathematical Sciences	
AST	119	General Astronomy (N)	4
AST	217	General Astronomy (N)	4
BOT	201	Plants, Man and the Environment (N)	3
ENT	250	Pesticides, Their Alternatives and Environmental	
		Quality (N)	3
FSC	101	Food and Society (N)	3
HNF	102	Nutrition for Man (N)	3
NS	115	The Nature and Continuity of Life (N)	4
NS	122	Human Biosocial Evolution (N)	4
NS	125	Time and Change in Nature (N)	4
NS	129	Biotechnology and Human Values (N)	4
N S	135	Changing Concepts of the Universe (N)	4
N S	142	Life, Its Environment (N)	4
NS	152	Science and Culture in the 20th Century (N)	4
N S	162	Race, The Evolution of an Idea (N)	4
N S		Our Biological Nature (N)	4
N S		Our Place in Nature (N)	4
N S		Science-Technology and Human Values (N)	4
NS	1814	Natural Science (N)	4
NS	1824	Natural Science (N)	4
NS	1834	Natural Science (N)	4
PHY	201	The Science of Sound I: Rock, Bach and Oscillators (N)	
			3 or 4
PHY	256	Energy Consumption and Environmental Quality (N)	3
PHY	301	Bohr and Einstein: The Concept of Nature in Our Day	
		(N)	3
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		d Behavioral Sciences	
ANP	171	Introduction to Sociocultural Anthropology (S)	4
ANP	250	Culture, Environment and Adaptation (S)	4
GEO	170	Future Worlds (S)	3
GEO	204	World Regional Geography (S)	4
PLS	251	Human Values and Politics: On Liberty (S)	4
PLS	252	Human Values and Politics: Equality and Justice (S)	4
PLS	253	Human Values and Politics: Authority and the	
	201	Individual (S)	4
SS	201	Americans and Their Values (S)	4
SS	202	Power in America (S)	4
SS	203	American and World Problems (S)	4
SS	211	The Emergence of Man (S)	4
S S	212	Coping with Changing Institutions in Modern Society	
8.6	010	(S)	4
S S S S	213 221	Casualties of Contemporary Society (S)	4
55		The Individual and Metropolitan Society (S) Economics, Politics and the Individual in the	4
00	222	Economics, Fondes and the individual in the	

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ANP	171	Introduction to Sociocultural Authropology (S)
ANP	250	Culture, Environment and Adaptation (S)
GEO	170	Future Worlds (S)
GEO	204	World Regional Geography (S)
PLS	251	Human Values and Politics: On Liberty (S)
PLS	252	Human Values and Politics: Equality and Justice (S)
PLS	253	Human Values and Politics: Authority and the
		Individual (S)
SS	201	Americans and Their Values (S)
S S	202	Power in America (S)
SS	203	American and World Problems (S)
SS	211	The Emergence of Man (S)
<u>s s</u>	212	Coping with Changing Institutions in Modern Society
0.0	210	(S)
SS	213	Casualties of Contemporary Society (S)
s s	221	The Individual and Metropolitan Society (S)
S S	222	Economics, Politics and the Individual in the
0.0		Metropolis (S)
SS	223	World Urbanization: Cultures and Common Issues (S)
SS	241	Cultures in Crisis (S)
SS	242	Freedom and Justice (S)
SS	243	War and Morality (S)
SOC	150	The Individual in Modern Society (S)
UD	200	Human Perspectives on Urbanization (S)
UD	201	Historical Roots of Racism and Ethnocentrism (S)
UD	202	Minorities in American Cities (S)
UΡ	231	Evolution of Urban Communities (S)

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