

DESCRIPTIONS of COURSES 1989

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.

Refer to the statements on *credits* and *Course Formats and Credits* in the *Academic Programs* section of the catalog.

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-developmental-preparatory 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-developmental-preparatory 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 graduate-professional 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 grade-point 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, with the exception of courses numbered 999 (doctoral dissertation research). Admission to a doctoral degree program is a prerequisite of all courses numbered 999.

VARIABLE CREDIT COURSES

For each variable credit course, the range of credits for which a student may enroll in a given term shall be specified.

Except for courses numbered 899 (Master's Thesis Research) and 999 (Doctoral Dissertation Research), the maximum number of credits that a student may earn in a course with a reenrollment provision shall be specified.

MULTITITLED COURSES

A multititled course is one that has been approved as such by the Academic Council upon recommendation of the Full Committee, University Committee on Curriculum (UCC). Approval of a course as a multititled course shall include authorization for subtitles for the course to be established. Approved subtitles shall have the same status as separately approved courses that are included in the *Descriptions of Courses* section of the University catalog. For example, an approved subtitle shall be included in the *Schedule of Courses* in place of the general, authorized title for the multititled course and shall appear on students' academic records (including transcripts). Multititled courses are identified as such by the coding '(MTC)' after the course titles.

Multititled courses may have approved subtitles. A subtitle of a multititled course represents a subject matter area that is related to the course and that has been approved as a subtitle for that course by the Full Committee, UCC, upon recommendation of the appropriate UCC subcommittee.

COURSE LISTINGS

| | | | | |
|-------|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| (A) → | 401. | <i>Comparative Physiology I</i> (412.) Fall. 4(3-4) PSL 240 or BS 212; | | |
| (B) → | CEM 131 or CEM 141. Interdepartmental with the Department of Zoology. | | | |
| (C) → | A comparison of osmoregulation, digestion, respiration, and other physiological processes in a wide range of organisms. | | | |

This material has three categories.

(A) The course number and title including:

The course number suffix:

H — Honors Course

1 — Type I

2 — Type II

3 — Type III

4 — Type IV

5 — Type V

Remedial-Develop-
mental-Preparatory
Courses.

For additional information about remedial-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, and 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-3.

The multititled course designation code in parentheses (MTC) following the title of any course that has been approved as a multititled course.

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 course alpha code and number are listed, the reference is to a course indicated by the code. The alpha codes and the corresponding 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 department, school, or college that administers the course.

C A brief description of the course.

Course Alpha Code Designations

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

| ALPHA CODE | NAME |
|------------|---|
| A E | Agricultural Engineering |
| A L | Arts and Letters (College of) |
| A S | Aerospace Studies |
| ACC | Accounting |
| ADV | Advertising |
| AEC | Agricultural Economics |
| AEE | Agricultural and Extension Education |
| AET | Agricultural Engineering Technology—See Agricultural Engineering |
| AFR | African Languages—See Linguistics and Germanic, Slavic, Asian and African Languages |
| AMS | American Studies |
| ANP | Anthropology |
| ANR | Agriculture and Natural Resources |
| ANS | Animal Science |
| ANT | Anatomy |
| ARB | Arabic—See Linguistics and Germanic, Slavic, Asian and African Languages |

| ALPHA CODE | NAME |
|------------|--|
| ASC | Audiology and Speech Sciences |
| AST | Astronomy and Astrophysics—See Physics and Astronomy |
| ATM | Agricultural Technology and Systems Management—See Agricultural Engineering |
| ATL | American Thought and Language |
| B S | Biological Science |
| BCH | Biochemistry |
| BCM | Building Construction Management—See Agricultural Engineering |
| BIM | Biomechanics |
| BME | Biomedical Engineering |
| BOT | Botany and Plant Pathology |
| C E | Civil Engineering |
| C J | Criminal Justice |
| CAS | Communication Arts and Sciences (College of) |
| CEM | Chemistry |
| CEP | Counseling, Educational Psychology and Special Education |
| CHE | Chemical Engineering |
| CHS | Chinese—See Linguistics and Germanic, Slavic, Asian and African Languages |
| CLA | Classical Studies—See Romance and Classical Languages |
| CMS | Community Health Science |
| COM | Communication |
| CPS | Computer Science |
| CSS | Crop and Soil Sciences |
| E E | Electrical Engineering |
| E S | Earth Science—See Geological Sciences |
| EAD | Educational Administration |
| EC | Economics |
| EGR | Engineering |
| ENE | Environmental Engineering—See Civil and Environmental Engineering |
| ENG | English |
| ENT | Entomology |
| F E | Food Engineering—See Agricultural Engineering |
| F I | Finance and Insurance |
| F M | Family Medicine |
| F W | Fisheries and Wildlife |
| FCE | Family and Child Ecology |
| FMP | Family Practice |
| FOR | Forestry |
| FRN | French—See Romance and Classical Languages |
| FSC | Food Science |
| FSM | Food Systems Economics and Management—See Agricultural Economics |
| G R | German and Russian—See Linguistics, Germanic, Slavic, Asian and African Languages |
| GBL | General Business and Business Law |
| GEN | Genetics |
| GEO | Geography |
| GLG | Geology—See Geological Sciences |
| CRK | Greek—See Romance and Classical Languages |
| GRM | German—See Linguistics, Germanic, Slavic, Asian and African Languages |
| H A | History of Art—See Art |
| H M | Human Medicine (College of) |
| HCP | Health Education, Counseling Psychology and Human Performance |
| HEB | Hebrew—See Linguistics and Germanic, Slavic, Asian and African Languages |
| HEC | Human Ecology (College of) |
| HED | Human Environment and Design |
| HNF | Human Nutrition and Foods—See Food Science and Human Nutrition |
| HRI | Hotel, Restaurant and Institutional Management |
| HRT | Horticulture |
| HST | History |
| HUM | Humanities |
| I M | Internal Medicine |
| I S | Improvement Service |
| IDC | Interdisciplinary Courses |
| ITL | Italian—See Romance and Classical Languages |
| JPN | Japanese—See Linguistics and Germanic, Slavic, Asian and African Languages |
| JRN | Journalism |
| L A | Landscape Architecture—See Geography |
| LBS | Lyman Briggs School |
| LCS | Large Animal Clinical Sciences |
| LIN | Linguistics—See Linguistics and Germanic, Slavic, Asian and African Languages |
| LIR | Labor and Industrial Relations |
| LOA | Linguistics and Oriental and African Languages—See Linguistics and Germanic, Slavic, Asian and African Languages |
| LTN | Latin—See Romance and Classical Languages |
| M C | James Madison College |
| M E | Mechanical Engineering |
| M S | Military Science |
| M T | Medical Technology |
| MED | Medicine |
| MGT | Management |
| MMM | Metallurgy, Mechanics, and Materials Science |
| MPH | Microbiology and Public Health |
| MTA | Marketing and Transportation Administration |

| ALPHA CODE | NAME |
|------------|---|
| MTH | Mathematics |
| MUS | Music |
| N E | Nursing (College of) |
| N S | Natural Science |
| NSC | Natural Science (College of) |
| O M | Osteopathic Medicine |
| OGR | Obstetrics, Gynecology, and Reproductive Biology |
| OST | Osteopathic Medicine (College of) |
| PAM | Public Affairs Management—See Agricultural Economics |
| PED | Pediatrics |
| PHD | Pediatrics and Human Development |
| PHL | Philosophy |
| PHM | Pharmacology and Toxicology |
| PHS | Physical Science |
| PHY | Physics—See Physics and Astronomy |
| PKG | Packaging |
| PLS | Political Science |
| PRR | Park and Recreation Resources |
| PRT | Portuguese—See Romance and Classical Languages |
| PSC | Psychiatry |
| PSL | Physiology |
| PSY | Psychology |
| PTH | Pathology |
| R D | Resource Development |
| RAD | Radiology |
| REL | Religious Studies |
| ROM | Romance Languages—See Romance and Classical Languages |
| RUS | Russian—See Linguistics and Germanic, Slavic, Asian and African Languages |
| S S | Social Science |
| S W | Social Work |
| SCS | Small Animal Clinical Sciences |
| SOC | Sociology |
| SPN | Spanish—See Romance and Classical Languages |
| SSC | Social Science (College of) |
| STA | Studio Art—See Art |
| STT | Statistics and Probability |
| SUR | Surgery |
| SYS | Systems Science—See Electrical Engineering and Systems Science |
| T E | Teacher Education |
| TC | Telecommunication |
| THR | Theatre |
| U P | Urban Planning—See Geography |
| V M | Veterinary Medicine (College of) |
| W S | Women's Studies |
| ZOL | Zoology |

GROUPINGS OF COURSES APPROVED FOR GENERAL EDUCATION CREDIT¹

Each student must earn a minimum of 45 credits in General Education in courses divided among the following four areas: written and oral communication; arts and humanities; biological, physical, and mathematical sciences; and social and behavioral sciences. In meeting the minimum of 45 credits, no fewer than 9 credits and no more than 16 credits shall be taken to satisfy the General Education requirement in each of the four areas. Students must meet the written and oral communication General Education requirement by completing 9 credits in appropriate American Thought and Language courses.

Beginning in the Fall of 1982, any student who has not completed the General Education requirements in the arts and humanities; biological, physical, and mathematical sciences; and social and behavioral sciences must meet these requirements in accordance with the statements on the groupings of courses in these areas that follow. If after completing a prescribed grouping of courses in each of the three areas the General Education credits do not total 36, the student must select an additional course approved for General Education from any of the three areas.

The planned groupings of courses approved for General Education in the arts and humanities and social and behavioral sciences areas are arranged according to:

Option A — groupings of courses arranged as three term sequences/series representing a broadly integrative perspective on selected topics or issues.

Option B — groupings of courses arranged according to specific emphases representing selected approaches to knowledge within the relevant area or emphases on topics or issues within the area.

The planned groupings of courses approved for General Education in the biological, physical, and mathematical sciences correspond to Option B as described above.

The General Education courses that are offered each term are included in the appropriate departmental listings in the *Schedule of Courses*. For additional information concerning the University's general education requirements, refer to the *Academic Programs* section of the University Catalog.

¹ Courses approved for General Education by the Academic Council will be counted toward the General Education requirements in accordance with the effective date for General Education approval. No course that was offered prior to the effective date for General Education approval shall be counted toward the requirements.

Any course that had General Education approval, but no longer has General Education approval, will be counted toward the General Education requirements if the course was completed during the period for which it had General Education approval. Any student who completed such a course should consult his or her academic adviser regarding the completion of the General Education requirements.

On April 15, 1986, the Academic Council approved a change in the 1980 General Education Policy on the substitution of certain alternative courses for those approved for General Education designation in the area closest to the student's major and mandated that the change be implemented no earlier than Fall Term 1987 and no later than Fall Term 1988. Students should consult departments, schools, and colleges on what, if any, General Education substitutions are available to them.

GROUPINGS OF GENERAL EDUCATION COURSES IN THE ARTS AND HUMANITIES

Students complete either Option A or Option B

Option A — Students take all three courses in one of the following series/sequences. Additional series/sequences of courses are available to students who elect to complete three courses in the Department of Humanities; each such series/sequence is comprised of three courses, one of which ends in number 1, one of which ends in number 2, and one of which ends in number 3.

| | | | | CREDITS |
|-----|-----|-----|---|---------|
| A-1 | A L | 311 | Great Cities, Arts and Ideas: The Western Classical Age (A)..... | 4 |
| | A L | 312 | Great Cities, Arts and Ideas: The Renaissance (A).... | 4 |
| | A L | 313 | Great Cities, Arts and Ideas: The Modern World (A)... | 4 |
| A-2 | GRM | 241 | German Literature in English Translation (A)..... | 3 |
| | GRM | 242 | German Literature in English Translation (A)..... | 3 |
| | GRM | 243 | German Literature in English Translation (A)..... | 3 |
| A-3 | H A | 206 | History of Western Art: The Ancient World (A)..... | 4 |
| | H A | 207 | History of Western Art: The Middle Ages and the Renaissance (A)..... | 4 |
| | H A | 208 | History of Western Art: The Baroque to the Present (A)..... | 4 |
| A-4 | HST | 111 | The Roots of European History (A)..... | 4 |
| | HST | 112 | Maturing of European Civilization (A)..... | 4 |
| | HST | 113 | Europe in the Modern Age (A)..... | 4 |
| A-5 | HUM | 201 | Humanities in the Western World: Ancient (A)..... | 4 |
| | HUM | 202 | Humanities in the Western World: Medieval and Early Modern (A)..... | 4 |
| | HUM | 203 | Humanities in the Western World: Modern (A)..... | 4 |
| A-6 | HUM | 211 | Great Books of Western Culture, Ancient (A)..... | 4 |
| | HUM | 212 | Great Books of Western Culture, Medieval and Early Modern (A)..... | 4 |
| | HUM | 213 | Great Books of Western Culture, Modern (A)..... | 4 |
| A-7 | HUM | 221 | The Visual Arts and Western Culture, Ancient (A)... | 4 |
| | HUM | 222 | The Visual Arts and Western Culture, Medieval and Early Modern (A)..... | 4 |
| | HUM | 223 | The Visual Arts and Western Culture, Modern (A)... | 4 |
| A-8 | HUM | 261 | Music and Western Culture, Ancient (A)..... | 4 |
| | HUM | 262 | Music and Western Culture, Medieval and Early Modern (A)..... | 4 |
| | HUM | 263 | Music and Western Culture, Modern (A)..... | 4 |

| | | | | |
|------|-----|------|--|---|
| A-9 | HUM | 281H | Honors Course: Ancient World (A) | 4 |
| | HUM | 282H | Honors Course: Medieval and Early Modern Periods (A) | 4 |
| | HUM | 283H | Honors Course: Modern World (A) | 4 |
| A-10 | MUS | 211 | Introduction to Music Literature I (A) | 4 |
| | MUS | 212 | Introduction to Music Literature II (A) | 4 |
| | MUS | 213 | Introduction to Music Literature III (A) | 4 |
| A-11 | PHL | 211 | Ancient Philosophy (A) | 3 |
| | PHL | 212 | Medieval and Early Modern Philosophy (A) | 3 |
| | PHL | 213 | Modern Philosophy (A) | 3 |
| A-12 | REL | 150 | Exploring Religion (A) | 3 |
| | REL | 151 | Western Religions (A) | 3 |
| | REL | 152 | Eastern Religions (A) | 3 |
| A-13 | REL | 220 | Old Testament (A) | 3 |
| | REL | 221 | Old Testament (A) | 3 |
| | REL | 222 | New Testament (A) | 3 |
| A-14 | REL | 370 | Religion in American Culture (A) | 3 |
| | REL | 371 | Religion in American Culture (A) | 3 |
| | REL | 372 | American Civil Religion (A) | 3 |
| A-15 | ROM | 241 | Masterpieces of the Romance and Classical Literatures in English Translation (A) | 4 |
| | ROM | 242 | Masterpieces of the Romance Literatures in English Translation (A) | 4 |
| | ROM | 243 | Masterpieces of the Romance Literatures in English Translation (A) | 4 |

Option B — Students take one course in *each* of at least 3 of the following emphases:

- B-1 Emphasis in Fine Arts
- B-2 Emphasis in History
- B-3 Emphasis in Language and Literature
- B-4 Emphasis in Philosophy and Religion

Students may not receive credit in more than one Humanities course which ends in the same number: 1, 2 or 3.

| | | | | |
|-----|--|--|---|--|
| B-1 | <i>Emphasis in Fine Arts</i> | | | |
| A L | 311 | Great Cities, Arts and Ideas: The Western Classical Age (A) | 4 | |
| A L | 312 | Great Cities, Arts and Ideas: The Renaissance (A) | 4 | |
| A L | 313 | Great Cities, Arts and Ideas: The Modern World (A) | 4 | |
| H A | 205 | Purposes of Art (A) | 3 | |
| H A | 206 | History of Western Art: The Ancient World (A) | 4 | |
| H A | 207 | History of Western Art: The Middle Ages and the Renaissance (A) | 4 | |
| H A | 208 | History of Western Art: The Baroque to the Present (A) | 4 | |
| HUM | 221 | The Visual Arts and Western Culture, Ancient (A) | 4 | |
| HUM | 222 | The Visual Arts and Western Culture, Medieval and Early Modern (A) | 4 | |
| HUM | 223 | The Visual Arts and Western Culture, Modern (A) | 4 | |
| HUM | 261 | Music and Western Culture, Ancient (A) | 4 | |
| HUM | 262 | Music and Western Culture, Medieval and Early Modern (A) | 4 | |
| HUM | 263 | Music and Western Culture, Modern (A) | 4 | |
| MUS | 211 | Introduction to Music Literature I (A) | 4 | |
| MUS | 212 | Introduction to Music Literature II (A) | 4 | |
| MUS | 213 | Introduction to Music Literature III (A) | 4 | |
| STA | 101 | How to Look at Art (A) | 4 | |
| B-2 | <i>Emphasis in History</i> | | | |
| HST | 101 | The African Experience (A) | 4 | |
| HST | 102 | The Latin American Experience (A) | 4 | |
| HST | 103 | The East Asian Experience in the Modern World (A) | 4 | |
| HST | 111 | The Roots of European History (A) | 4 | |
| HST | 112 | Maturing of European Civilization (A) | 4 | |
| HST | 113 | Europe in the Modern Age (A) | 4 | |
| HST | 121 | Union to Disunion: America, The First Hundred Years (A) | 4 | |
| HST | 122 | History of the United States: The Nation State (A) | 4 | |
| HUM | 201 | Humanities in the Western World: Ancient (A) | 4 | |
| HUM | 202 | Humanities in the Western World: Medieval and Early Modern (A) | 4 | |
| HUM | 203 | Humanities in the Western World: Modern (A) | 4 | |
| HUM | 204 | The Humanities in the Contemporary World (A) | 4 | |
| HUM | 281H | Honors Course: Ancient World (A) | 4 | |
| HUM | 282H | Honors Course: Medieval and Early Modern Periods (A) | 4 | |
| HUM | 283H | Honors Course: Modern World (A) | 4 | |
| HUM | 296 | The Cultural Traditions of Japan (A) | 4 | |
| REL | 370 | Religion in American Culture (A) | 3 | |
| REL | 371 | Religion in American Culture (A) | 3 | |
| REL | 372 | American Civil Religion (A) | 3 | |
| B-3 | <i>Emphasis in Language and Literature</i> | | | |
| A L | 345 | Jewish Humanities in the Twentieth Century (A) | 4 | |
| ENG | 241 | Introduction to Popular Culture (A) | 3 | |
| ENG | 344 | Jewish-American Literature (A) | 4 | |
| FRN | 341 | French Literary Masterpieces in English Translation (A) | 3 | |
| GRM | 241 | German Literature in English Translation (A) | 3 | |
| GRM | 242 | German Literature in English Translation (A) | 3 | |
| GRM | 243 | German Literature in English Translation (A) | 3 | |
| HUM | 211 | Great Books of Western Culture, Ancient (A) | 4 | |

| | | | | |
|-----|--|--|---|--|
| HUM | 212 | Great Books of Western Culture, Medieval and Early Modern (A) | 4 | |
| HUM | 213 | Great Books of Western Culture, Modern (A) | 4 | |
| HUM | 295 | The Cultural Traditions of Sub-Saharan Africa (A) | 4 | |
| HUM | 297 | The Cultural Traditions of India (A) | 4 | |
| ITL | 341 | Italian Literary Masterpieces in English Translation (A) | 3 | |
| LIN | 280 | Introduction to Sociolinguistics (A) | 4 | |
| PHL | 390 | Philosophy in Literature (A) | 3 | |
| ROM | 241 | Masterpieces of the Romance and Classical Literatures in English Translation (A) | 4 | |
| ROM | 242 | Masterpieces of the Romance Literatures in English Translation (A) | 4 | |
| ROM | 243 | Masterpieces of the Romance Literatures in English Translation (A) | 4 | |
| B-4 | <i>Emphasis in Philosophy and Religion</i> | | | |
| HUM | 294 | The Cultural Traditions of the Islamic World (A) | 4 | |
| HUM | 298 | The Cultural Traditions of China (A) | 4 | |
| 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 | |
| REL | 150 | Exploring Religion (A) | 3 | |
| REL | 151 | Western Religions (A) | 3 | |
| REL | 152 | Eastern Religions (A) | 3 | |
| REL | 220 | Old Testament (A) | 3 | |
| REL | 221 | Old Testament (A) | 3 | |
| REL | 222 | New Testament (A) | 3 | |

GROUPINGS OF GENERAL EDUCATION COURSES IN THE BIOLOGICAL, PHYSICAL, AND MATHEMATICAL SCIENCES¹

Students complete a minimum of three courses; at least one course must be from each of the two major emphases and at least one course must include a laboratory experience.

Only *one* of the following courses may be counted toward the General Education requirement: N S 122, N S 125, N S 162. Students may not receive credit in more than one of the following courses: AST 119, AST 217, AST 229,¹ N S 135, N S 155, N S 1834.

| | | | | |
|-----|--|---|---|--|
| 1. | <i>Emphasis on The Philosophy and Methods of Science</i> | | | |
| 1A | Biological Science content | | | |
| N S | 115 | The Nature and Continuity of Life (N) (Lab) | 4 | |
| N S | 1814 | Natural Science (N) (Lab) ² | 4 | |
| 1B | Geological and Historical content | | | |
| N S | 122 | Human Biosocial Evolution (N) (Lab) | 4 | |
| N S | 125 | Time and Change in Nature (N) (Lab) | 4 | |
| N S | 1824 | Natural Science (N) (Lab) ² | 4 | |
| 1C | Physical Science content | | | |
| AST | 119 | General Astronomy (N) | 4 | |
| AST | 217 | General Astronomy (N) | 4 | |
| N S | 135 | Changing Concepts of the Universe (N) (Lab) | 4 | |
| N S | 1834 | Natural Science (N) (Lab) ² | 4 | |
| PHY | 201 | The Science of Sound I: Rock, Bach and Oscillators (N) | 4 | |
| PHY | 203 | Science of Light and Color (N) | 4 | |
| 2. | <i>Emphasis on Science and Society</i> | | | |
| 2A | Issues in Human Biology | | | |
| FSC | 101 | Food and Society (N) | 3 | |
| HNF | 102 | Nutrition for Humans (N) | 3 | |
| N S | 129 | Biotechnology and Human Values (N) | 4 | |
| N S | 171H | Our Biological Nature (N) ³ | 4 | |
| N S | 209 | Humans and Disease (N) | 4 | |
| 2B | Issues in Environmental Science | | | |
| BOT | 201 | Plants, People and the Environment (N) | 3 | |
| ENT | 201 | Insects and Society (N) | 4 | |
| ENT | 250 | Pests, Environmental Quality and Ecosystem Management (N) | 3 | |
| GLC | 200 | Geology of Human Environment (N) | 4 | |
| N S | 142 | Life, Its Environment (N) (Lab) | 4 | |
| N S | 172H | Our Place in Nature (N) ³ | 4 | |
| N S | 242 | Wilderness Environmental Field Studies (N) | 4 | |
| PHY | 256 | Energy Consumption and Environmental Quality (N) | 4 | |

| | | | |
|------------------------------------|------|---|---|
| 2C Science and Human Values | | | |
| NS | 152 | Science and Culture in the 20th Century (N) | 4 |
| NS | 155 | Cosmology, Humanity's Place in the Universe (N) (Lab)..... | 4 |
| NS | 162 | Race, The Evolution of an Idea (N) (Lab)..... | 4 |
| NS | 173H | Science-Technology and Human Values (N) ³ | 4 |
| PHY | 205 | Bohr and Einstein: The Concept of Nature in Our Day (N) | 4 |

¹ AST 229 is not approved for General Education designation; therefore, this course may not be counted toward the General Education requirement.
² NS 1814, NS 1824, and NS 1834 are designed for students who are enrolled in the Remedial-Developmental Writing Program. The General Education requirement in the Biological, Physical, and Mathematical Sciences may be met by completing NS 1814, NS 1824, and NS 1834.
³ NS 171H, NS 172H, and NS 173H are designed for honors students. The General Education requirement in the Biological, Physical, and Mathematical Sciences may be met by completing NS 171H, NS 172H, and NS 173H.

GROUPINGS OF GENERAL EDUCATION COURSES IN THE SOCIAL AND BEHAVIORAL SCIENCES

Students complete either Option A or Option B

Option A Students take all three courses in one of the following series/sequences.

| | | | | |
|-----|----|-----|--|---|
| A-1 | SS | 201 | Americans and Their Values (S) | 4 |
| | SS | 202 | Power in America (S)..... | 4 |
| | SS | 203 | America and World Problems (S) | 4 |
| A-2 | SS | 211 | Becoming Human: The Social Scientific Perspective (S)..... | 4 |
| | SS | 212 | Coping with Changing Institutions in Modern Society (S) | 4 |
| | SS | 213 | Casualties of Contemporary Society (S) | 4 |
| A-3 | SS | 221 | The Individual and Metropolitan Society (S) | 4 |
| | SS | 222 | Economics, Politics and the Individual in the Metropolis (S) | 4 |
| | SS | 223 | World Urbanization: Cultures and Common Issues (S) | 4 |
| A-4 | SS | 241 | Cultures in Crisis (S) | 4 |
| | SS | 242 | Freedom and Justice (S) | 4 |
| | SS | 243 | War and Morality (S) | 4 |
| A-6 | SS | 251 | Human Perspectives on Urbanization (S)..... | 4 |
| | SS | 252 | Historical Roots of Racism and Ethnocentrism (S).... | 4 |
| | SS | 253 | Minorities in American Cities (S) | 4 |

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|-----|-----|-----|---|---|
| A-7 | SOC | 150 | The Individual in Modern Society (S)..... | 4 |
| | SOC | 160 | Structural Problems of American Society (S)..... | 4 |
| | SOC | 170 | International Problems of Change and Development (S)..... | 4 |

Option B Students take one course in each of the following emphases.

- B-1 Emphasis on the Individual and Society
- B-2 Emphasis on Social Institutions and Processes
- B-3 Emphasis on Global Interdependence and Conflict

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|-----|--|-----|--|---|
| B-1 | <i>Emphasis on the Individual and Society</i> | | | |
| | ANP | 171 | Introduction to Sociocultural Anthropology (S) | 4 |
| | PLS | 251 | Human Values and Politics: On Liberty (S) | 4 |
| | PLS | 253 | Human Values and Politics: Authority and the Individual (S) | 4 |
| | SS | 201 | Americans and Their Values (S) | 4 |
| | SS | 211 | Becoming Human: The Social Scientific Perspective (S)..... | 4 |
| | SS | 221 | The Individual and Metropolitan Society (S) | 4 |
| | SS | 241 | Cultures in Crisis (S) | 4 |
| | SS | 251 | Human Perspectives on Urbanization (S)..... | 4 |
| | SOC | 150 | The Individual in Modern Society (S)..... | 4 |
| B-2 | <i>Emphasis on Social Institutions and Processes</i> | | | |
| | ANP | 250 | Culture, Environment and Adaptation (S) | 4 |
| | ANP | 264 | Great Discoveries in Archaeology (S)..... | 4 |
| | GEO | 100 | People, Location and Environment (S) | 4 |
| | SS | 202 | Power in America (S)..... | 4 |
| | SS | 212 | Coping with Changing Institutions in Modern Society (S) | 4 |
| | SS | 213 | Casualties of Contemporary Society (S) | 4 |
| | SS | 222 | Economics, Politics and the Individual in the Metropolis (S) | 4 |
| | SS | 242 | Freedom and Justice (S) | 4 |
| | SS | 252 | Historical Roots of Racism and Ethnocentrism (S).... | 4 |
| | SS | 253 | Minorities in American Cities (S) | 4 |
| | SOC | 160 | Structural Problems of American Society (S)..... | 4 |
| B-3 | <i>Emphasis on Global Interdependence and Conflict</i> | | | |
| | GEO | 204 | World Regional Geography (S) | 4 |
| | SS | 203 | America and World Problems (S) | 4 |
| | SS | 223 | World Urbanization: Cultures and Common Issues (S) | 4 |
| | SS | 243 | War and Morality (S) | 4 |
| | SOC | 170 | International Problems of Change and Development (S)..... | 4 |
| | U P | 231 | Evolution of Urban Communities (S) | 4 |