
ILLINOIS ARTICULATION INITIATIVE

To Facilitate Interinstitutional Transfer

**ILLINOIS TRANSFERABLE
GENERAL EDUCATION CORE CURRICULUM**

A curriculum designed to ease the transfer of students
among Illinois' public and private associate and baccalaureate
degree-granting colleges and universities.

Adopted Unanimously by the Steering Panel, May 24, 1994
Revision Adopted Unanimously by the Steering Panel, April 14, 2000

Endorsed by the Illinois Board of Higher Education, September 7, 1994
Endorsed by the Illinois Community College Board, September 16, 1994
Endorsed by the Illinois State Board of Education, May 22, 1997

Revision Effective for Freshmen Entering on or after Summer 2001

*Published by
The Illinois Board of Higher Education
431 East Adams, Second Floor
Springfield, Illinois 62701
(5/00)*

Printed on Recycled Paper

THE GENERAL EDUCATION CORE CURRICULUM: AN INTRODUCTION

Each fall, 30,000 students transfer from one Illinois institution to another. While just over half of these students transfer in the traditional path from an associate to a baccalaureate degree-granting college or university, nearly half transfer from one community college to another, from one baccalaureate institution to another, or from a baccalaureate institution to an associate degree-granting institution. A high proportion of students transfer more than once in pursuit of the baccalaureate degree. To facilitate the transfer of students among all Illinois colleges and universities—public and private, associate and baccalaureate degree granting, the Illinois Board of Higher Education, the Illinois Community College Board, and the Transfer Coordinators of Illinois Colleges and Universities jointly launched the Illinois Articulation Initiative (IAI) in January 1993.

As the first step in facilitating student transfer statewide, panels of faculty members assisted by Transfer Coordinators were empowered to develop a General Education Core Curriculum that would be acceptable in transfer at all Illinois institutions in lieu of each college or university's own campus-wide general education curriculum of comparable size. Since the General Education Core Curriculum is designed specifically for students who intend to transfer from one institution to another in pursuit of their baccalaureate degrees, the curriculum includes only lower-division courses.

The General Education Core Curriculum is expected to benefit Illinois students. Past articulation efforts between associate and baccalaureate degree-granting institutions were based on the assumption that students knew either what baccalaureate institution they intended to transfer to or what baccalaureate major they wished to pursue, or both. Large numbers of students, however, enter Illinois colleges and universities each year without clear educational or career goals, and others find their original goals were unrealistic. Indeed, the number of students who transfer from one institution to another, and the increasing numbers who transfer more than once, suggest that many students will benefit from agreement on a basic curriculum accepted by all institutions as a good way for students, particularly undecided students, to begin their undergraduate experience.

Assumptions

Several assumptions guided the development of the General Education Core Curriculum. First, it is assumed that all entering freshmen meet or exceed the high school course requirements for admission to public institutions that became effective in fall 1993: four years of English (emphasizing written and oral communications and literature), three years of social studies (emphasizing history and government), three years of mathematics (introductory through advanced algebra, geometry, trigonometry, or fundamentals of computer programming), three years of laboratory science, and two years of electives selected from foreign language, music, vocational education, or art.

Second, it is assumed that all Illinois colleges and universities have in place processes for assessing the reading, writing, and mathematics skills of entering students in order to assure appropriate course placement.

Third, it is assumed that, as a result of entry assessment, students found to be in need of remedial or developmental work receive the assistance they need early in their academic careers.

Fourth, it is assumed that every college and university has in place criteria and processes that assure the quality of all credit-bearing courses and the comparability of different sections of the same course irrespective of delivery mode.

Finally, it is assumed that, while each degree-granting institution has developed its own general education program as part of its undergraduate degree requirements, most general education program objectives are similar from one institution to another.

Development Process

The General Education Core Curriculum was developed by five 22-member faculty panels, with overall guidance and direction provided by a 23-member Steering Panel. In all, 123 faculty members and transfer coordinators representing the 12 public universities, 40 community colleges, and 14 private colleges and universities in Illinois participated in the development process.

In October 1993, the first draft of the Curriculum was distributed to every Illinois college and university requesting comment. Four hearings to receive oral comment were held in November, and hundreds of written comments were received. Beginning in December and throughout the spring of 1994, the Field Panels and the Steering Panel grappled with the curriculum issues and course suggestions raised in the oral and written comments received. Each Field Panel and the Steering Panel used a consensus-building process to reach decisions. The final recommendations on both the content of the curriculum and on proposed implementation steps and time table were adopted unanimously by the members of the Steering Panel on May 24, 1994, for transmission to the Board of Higher Education and Illinois Community College Board.

Results

The General Education Core Curriculum, described fully in the pages that follow, consists of courses in written and oral communication and in mathematics and of courses designed to introduce students to the breadth of knowledge and the different modes of inquiry of different academic disciplines. The curriculum balances requirements among the core arts and sciences disciplines, with students selecting courses from the natural sciences, humanities and fine arts, and the social and behavioral sciences.

The Illinois General Education Core Curriculum closely mirrors the typical lower-division distribution-model general education requirements of Illinois' baccalaureate degree-granting institutions, parallels the national profile of general education curricula prepared by the Association of American Colleges, and is similar to the transfer and articulation agreements of a number of other states. In addition, the General Education Core Curriculum eliminates the differences between the general education requirements for the Associate in Arts and the Associate in Science degrees awarded by the community colleges, differences which have no parallel among Illinois' baccalaureate degree-granting institutions.

Because competency in a second or foreign language is not a widespread requirement in the general education programs of baccalaureate colleges and universities in this state, but is instead a requirement imposed by some constituent colleges or by some majors, community college students are strongly advised to become competent in a second or foreign language prior to transferring.

Implementation

The Illinois General Education Core Curriculum was implemented statewide for first-time freshmen entering in summer session 1998 and thereafter. A full-scale review of the Curriculum and its efficacy in facilitating the transfer of students among Illinois institutions is scheduled every five years, with the first review during 1999-2000. This revision is a result of the first review.

Following adoption of the General Education Core Curriculum, the Illinois Articulation Initiative began establishing panels of faculty members to recommend lower-division courses essential for students to complete in order to transfer as juniors in particular baccalaureate majors. As one panel completed its recommendation, another was formed until the most frequent baccalaureate majors offered by multiple institutions were addressed. Majors were selected in order of the number of transfer students statewide. Twenty-six Baccalaureate Majors' Panels have been established.

THE PURPOSE OF GENERAL EDUCATION WITHIN UNDERGRADUATE EDUCATION

The goal of a general education is to develop individuals with sensitivity to and a comprehensive understanding of the world in which they live. A general education helps students develop moral values, habits of critical thinking and introspection, intellectual sophistication, and an orientation to learning and investigation that will become life long. Generally educated individuals are conversant with scientific inquiry, appreciate the insights into the human character and culture provided by literature and the arts, understand human behavior and social institutions, are aware of history, respect human diversity, and act both ethically and responsibly as members of society.

The general education curriculum constitutes that part of an undergraduate education that develops breadth of knowledge and the expressive skills essential to more complex and in-depth learning throughout life. To develop breadth of knowledge, general education courses acquaint students with the methods of inquiry of the various academic disciplines and the different ways these disciplines view the world. The academic disciplines comprising the general education curriculum are the physical and life sciences, the humanities and fine arts, the social and behavioral sciences, and interdisciplinary combinations of these. To develop expressive skills, the general education curriculum requires courses that enhance written and oral communication and quantitative reasoning skills.

GENERAL EDUCATION CORE CURRICULUM REQUIREMENTS

Communication:	3 courses (9 semester credits ¹), <i>including a two-course sequence in writing (6 semester credits) and one course (3 semester credits) in oral communication</i>
Mathematics:	1 to 2 courses (3 to 6 semester credits)
Physical and Life Sciences:	2 courses (7 to 8 semester credits), <i>with one course selected from the life sciences and one course from the physical sciences and including at least one laboratory course</i>
Humanities and Fine Arts:	3 courses (9 semester credits), <i>with at least one course selected from humanities and at least one course from the fine arts</i>
Social and Behavioral Sciences:	3 courses (9 semester credits), <i>with courses selected from at least two disciplines</i>
TOTAL:	12 to 13 courses (37 to 41 semester credits)

No more than two courses from any one discipline can be used to fulfill General Education Core Curriculum requirements.

Students must earn a passing letter grade in each course used to fulfill requirements. A grade of C or better is required for satisfactory completion of the Communication writing requirement.

¹Credits are expressed as semester credits. For a translation into quarter credits, see the Appendix.

Students may substitute satisfactory scores on AP exams for specific IAI General Education Core Curriculum courses in fulfilling the core requirements. This does NOT mean, however, that an exam can also be used to substitute for a similar course required in the student's selected major. Students will still need to submit official AP scores to all institutions attended.

Passing scores (based on national norms) on appropriate CLEP exams may be used to fulfill requirements by students who earn an Associate in Arts or an Associate in Science degree prior to transfer. For other transfer students, receiving institutions will follow established CLEP-credit policies.

Students are encouraged to complete two courses (six credits) in mathematics in order to become reasonably quantitatively literate.

*While few baccalaureate institutions require a foreign or second language in their campus-wide general education requirements, competency through two, three, or four college semesters (or the high school equivalent) in a single foreign or second language is required for the Bachelor of Arts (B.A.) degree at some universities, for all bachelor's degrees in some colleges (such as colleges of liberal arts), and for some bachelor's degree majors. Thus, community college students who intend to transfer should plan to complete the foreign language courses required by their intended institution, college within a university, and/or major **prior to transferring**.*

GENERAL EDUCATION CORE CURRICULUM COURSE CRITERIA OR CONDITIONS

The foundation skills of communication (reading, writing, speaking, and listening), critical thinking and analysis/synthesis, quantification, computer use, and the use of resources (e.g., the library) should be embedded in **every** general education course. General education courses also should be broad in scope rather than narrowly specialized and should not require prerequisites (except high school preparation or when part of a multi-course sequence).

To recognize and engender respect and value for human diversity, a general education should examine ethical issues and the knowledge, wisdom, and creativity of diverse human groups, including (but not limited to) different cultural, ethnic, and racial groups, as well as of persons of different ages and genders. To this end, graduation from an Illinois college or university should require satisfactory completion of one or more courses incorporating human diversity for the purpose of improving human relations through an educated citizenry. While several courses within the General Education Core Curriculum are designed specifically to examine such diversity, each discipline area within the Curriculum should, as much as possible, throughout all its courses incorporate authors, sources, and topics that expose students to the realities of a culturally diverse world.

An interdisciplinary, integrative general education course is not required in the General Education Core Curriculum. However, colleges and universities are encouraged to develop such courses as creative approaches to fulfilling the general education objectives within each field.

COMMUNICATION

Communication is the art of expressing and exchanging ideas in speech or writing. The complexities of modern life demand that individuals have a mastery of both oral and written communication skills. Therefore, the General Education Core Curriculum requires competency in both skills. To fulfill the requirement, students should satisfactorily complete two three-semester-credit sequenced courses in written communication and one three-semester-credit course in oral communication. *Effective for freshmen entering in summer 1999 and beyond, satisfactory completion of the writing courses will mean a grade of C or better.*

Because communication skills provide a foundation for success in later academic work, general education communication courses should be completed early in a student's degree program, and communication skills should continue to be developed and refined across the undergraduate curriculum.

C1 900 and 901: WRITING COURSE SEQUENCE (6 semester credits). The writing course sequence: (1) develops awareness of the writing process, (2) provides inventional, organizational, and editorial strategies, (3) stresses the variety of uses for writing, and (4) emphasizes critical skills in reading, thinking, and writing. The writing course sequence *must include* production of documented, multi-source writing in one or more papers for a combined total of at least 2500 words in final version. *Since the AP exam does not include a research paper, a score of 3 or better on the AP exam on Language and Composition or Literature and Composition will be accepted as one of the two writing courses but does not satisfy the multi-source writing requirement.*

Upon successful completion of the writing course sequence, students should have the competencies listed below. *The student is expected to:*

- comprehend, analyze, and critique a variety of texts including academic discourse;
- use various invention, drafting, and revising/editing strategies depending upon the purpose of the writing, the materials available to the writer, and the length of time available for the task;
- engage a topic in which the writer explores writing as a means of self-discovery and produces a text that is designed to persuade the reader of the writer's commitment;
- demonstrate a theoretical understanding of rhetorical context (that is, how reader, writer, language, and subject matter interact);
- establish a voice appropriate to the topic selected and the rhetorical situation;
- clarify major aims, arrange material to support aims, and provide sufficient materials to satisfy expectations of readers;
- select, evaluate, and interact effectively with sources, subordinating them to the writer's purpose and creating confidence that they

have been represented fairly;

- demonstrate satisfactory control over the conventions of edited American English and competently attend to the elements of presentation (including layout, format, and printing); and
- recognize the existence of discourse communities with their different conventions and forms.

C2 900: ORAL COMMUNICATION (3 semester credits). The oral communication course, either a traditional public speaking or a hybrid course, combines communication theory with the practice of oral communication skills. The oral communication course: (1) develops awareness of the communication process, (2) provides inventional, organizational, and expressive strategies, (3) promotes understanding of and adaptation to a variety of communication contexts, and (4) emphasizes critical skills in listening, reading, thinking, and speaking. Students are expected to prepare and give **at least three substantial speeches**, including both informative and persuasive assignments.

Upon successful completion of the oral communication course, students should have attained **at least** the competencies in both theory and practice as listed below.

Communication Theory—The student is expected to:

- have a theoretical understanding of communication;
- understand the relationships among self, message, and others; and
- understand the process of effective listening.

Communication Practice—The student is expected to:

- phrase clear, responsible, and appropriate

- purpose statements;
- develop specific, well-focused thesis statements;
- analyze an audience and situation, and then adapt a message to those needs;
- generate ideas and gather supporting material;
- incorporate material from various appropriate sources, using proper verbal citations;
- use evidence, reasoning, and motive appeals in persuasive speaking;
- prepare and use visual aids that promote clarity and interest;
- organize and outline an effective message;
- use language that is appropriate to enhance understanding and effect the desired result;
- establish credibility by demonstrating knowledge and analysis of topic;
- use extemporaneous delivery with reasonable fluency, expressiveness, and comfort;
- cope effectively with the tensions involved in public speaking;
- demonstrate acceptable ethical standards in research and presentation of materials; and
- listen to, analyze, and critique oral communication.

MATHEMATICS

The mathematics component of general education focuses on quantitative reasoning to provide a base for developing a quantitatively literate college graduate. Every college graduate should be able to apply simple mathematical methods to the solution of real-world problems. A quantitatively literate college graduate should be able to:

- interpret mathematical models such as formulas, graphs, tables, and schematics, and draw inferences from them;
- represent mathematical information symbolically, visually, numerically, and verbally;
- use arithmetic, algebraic, geometric, and statistical methods to solve problems;
- estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results; and
- recognize the limitations of mathematical and statistical models.

Courses accepted in fulfilling the general education mathematics requirement emphasize the development of the student's capability to do mathematical reasoning and problem solving in settings the college graduate may encounter in the future. General education mathematics courses should not lead simply to an appreciation of the place of mathematics in society nor should they be merely mechanical or computational in character. The utilization of technology in general education mathematics courses should enable the student to recognize its value and understand its appropriate use.

To accomplish this purpose, students should have at least one course at the lower-division level that emphasizes the foundations of quantitative literacy and, preferably, a second course that solidifies and deepens this foundation to enable the student to internalize these habits of thought. Complete course descriptions and appropriate prerequisites for courses listed below are contained in the *Illinois Mathematics and Computer Science Articulation Guide* prepared by the Joint Task Force of IMACC and ISMAA in May 1995, second printing June 1998. The course descriptions below are intended to maintain consistency with the descriptions in the *Guide* and will change as the *Guide* changes. *All courses listed require as prerequisites at least satisfactory completion of intermediate algebra and geometry* (the high school courses expected for college admission).

To fulfill the general education mathematics requirement, students are expected to complete satisfactorily one to two courses (three to six semester credits) as follows:

A college-level calculus course (M1 900) (prerequisite: C or better in college algebra)

A score of 3 or higher on the AP Calculus exam will be accepted as equivalent. This does *NOT* mean, however, that the exam and score can also be used to substitute for a calculus course required in a specific major.

OR

At least one selection from the following list:

M1 901: QUANTITATIVE LITERACY (3-4 credits):
Develops conceptual understanding and problem-solving, decision-making, and analytic skills dealing with quantities and their magnitudes and interrelationships, using calculators and personal

computers as tools. Includes representing and analyzing data through such statistical measures as central tendency, dispersion, normal and chi-square distributions, and correlation and regression to test hypotheses (maximum of one-

third of course); using logical statements and arguments in a real-world context; estimating, approximating, and judging the reasonableness of answers; graphing and using polynomial functions and systems of equations and inequalities in the interpretation and solution of problems; and selecting and using appropriate approaches and tools in formulating and solving real-world problems. Prerequisite: C or better in intermediate algebra and geometry.

M1 902: GENERAL EDUCATION STATISTICS (3-4 credits): Focuses on mathematical reasoning and the solving of real-life programs, rather than on routine skills. Descriptive methods (frequency distributions and graphing and measures of location and variation), basic probability theory (sample spaces, counting, factorials, combinations, permutations, and probability laws), probability distributions (normal distributions and normal curve, binomial distribution, and random samples and sampling techniques), statistical inference (estimation, hypothesis testing, t-test and chi-square test, and errors), correlation and regression, and f-test and analysis of variance. Prerequisite: C or better in intermediate algebra and geometry.

M1 903: MATHEMATICS FOR ELEMENTARY TEACHING I AND II (3-4 credits each): Focuses on mathematical reasoning and problem solving, with calculators and microcomputers used in problem solving. Topics are selected from: sets, functions, and logic; whole numbers, integers, rational numbers, irrational numbers and the real number system, number theory, probability, statistics, measurement, and non-metric geometry. Fulfills the general education requirement only for students seeking state certification as elementary teachers. Prerequisite: C or better in intermediate algebra and geometry.

M1 904: GENERAL EDUCATION MATHEMATICS (3-4 credits): Focuses on mathematical reasoning and the solving of real-life problems. Three or four topics are studied in depth, with at least three chosen from the following list: geometry, counting techniques and probability, graph theory, logic/set theory, mathematical modeling, mathematics of finance, game theory, linear programming, and statistics. The use of calculators and computers is strongly encouraged. Prerequisite: C or better in intermediate algebra and geometry.

M1 905: DISCRETE MATHEMATICS (3-4 credits): Introduction to analysis of finite collections and mathematical foundations of sequential

machines, computer system design, data structures, and algorithms. Includes sets and logic, subscripts, arrays, number systems, counting, recursion, graph theory, trees, nets, Boolean algebra. Prerequisite: C or better in college algebra.

M1 906: FINITE MATHEMATICS (3-4 credits): Emphasis on concepts and applications, rather than mathematical structures. *Form A* (Designed especially for students in business, economics, social sciences, and life sciences, with applications drawn from these fields): Includes such topics as vectors, determinants, matrices, and matrix algebra; systems of linear equations and matrices; systems of inequalities and linear programming; simplex method; set theory, logic, and Boolean algebra; counting and probability theory; stochastic processes; game theory; Markov chain methods; mathematical modeling; and the mathematics of finance. *Form B* Matrix algebra; systems of linear equations and matrices; determinants; vectors in 2-space and 3-space; vector spaces; eigenvalues and eigenvectors. Prerequisite: C or better in college algebra.

M1 907 ELEMENTARY MATHEMATICAL MODELING (3-4 credits): Focuses on mathematical reasoning through the active participation of students in building a knowledge base of numeric, geometric, and algebraic models. Integrates the use of graphing calculators and personal computers. Includes inductive and deductive reasoning, mathematical proof, mathematical modeling in problem solving, and limitations therein. Topics may include sequences and series in modeling, variables and functions, graphical, tabular, and formulaic representation of algebraic functions, algebraic functions in modeling, logarithmic scales, logarithmic functions and exponential functions in modeling. Prerequisite: C or better in both intermediate algebra and geometry.

PHYSICAL AND LIFE SCIENCES

The purpose for the study of science is (1) to develop students' understanding of the methods of scientific inquiry, including the formulation and testing of hypotheses, (2) to familiarize students with selected scientific principles in the physical and life sciences, and (3) to enable students to make informed decisions about personal and societal issues.

To achieve this purpose, students are expected to complete satisfactorily a minimum of two courses (7 to 8 semester credits) to fulfill the general education science requirement.

In order for students to understand the methods of scientific inquiry, including the development of the skills and disposition necessary to become independent inquirers about the natural world, at least one general education science course must include a laboratory component that meets a minimum of two hours per week. Computer simulations may be used to augment instruction but are not generally considered suitable replacements for hands-on experiments. In the laboratory experience, students will be expected to:

- formulate or evaluate questions (hypotheses),
- plan and conduct experiments (test hypotheses),
- make systematic observations and measurements,
- interpret and analyze data,
- draw conclusions, and
- communicate the results (orally and/or in writing).

In order for students to become familiar with selected scientific principles, at least one course must be selected from the life sciences and one course from the physical sciences. The generic courses described below provide students a general education in the sciences. *Students with appropriate preparation may substitute an IAI-approved course for science majors for a more general course described below.*

Life Sciences

L1 900, 900L: GENERAL EDUCATION BIO-LOGY (3-5 credits): A laboratory course emphasizing scientific inquiry through selected concepts of biology, such as organization, function, heredity, evolution, and ecology. Biological issues with personal and social implications will be introduced to enable students to make informed decisions. *A score of 3 or higher on the AP Biology exam will be accepted as L1 900L.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

L1 901, 901L: PLANTS AND SOCIETY (3-5 credits): Emphasizes scientific inquiry through selected concepts in biology, such as organization, function, heredity, evolution, and ecology, using plants as the type of organism. Topics may include plant structure, growth, genetics, evolution, physiology, reproduction, and the economic

importance and interrelationships between plants and humans.

L1 902, 902L: ANIMALS AND SOCIETY (3-5 credits): Emphasizes scientific inquiry through selected concepts in biology, such as organization, function, heredity, evolution, and ecology, using animals as the type of organism. Topics may include animal structure, growth, genetics, evolution, physiology, reproduction, and behavior.

L1 903, 903L: MICROBES AND SOCIETY (3-5 credits): Emphasizes scientific inquiry through selected concepts in biology, such as organization, function, heredity, evolution, and ecology, using microbes as the type of organism. Topics may include a survey of microorganisms, the role of microorganisms in health and disease, ecological and economic roles of microbes, and the role of microorganisms in biotechnology.

L1 904, 904L: HUMAN BIOLOGY (3-5 credits): Examines practical aspects of selected concepts in

biology and their application to technology. Concepts may include heredity, growth, development, health, and ecology. Human systems may be studied as they relate to the major topics. Emphasis will be placed on the relationship of the issues to the individual and society.

L1 905, 905L: ENVIRONMENTAL BIOLOGY (3-5 credits): Examines ecological principles in relation to environmental problems. Emphasizes current environmental issues and possible solutions and courses of action.

L1 906 906L: HEREDITY AND SOCIETY (3-5 credits): Introduction to basic genetic principles and to contemporary issues in biotechnology. Addresses the ethical, political, and social implications of biological advances in the area of genetics.

L1 907, 907L: EVOLUTION (3-5 credits): Examines the origin of life and its diversification from a scientific perspective, including the impact of evolution on human thought.

Physical Sciences

P1 900, 900L: GENERAL EDUCATION PHYSICS (3-5 credits): A laboratory course that introduces the concepts and methods of physics, including mechanics, heat, electricity and magnetism, and modern physics. *A score of 3 or higher on the AP Physics exam will be accepted as P1 900L.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

P2 900, 900L: CALCULUS-BASED PHYSICS I (4-5 credits): Topics include mechanics (kinematics, Newton's 3 laws, work and energy, conservation of linear momentum, angular momentum, rotational dynamics, gravitation and Kepler's law, and harmonic motion), electricity and magnetism (charge; electric field and potential; resistance, capacitance, and inductance; RCL circuits; laws of Gauss, Ampere and Faraday; magnetic properties; and Maxwell's equations), heat and fluids (laws of thermodynamics, ideal gases and thermal properties, Kinetic theory of gases, and fluid mechanics) and optics.

P1 901, 901L: PHYSICS AND SOCIETY (3-5 credits): Examines selected concepts and methods from the following topics relating to physical phenomena encountered in the natural world and in human society: mechanics, heat, acoustics and waves, light and optics, and modern physics.

P1 902, 902L: GENERAL EDUCATION CHEMISTRY (3-5 credits): A laboratory course emphasizing the general principles and theories of chemistry, including fundamentals of inorganic chemistry, atomic structure and states of matter, bonding, stoichiometry, acid-base concepts, periodicity, and solution chemistry. *A score of 3 or higher on the AP Chemistry exam will be accepted as P1 902L.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

P1 903, 903L: CHEMISTRY AND SOCIETY (3-5 credits): Examines the influence of chemistry on society through the study of contemporary issues, such as health, environment, and other applications of chemistry to everyday life.

P1 904, 904L: GENERAL EDUCATION ORGANIC CHEMISTRY (3-5 credits): Fundamental principles of organic chemistry, including general aspects of structure, bonding, and nomenclature. Stresses the correlation of structure to physical properties and chemical reactivity. May include commercial and/or biological applications of organic compounds.

P1 905, 905L: EARTH SCIENCE (3-5 credits): Examines basic principles and concepts of earth sciences. Concepts may be drawn from one or more of the following: geology, meteorology, oceanography, astronomy, or climatology.

P1 906, 906L: INTRODUCTION TO ASTRONOMY (3-5 credits): Examines astronomical phenomena and concepts, including the solar system, stars and galaxies, planetary motions, atoms and radiation, and the origin and evolution of the universe.

P1 907, 907L: INTRODUCTION TO GEOLOGY (3-5 credits): Examines basic geologic principles from a physical or an historical perspective. Includes such topics as the formation of rocks and minerals, internal and external processes modifying the earth's surface and phenomena, and the evolutionary history of the earth, including its life forms, oceans, and atmosphere.

P1 908, 908L: ENVIRONMENTAL GEOLOGY (3-5 credits): Examines human interaction with geologic processes and hazards, including earthquakes, volcanoes, landslides, subsidence, hydrology, and flooding; occurrence and availability of geologic resources, such as energy, water, and

minerals; and land-use planning, pollution, waste disposal, environmental impact, health, and law.

P1 909, 909L: PHYSICAL GEOGRAPHY (3-5 credits): Emphasizes elements of the physical environment, including atmospheric, climatic, hydrologic, and geologic processes; the spatial variations of these processes; and the inter-relationship between these processes and the human environment.

P9 900, 900L: GENERAL PHYSICAL SCIENCE (3-5 credits): Emphasizes the fundamental principles of chemistry, physics, geology, meteorology, and astronomy and the philosophical importance of scientific discoveries.

LP 900, 900L: INTERDISCIPLINARY PHYSICAL AND LIFE SCIENCE (3-5 credits): Interdisciplinary courses that combine study of physical *and* life science disciplines and that meet the criteria in the introduction above.

THE HUMANITIES AND FINE ARTS¹

Study in the humanities and fine arts develops an understanding of what it means to be human—the struggles and aspirations, comedies and tragedies, and achievements and failures of human beings; wrestles with the basic questions that confront all human beings in the course of their lives—identity, beauty, courage, love, truth, justice, and morality; and examines the dreams, traditions, and cultural expressions of peoples throughout time who have wrestled with these same questions. To understand what it means to be human, one must understand oneself in relation to the natural world and in relation to others, reflect on ideas and confront presuppositions from one's own and other cultures, and respond creatively.

Thus, study in the humanities and fine arts focuses on intellectual and cultural expression approached through historical, hermeneutic, cultural, and aesthetic investigations. Courses designed to fulfill the general education humanities and fine arts requirement involve students in the basic questions and substance of the humanities and fine arts, as well as in the methods used to approach these questions. Courses in philosophy, religious studies, literature, history, and the history and appreciation of the visual and performing arts, as well as interdisciplinary courses, are typically included among those considered part of a general education. Because critical thinking, investigation, and reflection are necessary to the study of the humanities and fine arts, these processes—as embodied in writing (essays and essay examinations) and speaking (oral presentations and discussion)—are a significant component of humanities and fine arts courses. Each course will contain a writing component as an integral part of instruction and/or assessment, such as reaction papers/journals, essay questions on exams, or formal research papers. Where appropriate, course readings and activities also reflect an awareness of the United States' multi-cultural inheritance: race, ethnicity, gender, and class.

By contrast, courses that primarily focus on developing a skill, such as performance or production courses in the arts, technique or professional courses in communications, and those foreign language courses that focus on learning to speak and write a different language at an elementary level, generally are not considered part of a general education in the humanities and fine arts.

To fulfill the general education humanities and fine arts requirement, students should select a minimum of three courses (nine semester credits) from the courses described below, selecting at least one course from the humanities and one from the fine arts. Interdisciplinary courses encompassing both the humanities and the fine arts may be used in either category.

Humanities

Foreign Language

H1 900: FOREIGN LANGUAGE IV (3-4 cred-its): A fourth semester college (second semester intermediate) course (or above) in a foreign language that is designed to increase knowledge of the language and culture of the country or countries speaking the language.

H2 900: FOUNDATIONS OF CIVILIZATION (3 credits): The development of world civilizations from the earliest peoples to modern global interdependence among peoples and nations. Emphasis is on the relationship between present and past and on the recurring themes that connect past, present, and future. Examines landmark documents and artifacts that shaped human events and cultures.

H2 901, 902: WESTERN CIVILIZATION I, II (3 credits each): History of the intellectual and cultural development of western society from the earliest times to the present. Examines landmark documents and artifacts that reflect Western culture. (See also History of Western Civilization

¹ The Humanities and Fine Arts Panel acknowledges its debt to the previous Committee of Scholars on the Humanities for its work in defining the Humanities.

² Political, economic, and social history courses are found in the Social and Behavioral Science section.

*History and Civilization*²

in the Social and Behavioral Science section; credit cannot be used to fulfill both Humanities and Social Science requirements.) *A score of 4 or 5 on the AP European History exam will be accepted as H2 902.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

H2 903N: NON-WESTERN CIVILIZATIONS (3 credits): History of the intellectual and cultural development of the non-Western societies of Asia, the Middle East, Latin America, or Africa. Examines the origins of contemporary non-Western cultures and their adaptations to and influence on Western culture. (See also History of Non-Western Civilization in the Social and Behavioral Science section; credit cannot be used to fulfill both Humanities and Social Science requirements.)

H2 904, 905: U.S. HISTORY/ CIVILIZATION I, II (3 credits each): Survey of the major intellectual, literary, and cultural developments, landmark documents, and artifacts in the United States in their historical context from the colonial days to the present. Considers both the ways in which Americans have extended the European tradition and the contributions of diverse cultural constituencies. (See also U.S. History in the Social and Behavioral Science section; credit cannot be used to fulfill both Humanities and Social Science requirements.) *A score of 4 or 5 on the AP U.S. History exam will be accepted as H2 904 and 905.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

Literature

H3 900: INTRODUCTION TO LITERATURE (3 credits): Reading and analysis of texts from a variety of literary forms and periods. Approaches to determining literary meaning, form, and value.

H3 901: INTRODUCTION TO FICTION (3 credits): Reading and analysis of short stories and/or novels from a variety of periods. Approaches to determining literary meaning, form, and value.

H3 902: INTRODUCTION TO DRAMA (3 credits): Reading and analysis of plays of various types and from a variety of periods. Approaches to determining literary meaning, form, and value.

H3 903: INTRODUCTION TO POETRY (3 credits): Reading and analysis of poetry of various types and from a variety of periods. Approaches to determining literary meaning, form, and value.

H3 904: INTRODUCTION TO NON-FICTIONAL PROSE (3 credits): Reading and analysis of non-fictional prose in a variety of forms and from a variety of periods. Approaches to determining literary meaning, form, and value.

H3 905: INTRODUCTION TO SHAKESPEARE (3 credits): An introduction to Shakespeare's works by genre (comedy, history, tragedy, and non-dramatic poetry) or on some other basis.

H3 906, 907: WESTERN/WORLD LITERATURE IN TRANSLATION I, II (3 credits each): Reading and analysis of representative masterpieces from a variety of nationalities and epochs. Focuses primarily on Western literature, but may also include selections from other nationalities.

H3 908N: NON-WESTERN LITERATURE IN TRANSLATION (3 credits): Reading and analysis of representative masterpieces from a variety of nationalities and epochs.

H3 909: [NATIONAL] LITERATURE IN TRANSLATION (3 credits): Introduction to the literature of a specific nationality (e.g., French, German, Italian, Russian, etc.) for students not versed in the original language.

H3 910D: AMERICAN ETHNIC LITERATURE (3 credits): Examination of various types of literary works that reflect the experience and construction of racial and cultural minority identity.

H3 911D: LITERATURE AND GENDER (3 credits): Examination of various types of literary works that reflect the experience and construction of gender identity. May emphasize selected genres or the literary contributions of a gender-defined group (e.g., women writers).

H3 912, 913: SURVEY OF BRITISH LITERATURE I, II (3 credits each): Development of British literature from its beginnings to the present through analysis of representative texts.

H3 914, 915: SURVEY OF AMERICAN LITERATURE I, II (3 credits each): Development of literature of the United States from its beginnings to the present through analysis of representative texts.

H3 916, 917: SURVEY OF [NATIONAL] LITERATURE I, II (3 credits each): Development of literature of an other-than-English-speaking nationality through analysis of representative texts. (Literature is read in the original language.)

Philosophy

H4 900: INTRODUCTION TO PHILOSOPHY (3 credits): A study of recurrent, persistent human principles and problems such as the validity of knowledge, the nature of truth, the nature of identity, free will and determination, moral and aesthetic values, and religious belief systems.

H4 901, 902: HISTORY OF PHILOSOPHY I, II (3 credits each): A study of the major philosophers and schools of thought, including the social, political, and religious contexts within which each developed, from the pre-Socratic through the 20th Century.

H4 903N: NON-WESTERN PHILOSOPHY (3 credits): An introduction to selected philosophical concepts and value systems of several non-Western cultures.

H4 904: ETHICS (3 credits): A study of the principal ethical theories and concepts of human conduct and character, as well as a critical evaluation of these theories and concepts as they apply to particular moral problems and decisions.

H4 905: PHILOSOPHY OF RELIGION (3 credits): A study of selected religious concepts and theories, such as the existence and nature of a deity, nature of good and evil, reason and faith, ethics, and afterlife. May include an examination of the nature of religious language and experience.

H4 906: INTRODUCTION TO LOGIC/CRITICAL THINKING (3 credits): A study of the rules of valid judging and reasoning, both inductive and deductive, in a traditional, language-centered context rather than a symbolic context. Logical analysis of both formal and informal fallacies and of the consistency and logical consequences of a given set of statements. Logical analysis is applied to concrete problems dealing with our knowledge of reality.

Religious Studies

H5 900: INTRODUCTION TO RELIGION (3 credits): Introduction to the concept of religion within society, treating the nature, origin, beliefs, practices, and role that religion plays.

H5 901: FOUNDATIONAL RELIGIOUS TEXTS (3 credits): The humanistic study of one or more of the foundational documents of the world's major religions, such as the Hebrew Bible, the New Testament, the Qur'an (Koran), or the Vedas. (Courses primarily designed to promote an individual's faith or for the purpose of training for the ministry are not acceptable.)

H5 904N: COMPARATIVE RELIGIONS (3 credits): An introductory survey of selected teachings, practices, and institutions of major Eastern and Western religions. May include the role of history, appreciation for forms of expression, and criticism of their origins, rituals, forms of religious knowledge, and destiny.

H5 905: RELIGION IN AMERICAN SOCIETY (3 credits): A survey of the contribution of religion to American culture, including the differences between rural and urban society, the development of religious freedom, and the rise of a "secular religion." Examines the emergence of new forms of belief and practice and the variety of religious issues confronting American society today.

Interdisciplinary Humanities

H9 900: INTERDISCIPLINARY HUMANITIES (3 credits): Interdisciplinary study of humanities' themes, genres, and relationships from literary, historical, and philosophical perspectives. (Does not include a fine arts component.)

H9 901: MYTHOLOGY (3 credits): The nature of mythology through study of folklore and legendary narratives, themes, archetypal figures/situations, symbolism, and figurative language.

Fine Arts

Interdisciplinary Arts

F9 900: INTRODUCTION TO THE VISUAL AND PERFORMING ARTS (3 credits): Inter-disciplinary study of aesthetic expression in both the visual and performing arts, emphasizing their interrelationships and commonalities.

Performing Arts

F1 900: MUSIC APPRECIATION (3 credits): Introduction to representative music masterpieces through perceptive listening. Emphasis on the elements of music, various musical forms and periods, and great composers and performers.

F1 901, 902: MUSIC HISTORY AND LITERATURE I, II (3 credits each): Survey of the historical development of Western music, including various musical styles and periods and the contributions of key composers, conductors, and performers in shaping the Western musical tradition. Emphasizes concepts, structure, musical idioms, and aesthetics. (Courses requiring score analysis/reading and background in theory are not acceptable.)

F1 903N: NON-WESTERN MUSIC (3 credits): A study of representative music of the non-Western world, with an emphasis on its function within the culture of which it is a part.

F1 904: INTRODUCTION TO AMERICAN MUSIC (3 credits): Historical survey of the development and major cultural contributions of American music and composers, including classical, jazz, and popular forms, within the context of the American culture of the time.

F1 905D: ETHNIC TRADITIONS IN AMERICAN MUSIC (3 credits): A survey of various ethnic musical traditions as threads of influence on contemporary American musical culture. Selected African, Asian, and European music is traced from its origins through its continuing role in shaping a pluralistic American culture.

F1 906: APPRECIATION OF DANCE AS AN ART FORM (3 credits): Study of dance forms from primitive times to the present. Compares ancient and modern dance forms and examines the contributions of individual dancers, dance companies, and choreographers to cultural heritage.

F1 907: THEATRE APPRECIATION (3 credits): An introductory survey of theatre/drama as a

performing art form. Includes study and analysis of historical, social, aesthetic, and technical aspects of traditional and contemporary theatrical/dramatic expression.

F1 908: HISTORY OF THEATRE (3 credits): The historical development of theatre and drama from its earliest ritual beginnings to contemporary dramatic literature. Includes representative periods and styles, genres, key playwrights, aspects of technical production, social roles, and critical interpretation of major works.

F1 909D: ETHNIC TRADITIONS IN AMERICAN THEATRE (3 credits): Examination of various dramatic expressions that reflect the experience and construction of racial or cultural minority identity in the United States.

Visual Arts

F2 900: ART APPRECIATION (3 credits): A survey of the visual arts (painting, drawing, printmaking, sculpture, and architecture) as they transmit cultural traditions and humanistic and aesthetic values. Examines historical, social, and technological factors that contribute to understanding the function and meaning of works of art.

F2 901, 902: HISTORY OF WESTERN ART I, II (3 credits each): The historical development of the visual arts (painting, drawing, printmaking, sculpture, and architecture) in Western society, focusing on major artistic styles and movements. Examines works of art as expressions of the ideas and beliefs of artists within their cultural and social contexts. *A score of 4 or 5 on the AP Art History exam will be accepted as F2 901 and 902.* This does *NOT* mean, however, that the exam and score can also be used to substitute for similar courses required in a specific major.

F2 903N: NON-WESTERN ART (3 credits): A survey of the visual arts (painting, drawing, printmaking, sculpture, and architecture) in selected non-Western societies. Examines works of art as expressions of the ideas and beliefs of artists within their cultural and social contexts.

F2 904: HISTORY OF PHOTOGRAPHY (3 credits): The historical development of photography as an art form from 1839 to the present, including critical analysis of types of photographs and aesthetic movements in photography. Examines photographs for their aesthetic and humanistic values, emphasizing photographs as expressions

of the ideas and beliefs of photographers within their cultural and social contexts.

F2 905: FILM HISTORY AND APPRECIATION (3 credits): A survey of film as an art form, emphasizing elements of visual story telling, aesthetics, differences among genres, and criticism. Examines such techniques as pictorial composition, movement, sound, lighting, and editing.

F2 906D: ETHNIC TRADITIONS IN AMERICAN ART (3 credits): Examination of selected visual art works (e.g., paintings, drawings, prints, and sculptures) that express the experience and construction of racial and cultural minority identity.

F2 907D: ART AND GENDER (3 credits): Examination of selected visual art works (e.g., paintings, drawings, prints, and sculptures) that express the experience and construction of gender identity. May emphasize a single art form.

Interdisciplinary Humanities and Fine Arts³

HF 900, 901: HUMANITIES SURVEY I, II (3 credits each): Thematic- or genre-based interdisciplinary study of selected works of art, music, literature, and philosophy.

HF 902, 903: WESTERN HUMANITIES I, II (3 credits each): Chronologically organized interdisciplinary survey of the significant intellectual, literary, philosophical, visual art, and music and other performing art expressions from the major epochs of Western culture.

HF 904N: NON-WESTERN HUMANITIES (3 credits): Interdisciplinary survey of the significant intellectual and artistic achievements of several non-Western cultures through selected works of literature, philosophy, visual art, and music and other performing arts, as well as a comparative examination of their values, motifs, and aesthetics with those of Western cultural expression.

HF 906D: AMERICAN ETHNIC CULTURAL EXPRESSION (3 credits): Interdisciplinary study of art, architecture, music, literature, history, and philosophy reflecting the cultural identity of American racial and ethnic minorities.

HF 907D: CULTURAL EXPRESSION OF GENDER (3 credits): Interdisciplinary study of art, architecture, music, literature, history, and philosophy reflecting the cultural identity of gender.

³Interdisciplinary humanities courses that encompass both the humanities and the fine arts may be used for either humanities or fine arts credit.

D=Courses designed specifically to examine aspects of human diversity within the United States.

N=Courses designed specifically to examine aspects of human diversity from a non-U.S./non-European perspective.

SOCIAL AND BEHAVIORAL SCIENCES

Through study in the social and behavioral sciences, students gain an appreciation of human continuity and change. Students learn to analyze the past, develop insight into contemporary social life, and understand the impact of individual and social actions on the future. Students are encouraged to develop a sense of responsibility toward humanity and the environment. Study in the social and behavioral sciences will help students to:

- gain insight into individual behavior,
- develop an understanding of their own society and the world as part of larger human experience in time and place,
- analyze social, political, cultural, historical, and economic institutions and relationships that both link and separate societies throughout the world,
- develop analytical, critical thinking, and communication skills necessary to understand and influence the world in which they live, and
- comprehend methods of inquiry employed by social and behavioral scientists.

Students are expected to complete satisfactorily a minimum of 3 courses (9 semester credits) selected from at least two disciplines to fulfill the general education social and behavioral science requirement. The following courses have been designed to provide students a general education in the social and behavioral sciences.

Anthropology

Anthropology focuses on the concept and characteristics of human culture, including the relationship between language and thought, between individual and society, and between patterns of sexuality, marriage, and family organization in relation to the culture as a whole, as well as on the processes of variation and adaptation that create biological and cultural diversity in time and space. Upon satisfactory completion of one or more anthropology courses, students will:

- summarize the assumptions and history and distinguish the perspective of anthropology and its sub-fields: sociocultural anthropology, physical anthropology, archaeology, linguistic anthropology, and applied anthropology;
- demonstrate how anthropological information can help identify and solve social problems, using basic research methods including field work, documents, Human Resource Area Files, and archaeological techniques within the structure of the scientific method;
- develop a holistic, cross-cultural perspective in order to gain an appreciation of cultural similarities and differences and enhance intercultural sensitivity; and
- describe the on-going evolution of ethical standards guiding research and the treatment of artifacts and human remains.

S1 900N: INTRODUCTION TO ANTHROPOLOGY (3 credits): Introduction to the nature of humans and their development and relationship to the physical and social environment today and in the past. Surveys the major subfields of anthropology: cultural anthropology, physical anthropology, archaeology, and linguistics.

S1 901N: INTRODUCTION TO CULTURAL ANTHROPOLOGY (3 credits): Introduction to culture as an adaptive mechanism that provides for the survival of the human species. Encompasses social organization, technology, economics, religion, and language as used by various peoples, both past and present.

S1 902: INTRODUCTION TO PHYSICAL ANTHROPOLOGY (3 credits): Explores human origins, fossil records, human adaptation and variation, population genetics, and human-kind's place in world ecology.

S1 903: INTRODUCTION TO ARCHAEOLOGY (3 credits): Introduces concepts, principles, and methods used to reconstruct cultural history and prehistory. Explores sequences of cultural development that have been learned through archaeological analysis.

S1 904D: CROSS-CULTURAL RELATIONSHIPS (3 credits): Explores the application of anthropological concepts, techniques, and infor-

mation to understanding modern problems. Discusses the relevance of anthropology to development issues and to concerns within various career fields.

Economics

Economics is concerned with the allocation of scarce resources to achieve the maximum satisfaction of unlimited wants. Upon satisfactory completion of one or more economics courses, students will:

- demonstrate an understanding of the theories, tools, and methods of economic analysis,
- apply economic principles in the analysis of economic problems and policies,
- identify the major economic institutions and describe their operation and interrelationships,
- analyze those aspects of human behavior, both individual and social, through which the economic problem is addressed, and
- describe the different economic systems into which societies organize themselves to deal with the economic problem.

S3 900: PRINCIPLES OF ECONOMICS (3 cred-its): Introduction to national income theories, price theories, and behavior of the firm under varying economic conditions. Includes the economic roles of business, government, and households; economic fluctuations and growth; money and banking; and international economics. *A score of 4 or 5 on the AP Economics exam will be accepted as S3 900 or as S3 901 and 902.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

OR one or both of the following:

S3 901: PRINCIPLES OF MACROECONOMICS (3 credits): Introduction to national income theories, economic fluctuations and growth, money and banking, and international economics.

S3 902: PRINCIPLES OF MICROECONOMICS (3 credits): Introduction to price theories, the behavior of the firm under varying market conditions, and the behavior of the consumer.

History

The study of history exposes students to the complexities of human nature and the development of diverse human cultures, values, institutions, and

major events. Upon satisfactory completion of one or more history courses, students will:

- distinguish between primary and secondary sources as the foundation of modern historical scholarship;
- interpret primary sources critically by analyzing their historical contexts;
- formulate historical interpretations, both orally and in writing, and defend them critically with reference to primary and secondary sources; and
- incorporate into historical interpretations, both orally and in writing, an understanding of historical causation reflecting a) knowledge of important figures and events and their chronological relationship to each other and b) an awareness of the contingent relationships among social, political, religious, intellectual, and economic variables.

S2 900, 901: UNITED STATES HISTORY I, II (3 credits each): Political, social, and economic history of the United States, including the origins and development of its peoples and cultures to the present. *A score of 4 or 5 on the AP U.S. History exam will be accepted as S2 900 and 901.* This does *NOT* mean, however, that the exam and score can also be used to substitute for similar courses required in a specific major.

S2 902, 903: HISTORY OF WESTERN CIVILIZATION I, II (3 credits each): Political, social, and economic history of the Western world, including the origins and development of peoples and cultures to the present. *A score of 4 or 5 on the AP European History exam will be accepted as S2 903.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

S2 904N, 905N: HISTORY OF THE NON-WESTERN WORLD I, II (3 credits each): Political, social, and economic history of the non-Western world (Asia, the Middle East, Africa, and Latin America), including the origins and development of peoples and cultures to the present.

S2 906N, 907N: HISTORY OF AFRICA I, II (3 credits each): Political, social, and economic history of Africa, including the origins and development of its peoples and cultures to the present.

S2 908N, 909N: HISTORY OF ASIA AND THE PACIFIC I, II (3 credits each): Political, social, and economic history of Asia and the Pacific region, including the origins and development of its peoples and cultures to the present.

S2 910N, 911N: HISTORY OF LATIN AMERICA I, II (3 credits each): Political, social, and economic history of principal Latin American nations, including origins and development of peoples and cultures to the present.

S2 912N, 913N: WORLD HISTORY I, II (3 credits each): Political, social, and economic history of the world, including the origins and development of peoples and cultures to the present.

S2 914N, 915N: HISTORY OF CHINA I, II (3 credits each): Political, social, and economic history of China, including the origins and development of its peoples and cultures.

S2 916N, 917N: HISTORY OF SOUTH ASIA I, II (3 credits each): Political, social, and economic history of South Asia, including the origins and development of its peoples and cultures to the present.

S2 918N, 919N: HISTORY OF THE MIDDLE EAST I, II (3 credits each): Political, social, economic, and cultural history of the societies of the Middle East from ancient times to the present.

Human Geography

Human geography focuses on the uneven distribution of people and of human activity on the surface of the earth and on the causes and consequences of these uneven spatial patterns and cultural landscapes. Upon satisfactory completion of one or more human geography courses, students will:

- gain insight into their own behavior by recognizing that the individual choices they make are part of a wider pattern of locational and environmental choices that ultimately form the geographic patterns of the world of the future;
- demonstrate understanding of their own society and of the world at large by examining differences and similarities in human activity from place to place;
- explain the tools and techniques that geographers use to examine social, cultural, and economic relationships;
- develop analytical and critical thinking skills and use them to explore and criticize suggested explanations of the uneven distribution of human activity; and
- define key concepts in geography, summarize the ways in which important geographers have explained spatial patterns, and explain

their own thinking about the relationships between people and the world in which they live.

S4 900N: INTRODUCTION TO HUMAN GEOGRAPHY (3 credits): A systematic or regional introduction to the basic concepts of human geography, including the causes and consequences of the uneven distribution of human activity.

S4 901: GEOGRAPHY OF THE DEVELOPED (OR WESTERN) WORLD (3 credits): Examines the geographical problems and prospects associated with urban and industrial development in Europe, North America, and other economically advanced areas of the world.

S4 902N: GEOGRAPHY OF THE DEVELOPING (OR NON-WESTERN) WORLD (3 credits): Examines the ways in which location, climate, resources, and cultural factors promote and inhibit change in the developing areas of Asia, Africa, and Latin America.

S4 903N: INTRODUCTION TO ECONOMIC GEOGRAPHY (3 credits): Introduction to the study of the reasons for the uneven distribution of activities relating to the production, exchange, and consumption of goods and services and the geographic patterns created by these activities.

S4 904: GEOGRAPHY OF INTERNATIONAL CONFLICTS (3 credits): Introduction to geographical perspectives on cultural conflicts, competition among nations for resources, and territorial disputes, with a focus on contemporary world patterns.

Political Science

Political science deals with the theory and practice of politics and describes and analyzes political systems and political behavior. On satisfactory completion of one or more political science courses, students will:

- explain the relationships between political life and the cultural ideas of American democracy;
- describe formal government institutions and legal structures and political behavior and processes;
- describe the political systems of other countries, identify international organizations, and explain the relationships between nations;
- analyze and evaluate political phenomena;

- demonstrate an understanding of and skill in the process of social scientific inquiry;
- make explicit and analyze value judgments about political decisions and policies;
- explain the social-psychological sources and historical-cultural origins of their own political attitudes and values, and analyze critically the personal and social implications of alternative values; and
- demonstrate an understanding of the capacities and skills needed to participate effectively and democratically in society.

S5 900, 901: AMERICAN/U.S. NATIONAL GOVERNMENT I, II (3 credits each): Examines the organization and function of the American national government, including the U.S. Constitution, the federal system, and executive, legislative, and judicial powers, structures, and processes. *A score of 4 or 5 on the AP U.S. Government and Politics exam will be accepted as S5 900.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

S5 902: AMERICAN/U.S. STATE AND LOCAL GOVERNMENT (3 credits): Examines state and local political jurisdictions and systems, including their powers, organization, functions, development, and contemporary problems.

S5 903: PRINCIPLES OF POLITICAL SCIENCE (3 credits): Introduction to the principles and methods of political science, focusing on the nature and development of political science as a discipline, the political process, political institutions, and the interrelationships among elements in the political system.

S5 904N: INTERNATIONAL RELATIONS (3 credits): Introduction to international relations, emphasizing contemporary international problems and relations. Includes analysis of international behavior, international law, foreign policy, causes of conflicts, and potential solutions.

S5 905: COMPARATIVE GOVERNMENT (3 credits): Comparative examination of the political systems of selected countries, including common governmental problems, causes of political instability and revolution, and techniques of political analysis. *A score of 4 or 5 on the AP Comparative Government exam will be accepted as S5 905.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

S5 906N: NON-WESTERN COMPARATIVE GOVERNMENT (3 credits): Comparative examination of the political systems of selected non-Western countries, including common governmental problems, causes of political instability and revolution, and techniques of political analysis.

Psychology

Psychology is the scientific study of human and animal behavior, as well as those biological and mental processes that underlie behavior. Upon satisfactory completion of one or more psychology courses, students will:

- explain the nature of psychology as a contemporary science, discuss psychological issues intelligently and methodically, and describe both the contributions and limitations of psychological science and the promise of the future of the field and its attendant problems;
- explain the role played by the scientific method in the acquisition of knowledge about the basic principles of human and animal behavior;
- identify the principles that govern human and animal behavior and apply these principles to their own lives to enhance interactions between individuals and among societal groups;
- apply a knowledge of the historical background, basic theories, facts, and research questions in such major topic areas as research methods, biological psychology, cognitive psychology, learning theory and memory, perceptual processes, developmental psychology, personality, abnormal/clinical psychology, and social psychology;
- summarize research-based knowledge concerning the application of psychological principles to everyday life, including the study of the behavior of individuals and groups, the parameters of behavioral deviance and its various therapies, the study of individual differences, and explain the role of psychology in such areas as industry, complex organizations, law, and education; and
- explain and appropriately apply the code of ethics in psychology in diverse situations.

S6 900, 901: GENERAL PSYCHOLOGY I, II (3 credits each): A survey of the study of human and animal behavior with emphasis on the scientific nature of contemporary psychological investigation. Topics may include the biology of behavior, sensation and perception, learning, memory, cog-

niton, motivation, emotion, life-span development of behavior, personality, abnormal behavior and its therapies, social behavior, and individual differences. *A score of 4 or 5 on the AP Psychology exam will be accepted as S6 900.* This does *NOT* mean, however, that the exam and score can also be used to substitute for a similar course required in a specific major.

S8 900: SOCIAL PSYCHOLOGY (3 credits): A systematic introduction to theory and research on the ways social factors influence individual and group behavior. Examines attitudes, social perception, the establishment of norms, conformity, leadership, group dynamics, and research methods, emphasizing their effects on the individual. (See also sociology; credit only granted once and *in one discipline.*)

S6 902: LIFE-SPAN DEVELOPMENTAL PSYCHOLOGY (3 credits): A study of the neurobiological, physical, cognitive, social, and emotional development of humans from conception through childhood, adolescence, adulthood, and old age. Emphasizes normal developmental stages and patterns of adjustment to differing life-time demands. The theories and principles of human development are examined in light of contemporary research.

OR one of the following:

S6 903: CHILD PSYCHOLOGY (3 credits): Introduction to theory and research on the biological, physical, social, and cognitive development of the human child from conception to adolescence. Topics may include genetic factors, prenatal development, sensory and perceptual changes, motor system development, language acquisition, social learning, cultural influences, and aspects of abnormal development.

S6 904: CHILDHOOD AND ADOLESCENT PSYCHOLOGY (3 credits): Introduction to the development of children and adolescents, with emphasis on physical and physiological changes and social and cognitive development. Topics may include the role of play; sociocultural influences; stresses associated with adolescence; changing relationships with family, friends, and the opposite sex; identity development; sexuality; drug use; suicide; and delinquency.

S6 905: ADULTHOOD AND AGING (3 credits): Introduction to the changes that occur from early adulthood through old age. Topics may include

career choice and development, mate selection and marriage, conventional and non-conventional families, theories of adult personality development, mid- and late-life transitions, aging, and dying, death, and bereavement.

Sociology

Sociology is the study of human society and human behavior in social settings. On satisfactory completion of one or more sociology courses, students will:

- compare and contrast basic sociological theories, including functionalism, conflict theory, and symbolic interactionism, as well as the methodology of sociological analysis;
- describe the factors governing social life, including culture and subculture, socialization, social structure and organization, social institutions, and social control;
- identify the factors in social change, including the historical development of society, deviance, collective behavior, and social movements; and
- apply a global and cross-cultural perspective in understanding the sources of similarities and differences in the human experience.

S7 900: INTRODUCTION TO SOCIOLOGY (3 credits): A study of society, including the rules, interactions, and cultural patterns that organize everyday life. Analysis of social conflict, the structure and function of institutions, the dynamics of individual and group interactions, social stratification, and interactions among diverse groups of people.

S7 901: SOCIAL PROBLEMS (3 credits): Analysis of contemporary social problems and investigation of theories on social organization and conflict. Explores the genesis, significance, and amelioration of social problems.

S7 902: MARRIAGE AND FAMILY (3 credits): Survey of the contemporary family in historical and crosscultural perspectives. Includes trends in mate selection, marriage, child-rearing, employment, gender roles, and communication within the family.

S8 900: SOCIAL PSYCHOLOGY (3 credits): Exploration of the connections between group experience and individual behavior, including the development of "self," conformity and deviance, attitudes, attraction, intergroup interaction, and

collective behavior. (See also psychology; credit only granted once and in one discipline.)

S7 903D: RACIAL AND ETHNIC RELATIONS (3 credits): Analysis of racial, religious, ethnic, and other groups, examining persistence of group identity, inter-group relations, social movements, government policy, and related social problems.

S7 904D: THE SOCIOLOGY OF SEX AND GENDER (3 credits): Introduction to sociological perspectives on gender as a factor in social stratification, gender role acquisition, and individual and social consequences of changing social definitions of gender roles.

Interdisciplinary Social/Behavioral Science

Social and behavioral science interdisciplinary courses are those that integrate two or more disciplines in the social and behavioral sciences. Courses will be survey in nature, broad in scope, and foundational in the sense that they provide students with a basis for intellectual development and further study in the various disciplines. The relationship between the disciplines will be made explicit in the course. Textbooks and readings from those disciplines will be a significant part of the course, and methods of instruction may include instructors from more than one of the disciplines teaching jointly. On satisfactory completion of an interdisciplinary social and behavioral science course, students will:

- derive a balance of the concepts, theories, methods, and conclusions of each discipline and
- gain an understanding of two or more of the social or behavioral sciences.

S9 900, 901: INTERDISCIPLINARY SOCIAL/BEHAVIORAL SCIENCE I, II (3 credits each): Inter-disciplinary courses that combine two or more of the social and behavioral science disciplines and that meet the criteria specified in the introduction will be acceptable.

D=Courses designed specifically to examine aspects of human diversity within the United States.

N=Courses designed specifically to examine aspects of human diversity from a non-Western perspective.

APPENDIX**GENERAL EDUCATION CORE CURRICULUM REQUIREMENTS
EXPRESSED IN QUARTER CREDIT HOURS**

Communication:	3 to 4 courses (12-14 quarter credits), <i>including a two-(or three-)course sequence in writing (8-9 quarter credits) and one course (4-5 quarter credits) in oral communication</i>
Mathematics:	1 to 2 courses (5-10 quarter credits)
Physical and Life Sciences:	2 to 3 courses (10-12 quarter credits), <i>with one course selected from the life sciences and one course from the physical sciences and including at least one laboratory course</i>
Humanities and Fine Arts:	3 courses ¹ (12-15 quarter credits), <i>with at least one course selected from humanities and at least one course from the fine arts</i>
Social and Behavioral Sciences:	3 courses ¹ (12-15 quarter credits), <i>with courses selected from at least two disciplines</i>
TOTAL:	13 to 14 courses (56 to 61 quarter credits ²)

¹In order to fulfill the required total number of credits, it may be necessary to complete an extra course in either of these two categories.

²In converting from quarter to semester credits, a fractional credit may be waived for completion of a requirement providing the total minimum number of quarter credits are met.