## General Studies

All undergraduate students must fulfill the General Studies requirement.

General Studies is based on four principles. The first is the distinction between skill and knowledge-the instrumental skills by means of which knowledge is acquired and communicated and the knowledge itself in the sense of fact, information, or conclusions. Second is the distinction between skill in the use of language and skill in the use of figures-literacy and numeracy. Third is the conventional division of knowledge into the humanities, the social sciences, and the natural sciences. And fourth is the concept of the university graduate as a person who is not only prepared for advanced study or a particular profession, but also is amply prepared to lead a constructive and satisfying personal, social, and civic or political life. This principle implies a commonality of knowledge (that is, knowledge shared with others), skill in learning and in communicating with others, and a diversity of learning that frees the person to enjoy the diversity of human potentiality. In addition to the four principles, the program recognizes the value of sustained experience in the acquisition of a skill or the mastery of a body of knowledge, the increasing importance of literacy and numeracy skills because of the rapid growth of modern knowledge, the utility of historical perspective, and the internationalization of modern life.
The General Studies Program consists of five core areas and three awareness areas. The core areas are as follows:

1. literacy and critical inquiry (L1 and L2);
2. numeracy ( $\mathrm{N} 1, \mathrm{~N} 2$, and N 3 );
3. humanities and fine arts (HU);
4. social and behavioral sciences (SB); and
5. natural sciences (S1 and S2).

These areas provide training in basic academic skills and assure that students are introduced to the traditional branches of knowledge.

The three awareness areas are as follows:

1. cultural diversity in the United States (C);
2. global awareness (G); and
3. historical awareness (H).

These areas contribute to the development of an international perspective, foster an understanding of current human events by study of the past, and promote appreciation of cultural diversity within the contemporary United States.

The courses approved by the ASU Main General Studies Council (for ASU Main and ASU East) for meeting the General Studies requirement are noted in the "General Studies Courses" table, page 89; in the course descriptions; and in the Schedule of Classes each academic term. The courses approved by the ASU West General Studies Council can be found in the ASU West Catalog and in the Schedule of Classes.

## General Studies Requirement

All students enrolled in a baccalaureate degree program must successfully complete a minimum of 35 semester
hours of approved General Studies courses. The required distribution of General Studies courses among the core areas and awareness areas is described below. It is important to note that 35 semester hours must be taken in the five core areas. Students also must take courses that satisfy each of the three awareness areas. Note, however, that the awareness area requirement does not mean that the student must exceed 35 hours. Many courses concurrently satisfy a core area requirement and an awareness area requirement.

The following conditions apply in taking courses to satisfy the General Studies requirement:

1. a course may satisfy a core area and an awareness area requirement concurrently;
2. a course may not be used to concurrently satisfy requirements in two core areas, even if it is approved for more than one core area; and
3. a course may be used to concurrently satisfy requirements in two awareness areas, if it is approved for those areas.
There is no limit to the number of advanced placement (AP) or CLEP credits that can be used to meet the General Studies requirement (see "Special Programs for Advanced Placement Credit," page 67). However, the natural sciences (S1 and S2) and literacy and critical inquiry (L1 and L2) portions of the General Studies requirement are not satisfied by CLEP.

First-Year Composition is a university requirement of all students that is separate from and in addition to General Studies.

## Transfer Credit

The Arizona General Education Curriculum (AGEC), offered by the Arizona community colleges, is composed of 35 semester hours of lower-division general education course work.

The AGEC has three forms: AGEC-A, AGEC-B, and AGEC-S. Refer to www.abor.asu.edu/abor3/board/student/ transfer/agec.html for a detailed description of each AGEC.

Completion of the appropriate AGEC fulfills the university lower-division general education requirements of the baccalaureate degree with which AGEC articulates but may not apply to degrees articulated with the Transfer Guides/ Exceptional Requirements Pathway. Students completing the AGEC are still required to fulfill lower-division program requirements and prerequisites within their college and major and/or minor areas of study. In order to most efficiently complete a degree program, students should select courses to meet the AGEC requirements that also fulfill program requirements in the college and major they intend to pursue upon transfer.

Students transferring from other accredited institutions of higher education ordinarily are given General Studies credit work done in those institutions insofar as it is equivalent in content to General Studies courses at this university.

## College and School Requirements

Colleges and schools may require their students to take specific courses to satisfy the General Studies requirement.

In some instances, the number of semester hours exceeds the minimum 35 semester hours because of the required college or school courses.

Also, colleges and schools can define requirements that go beyond the General Studies requirement and require additional courses. Those colleges and schools can designate specific General Studies-approved courses that students must take to satisfy college or school requirements.

Students are encouraged to consult with an academic advisor in planning a program to ensure that it meets the various requirements. A well-planned program may enable a student to concurrently satisfy requirements at the university, college or school, and department levels.

## CORE AREAS

## Literacy and Critical Inquiry (L1 and L2)

Literacy is here defined broadly as communicative competence in written and oral discourse; critical inquiry is defined as the gathering, interpretation, and evaluation of evidence. Building on the proficiency attained in traditional freshman composition courses, the literacy and critical inquiry requirement helps students sustain and extend their ability to reason critically and communicate clearly through language. Thus, the literacy and critical inquiry requirement stipulates a sequence of two courses beyond First-Year Composition.

Requirement. Six semester hours are required. One L1 course is required, typically at the sophomore level, in which students learn how to gather, interpret, and evaluate evidence and to express their findings in writing or speech. This course includes a series of formal, graded, and written or spoken assignments. The L1 course is preferably taken after completion of the First-Year Composition requirement. Completion of one semester of First-Year Composition is required.
One L2 upper-division course is required with advanced subject-matter and rigorous critical-writing assignments. The course should be taken in the student's major discipline and may also count toward the major.

## Numeracy (N1, N2, and N3)

The numeracy requirement is intended to ensure that students have skill in basic mathematics, can use mathematical analysis in their chosen fields, and can understand how computers can make mathematical analysis more powerful and efficient. Numeracy thus has three components. First, the acquisition of essential skill in basic mathematics requires the student to complete a course in college algebra or to demonstrate a higher level of skill by completing a course for which college algebra is a prerequisite. The second component, the real-world application of mathematical reasoning, requires the student to take a course in the use of quantitative analysis to solve problems of substance. Many students may use courses in statistics to satisfy this requirement. The third component of numeracy requires use of the computer to assist in serious analytical work. Computers are widely used to study the implications of social decisions or to model physical systems, and computer modeling courses are available in many major programs.
Requirement. Six semester hours are required. One course must be selected from the mathematics category; a second
course must be selected from either of the remaining two
categories listed below.

1. Mathematics. A course in college mathematics (i.e., MAT 114), college algebra (i.e., MAT 117), precalculus (i.e., MAT 170), or any other mathematics course for which college algebra is a prerequisite fits this category.
2. Statistics and Quantitative Reasoning. Courses that emphasize the use of statistics or other mathematical methods in the interpretation of data and in describing and understanding quantitative relationships fit this category. The course selected can be taken in the student's major discipline and can count toward the major's semester-hour requirements.
3. Computer Applications. Courses that involve the use of computer programming languages or software in the development of skills in analytical thinking fit this category. The course selected can be taken in the student's major discipline and can count toward the major's semester-hour requirements.

## Humanities and Fine Arts (HU)

The humanities are concerned with questions of human existence and the universality of human life, questions of meaning and the nature of thinking and knowing, and questions of moral, aesthetic, and other human values. The humanities investigate these questions in both the present and the past and make use of philosophy, foreign languages, linguistics and communication studies, religious studies, literature, and fine arts. The fine arts constitute the artist's creative deliberation about reality, meaning, knowledge, and values. The humanities and fine arts core area enables students to broaden and deepen their consideration of basic human values and their interpretation of the experiences of human beings.

## Requirement. See "Combined Requirement."

## Social and Behavioral Sciences (SB)

The social and behavioral sciences provide scientific methods of inquiry and empirical knowledge about human behavior, both within society and individually. The forms of study may be cultural, economic, geographic, historical, linguistic, political, psychological, or social. The courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a world of diminishing economic, linguistic, military, political, and social distance.
Combined Requirement. A total of 15 semester hours must be completed in the following two core areas: (1) social and behavioral sciences and (2) humanities and fine arts. Four conditions must be satisfied:

1. A minimum of six semester hours must be taken in one core area and nine hours in the other core area.
2. At least one course within the 15 semester hours must be at the upper-division level.
3. Two courses from the same department in either core area are required.
4. Courses from at least two departments in either core area must be taken.

## Natural Sciences (S1 and S2)

Courses in the natural sciences core area help the student to develop an appreciation of the scope and limitations of scientific capability to contribute to the quality of society. Knowledge of methods of scientific inquiry and mastery of basic scientific principles and concepts, in particular those that relate to matter and energy in living and nonliving systems, are stressed. Firsthand exposure to scientific phenomena in the laboratory is important in developing and understanding the concepts, principles, and vocabulary of science. At least one of the two laboratory courses required in the natural sciences core area must include an introduction to the fundamental behavior of matter and energy in physical or biological systems.

Requirement. Eight semester hours are required. One laboratory course in the natural sciences that includes a substantial introduction to the fundamental behavior of matter and energy in physical or biological systems is required.

A second laboratory course in the natural sciences selected, for example, from anthropology, astronomy, biology, chemistry, experimental psychology, geology, microbiology, physical anthropology, physical geography, physics, or plant biology is required.

## AWARENESS AREAS

Students must complete courses that satisfy each of the three awareness areas. Courses that are listed for a core and an awareness area may satisfy both requirements concurrently, as may courses that are listed for more than one awareness area.

## Cultural Diversity in the United States (C)

The contemporary "culture" of the United States involves the complex interplay of many different cultures that exist side by side in various states of harmony and conflict. The U.S. history involves the experiences not only of different groups of European immigrants and their descendants, but also of diverse groups of American Indians, Hispanic Americans, African Americans, and Asian Americans-all of whom played significant roles in the development of contemporary culture and together shape the future of the United States. At the same time, the recognition that gender, class, and religious differences cut across all distinctions of race and ethnicity offers an even richer variety of perspectives from which to view oneself. Awareness of cultural diversity and its multiple sources can illuminate the collective past, present, and future and can help to achieve greater mutual understanding and respect.

The objective of the cultural diversity requirement is to promote awareness and appreciation of cultural diversity within the contemporary United States. This is accomplished through the study of the cultural, social, or scientific contributions of women and minority groups, examination of their experiences in the United States, or exploration of successful or unsuccessful interactions between and among cultural groups.

## Global Awareness (G)

Human organizations and relationships have evolved from being family and village centered to the modern global interdependence that is apparent in many disciplines-for example, contemporary art, business, engineering, music, and the natural and social sciences. Many serious local and
national problems are world issues and require solutions that exhibit mutuality and reciprocity. These problems occur in a wide variety of activities, such as food supply, ecology, health care delivery, language planning, information exchange, economic and social developments, law, technology transfer, and even philosophy and the arts. The global awareness area recognizes the need for an understanding of the values, elements, and social processes of cultures other than the culture of the United States. The global awareness area includes courses that recognize the nature of other contemporary cultures and the relationship of the American cultural system to generic human goals and welfare.

Courses that meet the requirement in global awareness are of one or more of the following types:

1. in-depth area studies which are concerned with an examination of culture-specific elements of a region of the world, country, or culture group;
2. the study of contemporary non-English language courses that have a significant cultural component;
3. comparative cultural studies with an emphasis on nonU.S. areas; and
4. in-depth studies of non-U.S.-centered cultural interrelationships of global scope such as the global interdependence produced by problems of world ecology, multinational corporations, migration, and the threat of nuclear war.

## Historical Awareness (H)

The historical awareness area aims to develop a knowledge of the past that can be useful in shaping the present and future. Because historical forces and traditions have created modern life and lie just beneath its surface, historical awareness is an aid in the analysis of present-day problems. Also, because the historical past is a source of social and national identity, historical study can produce intercultural understanding by tracing cultural differences to their origins in the past. Even the remote past may have instructive analogies for the present.

The historical awareness area consists of courses that are historical in method and content. In this area, the term "history" designates a sequence of past events or a narrative whose intent or effect is to represent such a sequence. The requirement presumes that these are human events and that history includes all that has been felt, thought, imagined, said, and done by human beings. History is present in the languages, art, music, literature, philosophy, religion, and the natural sciences, as well as in the social science traditionally called history.

## GENERAL STUDIES COURSES

The following ASU Main and ASU East General Studies courses satisfy the requirements of the five core areas and three awareness areas. General Studies courses are regularly reviewed. Since courses are occasionally added to and deleted from the list, students should always consult the Schedule of Classes each semester to see which courses currently meet the General Studies requirement.

A student receives the General Studies credit a course carries in the semester in which the course is taken, with one exception: a course listed on an approved program of study but subsequently deleted from the General Studies list
retains the General Studies credit it carried when the program of study was approved.

Under each core and awareness area, courses are presented alphabetically by course prefix. The course prefix is followed by course number and course title. See "Key to Course Listing Codes" table, page 59.

The "Key to General Studies Credit Abbreviations" table identifies which requirement(s) the course meets. This key is also used in the Schedule of Classes. General Studies courses are also identified following course descriptions.

The campus codes "M" (for ASU Main) and "W" (for ASU West) identify the campus that maintains academic control over the course (i.e., course content, registration restrictions, General Studies designations, and other curricular matters). ASU East courses are listed under the "M" campus code. The campus code is not used in the catalogs but appears in the Schedule of Classes, on transcripts, and other enrollment and registration records.

Key to General Studies Credit Abbreviations

| Code | Description |
| :--- | :--- |
| L1 | Literacy and critical inquiry core courses <br> (intermediate level) |
| L2 | Literacy and critical inquiry core courses (upper <br> division) |
| N1 | Numeracy core courses (mathematics) <br> Numeracy core courses (statistics and <br> quantitative reasoning) |
| N3 | Numeracy core courses (computer applications) <br> Humanities and fine arts core courses |
| HU | Social and behavioral sciences core courses |
| SB1 | Natural sciences core courses (introductory) <br> Natural sciences core courses (additional |
| S2 | courses) <br> Cultural diversity in the United States awareness <br> courses |
| C | Global awareness courses |
| Historical awareness courses |  |
| H | or <br> and |
| I |  |



