

General Education

General Education profoundly influences undergraduates by providing the breadth of knowledge necessary for meaningful work, life-long learning, socially responsible citizenship, and intellectual development. This 49-unit program, which comprises over one third of an undergraduate's course of study, places specialized disciplines into a wider world, enabling students to integrate knowledge and to make connections among fields of inquiry.

The General Education program at SDSU prepares students to succeed in an increasingly complex and rapidly changing world. Our students will live and work in the context of globalization, scientific and technological innovation, cross-cultural encounters, environmental challenges, and unforeseen shifts in economic and political power. Through this program, students will acquire knowledge of human cultures and the physical and natural world that will enable them to engage significant questions, both contemporary and enduring.

To put their breadth of knowledge to work, students gain intellectual and practical skills such as inquiry and analysis, creative and critical thinking, written and oral communication, scientific and quantitative literacy, and technological-information proficiencies. Students practice these skills in progressively challenging venues, mastering learning outcomes from a series of courses drawn from the following four sections: I) Communication and Critical Thinking; II) Foundations of Learning; III) American Institutions; and IV) Explorations of Human Experience. In order to acquire the skills required for advanced coursework within and across disciplines, student should complete the four sections sequentially.

The General Education program at San Diego State University is evolving. A standing committee of faculty and students reviews the program continually and encourages the development of new courses, concepts, and learning experiences.

Seven Essential Capacities Developed through General Education

In addition to mastering the specialized disciplinary knowledge typically associated with undergraduate majors, well-educated individuals acquire general abilities, habits of mind, or capacities that significantly enhance their intellectual and professional lives. Students come to understand how arguments—whether in journal articles, laboratory reports, lyrics, or manifestos—are constructed and evaluated; and they are able to craft persuasive cases in a wide variety of contexts. Students become familiar with the ways scholars—whether physicists or literary critics— theorize; and they are able to apply different kinds of theoretical models to real-world conditions. Students come to realize that most significant phenomena—from endangered species to British novels—cannot be understood in isolation because they are inevitably situated in complex webs or networks of interrelated phenomena; and they are able to locate concepts, ideas, texts, and events within these broader contexts. Students recognize the value of engaging diverse and opposing principles, perspectives, and people to achieve political, intellectual, artistic, and social ends; and they grow competent in the sorts of negotiations such engagement requires. Students come to appreciate that local and global perspectives on subjects as diverse as policing, safe drinking water, and artistic trends are inevitably connected; and they can bring the two perspectives together. Students come to see that diverse concepts—from principles of harmony to supply and demand—apply to multiple phenomena; and they are skilled in identifying the relevance of such concepts across traditional boundaries. Finally, students come to understand the intricate causal relationships between actions—whether giving a dowry or exploring space—and their effects; and they develop the ability to evaluate consequences in meaningful and responsible ways.

In order to develop these abilities in all our students, San Diego State University's General Education program will emphasize the following seven *essential capacities*:

1. Construct, analyze, and communicate arguments;
2. Apply theoretical models to the real world;
3. Contextualize phenomena;
4. Negotiate differences;
5. Integrate global and local perspectives;
6. Illustrate relevance of concepts across boundaries;
7. Evaluate consequences of actions.

It is important to note that although these essential capacities inform General Education, they are by no means its exclusive property. In fact, these fundamental abilities are to be further strengthened through students' major coursework. More specific goals of the various areas of General Education articulate directly with the seven essential capacities, in many cases manifesting the general abilities characterized—in rather abstract terms—by the capacities.

Communication and Critical Thinking

Communication and Critical Thinking are essential skills that underlie all university education. Focusing particularly on argument, courses in this area of General Education help students understand the general function of writing, speaking, visual texts, and thinking within the context of the university at large, rather than within specific disciplines. In addition to featuring the basic rules and conventions governing composition and presentation, Communication and Critical Thinking courses establish intellectual frameworks and analytical tools that help students explore, construct, critique, and integrate sophisticated texts.

Goals in Communication and Critical Thinking:

- Goal 1: Craft well-reasoned arguments for specific audiences.
- Goal 2: Analyze a variety of texts commonly encountered in the academic setting.
- Goal 3: Situate discourse within social, generic, cultural, and historic contexts.
- Goal 4: Assess the relative strengths of arguments and supporting evidence.

Foundations of Learning

Foundations of Learning courses follow and build upon Communication and Critical Thinking courses and are offered by individual departments and interdisciplinary areas in the Natural Sciences and Quantitative Reasoning, Social and Behavioral Sciences, and Humanities and Fine Arts. Foundations of Learning courses in the Natural Sciences and Quantitative Reasoning are divided into four categories: 1. Physical Sciences, 2. Life Sciences, 3. Laboratory, and 4. Mathematics and Quantitative Reasoning. Those in the Humanities and Fine Arts are divided into five categories: 1. Literature, 2. Art, Classics, Dance, Drama, Humanities, and Music, 3. History, 4. Philosophy and Religious Studies, and 5. Foreign Language. Foundations of Learning courses introduce students to the basic concepts, theories, and approaches offered by disciplinary and interdisciplinary areas of study. They provide the foundation to understand and approach problems in the academy, and in local and global real-world environments. Consistent with class size and learning goals, they cultivate skills in reading, writing, communication, computation, information-gathering, and use of technology. Where appropriate, courses intended as preparation for a major may also be designated as Foundations courses. Only lower division courses are designated as Foundations of Learning courses.

Explorations of Human Experience

Explorations of Human Experience courses are upper division courses which allow concentrated or thematic study. In Explorations of Human Experience there are three areas of study – Natural Sciences and Quantitative Reasoning, Social and Behavioral Sciences, and Humanities and Fine Arts. Among these areas are courses designated as cultural diversity courses. "Explorations of Human Experience" courses take the goals and skills of "Foundations of Learning" courses to a more advanced level. This may find expression in one or more of the following pedagogical elements: greater interdisciplinary, more complex and in-depth theory, deeper investigation of local problems, and wider awareness of global challenges. More extensive reading, written analysis involving complex comparisons well-developed arguments, considerable bibliography, and use of technology are appropriate in many explorations courses. Courses narrowly centered within one aspect of a discipline are more suited to major study than general education, which encourages students to relate their learning across the range of their educational experience. Explorations of Human Experience courses are upper division and cannot be used to fulfill this requirement if taken before students reach junior standing (passing 60 units).

Areas of Study In Foundations of Learning and Explorations of Human Experience

A. NATURAL SCIENCES AND QUANTITATIVE REASONING

Natural Sciences

Natural Sciences use the scientific process to study nature and represent an approach to the study of the universe and its natural laws and phenomena. Students achieve basic scientific literacy and thereby understand the scientific process including the value of observation, hypothesis testing, and experiments in the advance of science. Thus students require a general understanding of fundamental concepts and knowledge accumulated by the natural sciences. From that understanding, students develop an ability to reason about and follow new developments in the natural sciences, and to think in a scientifically informed manner about social and political issues that involve science and technology.

Goals for GE Courses in the Natural Sciences

- Goal 1: Explain basic concepts and theories of the natural sciences.
- Goal 2: Use logic and scientific methods to analyze the natural world and solve problems.
- Goal 3: Argue from multiple perspectives about issues in natural science that have personal and global relevance.
- Goal 4: Use technology in laboratory and field situations to connect concepts and theories with real-world phenomena.

Quantitative Reasoning

Quantitative reasoning refers to a range of academic capacities that includes learning from data, communicating quantitatively, analyzing evidence and assertions, and employing quantitative intuition. While quantitative reasoning is essential to sciences, other disciplines require the ability to use and comprehend quantitative language. To do this, students require the ability to analyze and interpret data in both scientific and social contexts. By possessing this set of mathematical and problem solving skills, students will be able to engage effectively in quantitative situations arising in life and work.

Goals for GE Courses in Quantitative Reasoning

- Goal 1: Apply appropriate computational skills and use basic mathematical concepts to analyze problems in natural and social sciences.
- Goal 2: Use methods of quantitative reasoning to solve and communicate answers to real-world problems.

B. SOCIAL AND BEHAVIORAL SCIENCES

The Social and Behavioral Sciences focus on human behavior, cognition, and organization from anthropological, economic, geographic, linguistic, political, psychological and sociological perspectives. Students gain an understanding of society and culture, as well as individual and social interaction processes. Disciplines within the Social and Behavioral Sciences employ the scientific method and utilize both quantitative and qualitative techniques to analyze the diversity and complexity of human experience. Through interdisciplinary learning, students explore the relationships between human societies and the physical environment.

Goals for GE Courses in the Social and Behavioral Sciences

- Goal 1: Explore and recognize basic terms, concepts, and domains of the social and behavioral sciences.
- Goal 2: Comprehend diverse theories and methods of the social and behavioral sciences.
- Goal 3: Identify human behavioral patterns across space and time and discuss their interrelatedness and distinctiveness.
- Goal 4: Enhance understanding of the social world through the application of conceptual frameworks from the social and behavioral sciences to first-hand engagement with contemporary issues.

C. HUMANITIES AND FINE ARTS

The Humanities and Fine Arts encompass works of the imagination, such as art, literature, film, drama, dance, and music, and related scholarship. Students better understand human problems, responsibilities, and possibilities in changing historical contexts and diverse cultures, and in relation to the natural environment. Students acquire new languages and familiarize themselves with related cultures. They gain the abil-

ity to recognize and assess various aesthetic principles, belief systems, and constructions of identity. Students acquire capacities for reflection, critique, communication, cultural understanding, creativity, and problem solving in an increasingly globalized world.

Goals for GE Courses in the Humanities and Fine Arts

- Goal 1: Analyze written, visual, or performed texts in the humanities and fine arts with sensitivity to their diverse cultural contexts and historical moments.
- Goal 2: Develop a familiarity with various aesthetic and other value systems and the ways they are communicated across time and cultures.
- Goal 3: Argue from multiple perspectives about issues in the humanities that have personal and global relevance.
- Goal 4: Demonstrate the ability to approach complex problems and ask complex questions drawing upon knowledge of the humanities.