

UNIVERSITY CORE CURRICULUM Student Outcome Expectations

The core curriculum is designed to ensure that graduates of Texas' institution of higher education are well-educated persons who are intellectually flexible and articulate, and who have the capacity to become creative citizens for the state and nation.

1. Communications (composition, speech, modern language)

The objective of a communication component of the core curriculum is to enable the student to communicate effectively in clear and correct prose in a style appropriate to the subject, occasion, and audience.

Exemplary Educational Objectives

- a. to understand and demonstrate the writing and speaking processes through invention, organization, drafting, revision, editing, and presentation;
- b. to understand the importance of specifying audience and purpose and to select appropriate communication choices;
- c. to understand and appropriately apply modes of expression, i.e., descriptive, expository, narrative, scientific, and self-expressive, in written and oral communication;
- d. to apply the principles of communicating as process and the analysis of audience and purpose to assignments;
- e. to participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding;
- f. to understand and apply basic principles of critical thinking, problem solving, and technical proficiency in the development of exposition and argument;
- g. to develop the ability to research and write a documented paper and/or to give an oral presentation.

2. Mathematics

The objective of the mathematics component of the core curriculum is to develop a quantitatively literate college graduate. Every college graduate should be able to apply basic mathematical tools in the solutions of real-world problems.

Exemplary Educational Objectives

- a) to apply arithmetic, algebraic, geometric, and statistical methods to modeling and solving real-world problems;
- b) to represent and evaluate basic mathematical information numerically, graphically, and analytically;
- c) to expand mathematical reasoning skills and develop convincing mathematical arguments;
- d) to use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results;

- e) to interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them;
- f) to recognize the limitations of mathematical and statistical models;
- g) to develop the view that mathematics is a growing discipline, interrelated with human culture, and understand its connections to other disciplines.

3. Natural Sciences

The objective of the study of the natural sciences component of the core curriculum is to enable the student to understand, construct, and evaluate empirical relationships in the natural sciences, and to enable the student to understand the bases for theory-building and testing.

Exemplary Educational Objectives

- a) to understand and apply the empirical method to the study of natural sciences;
- b) to recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
- c) to identify and recognize the differences among competing scientific models of the universe;
- d) to demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics and values;
- e) to demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

4. Humanities and Fine Arts

The objective of the humanities and fine arts in the core curriculum is to expand students' knowledge of the human condition and human cultures, especially in relation to behavior, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature, philosophy, and fine arts, students will engage in critical analysis, form aesthetic judgments, and develop an appreciation of the arts and humanities as fundamental to the health and survival of any society. Students should have experiences in both the arts and humanities.

Exemplary Educational Objectives

- a) to demonstrate awareness of the scope and variety of works in the arts and humanities;
- b) to understand those works as expressions of individual and human values within an historical and social context;
- c) to respond critically to works in the arts and humanities;
- d) to engage in the creative process or interpretive performance and comprehend the physical and intellectual demands required of the writer or artist;
- e) to articulate an informed personal reaction to works in the arts and humanities;
- f) to develop an appreciation for the aesthetic principles that guide or govern the humanities and arts;
- g) to demonstrate knowledge of the influence of literature, philosophy, and/or the arts on cross-cultural interactions.

5. Social and Behavioral Science

The objective of a social and behavioral science component of the core curriculum is to increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events, and ideas.

Exemplary Educational Objectives

- a) to employ the methods and dates that historians and social and behavioral scientist use to investigate the human condition;
- b) to examine social institutions and processes across a range of historical periods and cultures;
- c) to use and critique alternative explanatory systems or theories;
- d) to develop and communicate alternative explanations or solutions for contemporary social issues;
- e) to analyze the effects of social, political, economic, cultural, and diplomatic forces on the area under study
- f) to comprehend the origins and evolution of U.S. and Texas political systems, with a focus on the growth of political institutions, the constitutions of the U.S. and Texas, federalism, civil liberties, civil and human rights;
- g) to understand the evolution and current state of the role of the United States in the world;
- h) to differentiate and analyze historical evidence (documentary and statistical) and differing historical points of view;
- i) to recognize and apply reasonable criteria for the acceptability of historical evidence;
- j) to understand and identify commonalties in a diverse culture.
- k) to analyze, critically assess, and develop creative solutions to public policy problems;
- l) to recognize and assume one's responsibility as a citizen in a democratic society by learning to think for oneself by engaging in public discourse and by obtaining information through the news media and other appropriate information sources about politics and public policy.

6. Computing (Computer Literacy)

The objective of computing in the core curriculum is to ensure that graduates are able to use computer technology to communicate, solve problems, and acquire information.

Exemplary Educational Objectives

- a) to communicate and demonstrate knowledge of different types of operating systems, hierarchical files, and directory structures;
- b) to publish a document which incorporates appropriate design and uses standard formatting tools (tabs, margin setting, document formatting, headers and footers);
- c) to publish a document that utilized information imported from other sources;
- d) to know several different formats (table, charts and graphs, graphics, and mail merge);
- e) to create a spreadsheet document which incorporates tables and graphs (line, pie, bar, X-Y scatter);

- f) to create a presentation slide using a presentation software (e.g. PowerPoint);
- g) to create multimedia projects using a variety of tools and media with increasingly sophisticated linking of ideas;
- h) to understand online information access via TCP/IP, ftp, Archie, html, www;
- i) to navigate independently through the Internet to locate resources;
- j) to navigate the Internet using World Wide Web search engines;
- k) to create a simple World Wide Web page which includes at least one graphic, text and link to another Internet site;
- l) to understand e-mail tools such as integrated mail program (Netscape, Explorer, Eudora);
- m) to know what computers can and cannot do as spreadsheets.

Explanatory Notes

- 1. Communication (Composition, Speech, Modern Language)** – To satisfy the communication requirement, a student must take or receive advanced placement credit for ENGL 1123 and for SPCH 1003 Fundamentals of Speech Communication. ENGL 1133 Freshman Composition II, while required, may be satisfied by ENGL 1143 Technical Writing or ENGL 2143 Advanced Composition.
- 2. Mathematics** – For mathematics requirements for specific degree majors, see suggested program sequences for the majors.
- 3. Natural Sciences** – Students who begin their matriculation at Prairie View A&M University having completed the 6 SCH of natural science without laboratory will have satisfied the University Core Requirement. However, both transfer and native students who plan to major in the sciences should consult the suggested program sequence for major.
- 4. Humanities and Visual and Performing Arts**
The Humanities and Visual and Performing Arts requirement may be satisfied with 6 credits of courses from the Visual and Performing Arts options or 3 credits from the Visual and Performing Arts options combined with 3 credits from the Humanities options.

Humanities

Students who plan to major in engineering or in engineering technology or who are accepted into the University Scholars Program should select from among courses for which there is a sequential course.