

## **Core Curriculum: Assumptions and Defining Characteristics**

**APRIL 1998**

Senate Bill (SB) 148, enacted in 1997 by the 75th Texas Legislature, requires the Texas Higher Education Coordinating Board to adopt rules that include "a statement of the content, component areas, and objectives of the core curriculum," which each institution is to fulfill by its own selection of specific courses. Those rules are included in Chapter 5, Subchapter S, Sections 5.390 through 5.404. The Coordinating Board has adopted this document in order to provide additional guidance to institutions as they refine their core curricula to comply with SB 148 and the Coordinating Board rules that implement the statute. The Assumptions, Defining Characteristics of Intellectual Competencies, Perspectives, and Exemplary Educational Objectives (listed by component area) contained in this document are derived from the Report of the Advisory Committee on Core Curriculum (1997-98). That Advisory Committee based its work on the 1989 Report of the Subcommittee on Core Curriculum, which the Board received and endorsed in accordance with House Bill 2187 of the 70th Legislature. That legislation required all institutions to adopt, evaluate, and report on an undergraduate core curriculum. Each institution should consider these guiding principles carefully as it proceeds with the revision of its core curriculum.

### **ASSUMPTIONS**

In establishing its guidelines for core curricula, the Board has made the following assumptions:

1. Every institution of higher education is required by law to adopt a core curriculum of no less than 42 semester credit hours which is consistent with the Texas Common Course Numbering System and the statement, recommendations, and rules issued by The Texas Higher Education Coordinating Board.

[The Core Curriculum Advisory Committee (1997-1998) has defined "consistent with the Texas Common Course Numbering System" as meeting one of the following criteria: a) the course already has a common course number, b) application for a common course number has been made, or c) the course is not a common course but at least one common course number that may be accepted in lieu of the course is designated by the institution.]

2. If a student successfully completes the 42-hour core at an institution of higher education, that block of courses must be substituted for the receiving institution's core curriculum. A student shall receive academic credit for each of the courses transferred and may not be required to take additional core curriculum courses at the receiving institution unless the Board has approved a larger core curriculum at the receiving institution.

3. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the core curriculum of the sending institution, with certain exceptions noted in the rules [Chapter 5, Subchapter S, Section 5.403 (h)].
4. The basic intellectual competencies discussed in this document -- reading, writing, speaking, listening, critical thinking, and computer literacy -- should inform the components of any core curriculum. Moreover, a core curriculum should contain courses that provide multiple perspectives about the individual and the world in which he or she lives; that stimulate a capacity to discuss and reflect upon individual, political, and social aspects of life so students understand ways in which to exercise responsible citizenship; and that enable students to integrate knowledge and understand the interrelationships of the disciplines.
5. There should be no attempt by the state to prescribe a specific set of core courses or a single core curriculum that would be uniform across all Texas colleges and universities.
6. A core curriculum should be described and assessed by faculty and institutions in terms of basic intellectual competencies and perspectives, and of specified student outcomes, rather than simply in terms of specific courses and course content.

### **DEFINING CHARACTERISTICS OF BASIC INTELLECTUAL COMPETENCIES IN THE CORE CURRICULUM**

The core curriculum guidelines described here are predicated on the judgment that a series of basic intellectual competencies - reading, writing, speaking, listening, critical thinking, and computer literacy - are essential to the learning process in any discipline and thus should inform any core curriculum. Although students can be expected to come to college with some experience in exercising these competencies, they often need further instruction and practice to meet college standards and, later, to succeed in both their major field of academic study and their chosen career or profession.

**READING:** Reading at the college level means the ability to analyze and interpret a variety of printed materials - books, articles, and documents. A core curriculum should offer students the opportunity to master both general methods of analyzing printed materials and specific methods for analyzing the subject matter of individual disciplines.

**WRITING:** Competency in writing is the ability to produce clear, correct, and coherent prose adapted to purpose, occasion, and audience. Although correct grammar, spelling, and punctuation are each a sine qua non in any composition, they do not automatically ensure that the composition itself makes sense or that the writer has much of anything to say. Students need to be familiar with the writing process including how to discover a topic and how to develop and organize it, how to phrase it effectively for their audience. These abilities can be acquired only through practice and reflection.

**SPEAKING:** Competence in speaking is the ability to communicate orally in clear, coherent, and persuasive language appropriate to purpose, occasion, and audience. Developing this competency includes acquiring poise and developing control of the language through experience in making presentations to small groups, to large groups, and through the media.

**LISTENING:** Listening at the college level means the ability to analyze and interpret various forms of spoken communication.

**CRITICAL THINKING:** Critical thinking embraces methods for applying both qualitative and quantitative skills analytically and creatively to subject matter in order to evaluate arguments and to construct alternative strategies. Problem solving is one of the applications of critical thinking, used to address an identified task.

**COMPUTER LITERACY:** Computer literacy at the college level means the ability to use computer-based technology in communicating, solving problems, and acquiring information. Core-educated students should have an understanding of the limits, problems, and possibilities associated with the use of technology, and should have the tools necessary to evaluate and learn new technologies as they become available.

Some of these intellectual competencies have traditionally been tied to specific courses required of all students during their first two years of college. For example, courses in college composition, together with mathematics have long been the cornerstone experience of the freshman year. But a single course or two-course sequence in college composition can do little more than introduce students to the principles and practices of good writing. Within the boundary of three to six semester credit hours of course work, neither of these sequences can guarantee proficiency. Moreover, in most curricula there are no required courses specifically dedicated to reading or to critical thinking. Thus, if a core curriculum is to prepare students effectively, it is imperative that, insofar as possible, these intellectual competencies be included among the objectives of many individual core courses and reflected in their course content.

## **PERSPECTIVES IN THE CORE CURRICULUM**

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Another imperative of a core curriculum is that it contain courses that help students attain the following:

1. Establish broad and multiple perspectives on the individual in relationship to the larger society and world in which he or she lives, and to understand the responsibilities of living in a culturally and ethnically diversified world;
2. Stimulate a capacity to discuss and reflect upon individual, political, economic, and social aspects of life in order to understand ways in which to be a responsible member of society;
3. Recognize the importance of maintaining health and wellness;
4. Develop a capacity to use knowledge of how technology and science affect their lives;
5. Develop personal values for ethical behavior;
6. Develop the ability to make aesthetic judgments;
7. Use logical reasoning in problem solving; and
8. Integrate knowledge and understand the interrelationships of the scholarly disciplines.

## **INSTRUCTION AND CONTENT IN THE CORE CURRICULUM**

Education, as distinct from training, demands a knowledge of various contrasting views of human experience in the world. Both the humanities and the visual and performing arts deal with the individual's reaction to the human situation in analytical and creative ways. The social and behavioral sciences deal with the principles and norms that govern human interaction in society and in the production of goods and services. The natural sciences investigate the phenomena of the physical world. Mathematics examines relations among abstract quantities and is the language of the sciences. Composition and communication deal with oral and written language. Each of these disciplines, using its own methodology, offers a different perspective on human experience. Taken together, study in these disciplines provides a breadth of vision against which students can establish and reflect on their own goals and values.

The outcomes specified for the disciplinary areas are thus intended primarily to provide students with a perspective on their experience through an acquaintance with the subject matter and methodology of each discipline. They provide students with the opportunity to understand how these disciplines present varying views of the individual, society, and the world, and of appreciating the methods by which scholars in a given discipline organize and evaluate data. The perspectives acquired in these studies describe the potential, as well as the limitations, of each discipline in understanding the human experience.

The objective of disciplinary studies within a core curriculum is to foster multiple perspectives as well as to inform and deliver content. Disciplinary courses within a core curriculum should promote outcomes focused on the intellectual core competencies, as well as outcomes related to establishing perspectives, and the basic concepts in the discipline - methods of analysis and interpretation specific to the discipline.

Institutions are urged to consider development and utilization of appropriate interdisciplinary courses as a means of helping students develop multiple perspectives on the individual in relationship to other people and societies. Comparison and contrast of disciplinary perspectives on an issue within the context of a single course can be a particularly effective instructional device.

## **CORE COMPONENTS AND RELATED EXEMPLARY EDUCATIONAL OBJECTIVES**

In designing and implementing a core curriculum of at least 42 semester credit hours, each Texas college and university should select and/or develop courses which satisfy exemplary educational objectives specified for each component area. The following exemplary educational objectives should be used as basic guidelines for selected component areas. Exemplary educational objectives become the basis for faculty and institutional assessment of core components.

Since it is difficult to define exemplary educational objectives for a core curriculum outside of some framework of the general areas of content, the objectives and outcomes described below are suggested as those that meet the intent of Senate Bill 148. The outcomes for student learning provide both guidelines for instruction and a profile of students as they complete each component of a core curriculum. Although these component areas could easily be "translated" directly into disciplinary or departmental terms, it is not necessary to restrict the areas to one or a few departments. These objectives could be met in a number of differing course configurations, including multi-disciplinary courses.

Colleges and universities across the state have specific missions and different roles and scope. The way in which colleges and universities achieve these outcomes will thus vary. These outlines are not intended in any way to impose restrictions on the creativity of the classroom instructor or to dictate pedagogical methods. The emergent profile of the students, however, will presumably have common characteristics insofar as they achieve the specified outcomes. A core curriculum experience will prepare them to learn effectively through the rest of their college years so that they carry these aptitudes for learning into their life careers.

### **I. Communication (composition, speech, modern language)**

The objective of a communication component of a 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

1. To understand and demonstrate writing and speaking processes through invention, organization, drafting, revision, editing, and presentation.
2. To understand the importance of specifying audience and purpose and to select appropriate communication choices.
3. To understand and appropriately apply modes of expression, i.e., descriptive, expository, narrative, scientific, and self-expressive, in written, visual, and oral communication.
4. To participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding.
5. To understand and apply basic principles of critical thinking, problem solving, and technical proficiency in the development of exposition and argument.
6. To develop the ability to research and write a documented paper and/or to give an oral presentation.

## **II. 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 solution of real-world problems.

### Exemplary Educational Objectives

1. To apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations.
2. To represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.
3. To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.
4. To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results.
5. To interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.
6. To recognize the limitations of mathematical and statistical models.

7. To develop the view that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.

### **III. Natural Sciences**

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

#### Exemplary Educational Objectives

1. To understand and apply method and appropriate technology to the study of natural sciences.
2. 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.
3. To identify and recognize the differences among competing scientific theories.
4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

### **IV. Humanities And Visual And Performing Arts**

The objective of the humanities and visual and performing arts in a core curriculum is to expand students' knowledge of the human condition and human cultures, especially in relation to behaviors, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature, philosophy, and the visual and performing 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

1. To demonstrate awareness of the scope and variety of works in the arts and humanities.
2. To understand those works as expressions of individual and human values within an historical and social context.
3. To respond critically to works in the arts and humanities.

4. To engage in the creative process or interpretive performance and comprehend the physical and intellectual demands required of the author or visual or performing artist.
5. To articulate an informed personal reaction to works in the arts and humanities.
6. To develop an appreciation for the aesthetic principles that guide or govern the humanities and arts.
7. To demonstrate knowledge of the influence of literature, philosophy, and/or the arts on intercultural experiences.

## **V. Social And Behavioral Sciences**

The objective of a social and behavioral science component of a core curriculum is to increase students' knowledge of how social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events, and ideas. Such knowledge will better equip students to understand themselves and the roles they play in addressing the issues facing humanity.

### Exemplary Educational Objectives

1. To employ the appropriate methods, technologies, and data that social and behavioral scientists use to investigate the human condition.
2. To examine social institutions and processes across a range of historical periods, social structures, and cultures.
3. To use and critique alternative explanatory systems or theories.
4. To develop and communicate alternative explanations or solutions for contemporary social issues.
5. To analyze the effects of historical, social, political, economic, cultural, and global forces on the area under study.
6. 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, and civil and human rights.
7. To understand the evolution and current role of the U.S. in the world.
8. To differentiate and analyze historical evidence (documentary and statistical) and differing points of view.
9. To recognize and apply reasonable criteria for the acceptability of historical evidence and social research.

10. To analyze, critically assess, and develop creative solutions to public policy problems.
11. 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.
12. To identify and understand differences and commonalities within diverse cultures.

#### **VI. INSTITUTIONALLY DESIGNATED OPTION**

An institution may wish to include in its core curriculum courses that address exemplary educational objectives not covered in the preceding broad discipline categories. Such courses may include computer literacy, kinesiology, health/wellness, interdisciplinary or linked courses, or other courses that address a specific institutional role and mission.