Attachment: Charge to SACS Task Force 01-02-2008

Why was Texas Tech University continued in accreditation for good cause and placed on Probation? Texas Tech University was continued in accreditation for good cause and placed on Probation because the Commission determined that it met the provisions for good cause but it failed to demonstrate compliance with Comprehensive Standard 3.5.1 (College-Level Competencies) of the *Principles of Accreditation*. This standard expects an accredited institution to provide evidence that it has identified college-level competencies within the general education core and has demonstrated that graduates have attained those competencies. (To read the full statement for the standard cited above, access the *Principles of Accreditation* at <a href="http://www.sacscoc.org/principles.asp">http://www.sacscoc.org/principles.asp</a>.) In addition, and in accordance with Commission policy, the institution was placed on Probation because it had reached the end of its maximum two-year monitoring period without demonstrating compliance with the *Principles of Accreditation*.

# <u>Task 1: Provide evidence that the institution has identified college-level</u> <u>competencies within the general education core.</u>

The following is taken from <u>THECB Core Curriculum Assumptions and Defining Characteristics (REV 1999)</u>

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.

Exemplary educational competencies for five of the eight categories of Texas Tech's General Education Curriculum are specified in THECB document included as Appendix A. Other public institutions in Texas are using these competencies and have report data to SACS relative to these individual competencies. Beyond the five specified by THECB Texas Tech added additional competencies for Multicultural, Technology and Applied Science. We must specific competencies these as well. With the complete set of competencies specified we know what to assess, what data to collect and what we will analyze for the Fall 2008 monitoring report. We are also required to submit a report to THECB in 2009 regarding these same general education competencies. Accomplishing this task will satisfy this requirement as well. Of immediate concern for the Spring Semester 2008 is reviewing Student Learning Objectives (SLO's) for all general education courses to be sure they are consistent with these core competencies.

# Task 2: Demonstrate that graduates have attained those competencies.

During the Spring Semester 2008 we will continue collecting data at the course level as well as implementing additional assessment activities.

- a. <u>Direct Assessment of Core Curriculum Courses:</u> Two years of data have been collected at the course level related to student competencies for courses in the core curriculum. It is uncertain whether the data being collected at the course level can be aligned with the eight specific core competencies within categories. To the extent feasible we will (1) assesses this data to yield information on student competencies within categories and (2) determine the degree to which this data can be used to assess specific competencies as defined in Task 1. Where feasible we will use an off-the-shelf software approach to facilitate a meta-analysis of this data.
- b. <u>Direct Assessment of the Core Curriculum Using the CLA:</u> In the fall of 2007 the CLA was administered for the first time. The CLA assesses critical thinking, analytic reasoning, written communication and problem solving. The CLA will be administered for the second time in the spring of 2008. Results of the CLA will be available in the summer of 2008.
- c. Assessment Activities Beyond the CLA: The CLA does not map one-to-one onto the eight core competencies specified in our core curriculum. Additional assessment of student learning outcomes in all areas not covered by CLA (mathematics, natural sciences, technology, multicultural, visual and performing arts) will be implemented.
- **d.** <u>Indirect Assessment of Student, Self-reported Competencies:</u> In the spring semester of 2008 we will implement an on-line survey instrument to assess general educational competencies from a student perspective for all eight core competencies.

# Task 3: Document the use of results of the assessment of student general education competencies to modify and improve the general education curriculum.

<u>Finding-1:</u> Specific competencies above and beyond course level learning outcomes have not been specified in the detail necessary to perform an assessment of the general education competencies. Task 1 responds to this finding.

<u>Finding-2:</u> The on-going assessment of students' general educational competencies at the course level was necessary but not sufficient to inform changes needed to modify and improve the general education curriculum. Task 1 and Task 2 respond to this finding. The results of an overall assessment of students' general education competencies informs the General Education

Committee in its continuing program level review of all courses in the core curriculum. A direct result of this finding is the General Education Committee must consider all eight specific competencies when it evaluates courses, not just the student learning outcomes associated with a specific course. This conforms to the following requirement from THECB.

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.

**Finding-3:** Texas Tech has more than 312 courses listed in its 2003 General Education Curriculum. Over the last two years the General Education Committee embarked on an extensive course level assessment of student learning outcomes. A large amount of course level data has been collected and continues to be collected. This resulted in changes at the course level as well as identifying courses that should be added or deleted from the core curriculum. With the assessment of all eight college level student competencies the General Education Committee will be able to recommend structural changes to the general education curriculum including a reduction in the total number of courses listed in the core curriculum. This will greatly simplify the advising process for students.

# Statutory basis for Texas Core Curriculum as documented on the Higher Education Coordinating Board Website

Appendix A: Core Curriculum Assumptions and Defining Characteristics (REV 1999), is taken directly from the Texas Higher Education Coordinating Board Website. This document sets forth the statutory requirements for establishing a core curriculum including (1) assumptions, (2) defining characteristics of basic intellectual competencies in the core curriculum, (3) perspectives in the core curriculum, (4) instruction and content in the core curriculum and (5) core components and related exemplary educational objectives. Five areas of competency are required which will consist of no less than 42 credit hours. Institutions may specify additional areas of competency.

- 1. Communication
- 2. Mathematics
- 3. Natural Sciences
- 4. Humanities and Visual and performing Arts
- 5. Social and Behavioral Sciences.

# **Texas Tech University's General Education Competencies**

Note: Texas Tech University's Core Curriculum objectives shown in italics were taken verbatim from the document found in Appendix A: Core Curriculum Assumptions and Defining Characteristics (REV 1999). This document specifies exemplary competencies for all of these areas.

Two areas of competency in Texas Tech's core curriculum that differ are (1) Multicultural and (2) Technology and Applied Science.

# Multicultural

Every student must include at least one 3-hour multicultural course or its equivalent that focuses explicitly on the distinctive subcultures of the United States or on the culture of another society.

#### Communication

Written – 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.

Oral - Oral communication means the basic skills acquired in speaking and listening effectively and critically.

#### **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.

#### Natural Sciences

The objective of the study of the 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. (The natural sciences investigate the phenomena of the physical world.)

# **Technology and Applied Science**

The objective of the study of the technology and applied science component of a core curriculum is to enable the student to under- stand how profoundly scientific and technological developments affect society and the environment. Human nutrition, the world's environment, and energy problems are all viewed as critical to one's understanding of and interactions with today's world.

# Humanities

The objective of the humanities in a core curriculum is to expand the student's 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 and philosophy, students will engage in critical analysis and develop an appreciation of the humanities as fundamental to the health and survival of any society.

# 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.

#### 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.

# Texas Tech's list of approved core curriculum courses (2003) is included as Appendix B.

- 10 Communication (2 courses from a total of 2)
- 11 Additional Communication (1 course from a total of 6)
- 20 Mathematics (1 course from a total of 11+)
- 21 Additional Mathematics (1 course from a total of 11+)
- 30 Natural Science (2 courses from a total of 31+)
- 40 Humanities (1 course from a total of 48+)
- 50 Visual and Performing Arts (1 course from a total of 48+)
- 60 History (2 courses from a total of 4)
- 70 Government (2 courses from a total of 2)
- 80 Social and Behavioral Sciences (1 course from a total of 83+)
- 90 Institutionally Designated Option (1 from a total of 66)

Total Credit Hours 47-51

The total number of courses listed in the core curriculum is at least 312 courses.

# **Appendix A: Core Curriculum: Assumptions and Defining Characteristics (Rev. 1999)**

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, and 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

- 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

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 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 which are 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 multidisciplinary 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, expositive, 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.

# Appendix B: Texas Tech Core Curriculum 2003

# 10 - Communication (2 courses)

6 credit hours

English 1301 - Essentials of College Rhetoric

English 1302 - Advanced College Rhetoric

#### 11 - Additional Communication (1 course)

3 credit hours

Chemical Engineering 2306 - Exposition of Technical Information

Communication Studies 2300 - Public Speaking

Communication Studies 3358 - Business & Professional Communication

Human Development and Family Studies 2320 - Basic Interpersonal Skills

Management 3373 - Managerial Communication

Petroleum Engineering 3308 - Engineering Communications

# 20 - Mathematics (1 course)

3-4 credit hours

(at least 1 course from this and the 021 category must be in Mathematics)

Agricultural and Applied Economics 3401 - Agricultural Statistics

Industrial Engineering 3341 - Engineering Statistics

Math 1300 - Contemporary Mathematics

or Math 1320 - College Algebra

or Math 1420 - College Algebra with Review

All courses above 1320 except for Math 3430

Music Theory - 3303 -Form, Analysis & Synthesis

Philosophy 2310 - Logic

Philosophy 4310 - Advanced Logic

Psychology 3400 - Statistical Methods

Sociology 3391 - Introduction to Social Research I

# 21 - Additional Mathematics (1 course)

3-4 credit hours

(at least 1 course from this and the 020 category must be in Mathematics)

Agricultural and Applied Economics 3401 - Agricultural Statistics

Industrial Engineering 3341 - Engineering Statistics

Math 1300 - Contemporary Mathematics

Math 1320 - College Algebra

Math 1420 - College Algebra with Review

All courses above 1320 except for Math 3430

Music Theory - 3303 -Form, Analysis & Synthesis

Philosophy 2310 - Logic

Philosophy 4310 - Advanced Logic

Psychology 3400 - Statistical Methods

Sociology 3391 - Introduction to Social Research I

# 30 - Natural Science (2 courses)

8 credit hours

Animal Science 3404 - Consumer Selection & Utilization of Meat Products

Anthropology 2300/2100 - Physical Anthropology

Astronomy 1300/1100 - Solar System Astronomy

Astronomy 1301/1101 - Stellar Astronomy

Atmospheric Science 1300/1100 Introduction to Atmospheric Science

Biology 1305/1113 - Ecology & Environmental Problems

Biology 1401 - Biology of Plants

Biology 1402 - Biology of Animals

Biology 1403 - Biology I

Biology 1404 - Biology II

Chemistry 1305/1105 - Chemistry & Society I

Chemistry 1306/1106 - Chemistry & Society II

Chemistry 1307/1107 - Principles of Chemistry I

Chemistry 1308/1108 - Principles of Chemistry II

Foods and Nutrition 1410 - Science of Nutrition

Geography 1401 - Physical Geography: Climate & the Biosphere

Geology 1303/1101 - Physical Geology

Geology 1304/1102 - Historical Geology

Geology 1350/1105 - History of Life

Honors 2305/2115 - Honors Integrated Science I

Honors 2306/2116 - Honors Integrated Science II

Physics 1303/1101 - Physics for Nonscience Majors

Physics 1306/1103 - General Physics

Physics 1307/1104 - General Physics

Physics 1308/1105 - Principles of Physics I

Physics 1406 - Physics of Sound & Music

Physics 2301/1106 - Principles of Physics II

Plant and Soil Science 1411 - Principles of Horticulture

Plant and Soil Science 2330/2130 - Urban Soils

Plant and Soil Science 2401 - Introductory Entomology

Zoology 2403 - Human Anatomy & Physiology

# 40 - Humanities (1 course)

3 credit hours

Anthropology 3323 - Religion of Culture

Anthropology 3325 - Anthropological Folklore

Anthropology 3346 - Ancient Civilizations of Middle & South America

Anthropology 3351 - Language & Culture

Architecture (all Architecture history courses)

Classics 1320 - Classical Mythology

Classics 1330 - Sports & Public Spectacles in the Ancient World

Classics 3320 - The World of Greece

Classics 3330 - The World of Rome

Classics 3350 - Comparative Mythology

Culture 4305 - Contemporary Theories of Cultural Meaning

Communication Studies 3311 - Rhetoric in Western Thought

Communication Studies 3318 - Persuasion & Social Movements

English (all courses in literature or linguistics, excluding courses in technical writing)

Fashion Design 3312 - History & Philosophy of Dress

History (any History courses not used to fulfill Core Curriculum American History requirement)

Honors 3301 - Honors Seminar in Humanities

Humanities 2301 - Introduction to the Humanities

Humanities 2302 - Introduction to the Humanities

Journalism 3350 - History of American Journalism

Latin American/Iberian Studies 2300 - Latin America & Iberia: An Interdisciplinary Introduction

Latin American/Iberian Studies 4300 - Seminar in Latin America & Iberian Studies

Landscape Architecture 3302 - Development of Landscape Architecture

Natural History & Humanities 1301 - Natural History & Humanities Seminar

Philosophy 2300 - Beginning Philosophy

Philosophy 2320 - Introduction to Ethics

Philosophy 2350 - World Religions & Philosophy

Philosophy 3301 - Classical Greek Philosophy

Philosophy 3302 - Asian Philosophy

Philosophy 3303 - Modern European Philosophy

Philosophy 3304 - Existentialism & Phenomenology

Philosophy 3320 - Introduction to Political Philosophy

Philosophy 3322 - Biomedical Ethics

Philosophy 3324 - Philosophy of Religion

Philosophy 3332 - Feminism & Philosophy

Philosophy 4320 - Ethics

Philosophy 4323 - Aesthetics

Philosophy 4330 - Epistemology

Philosophy 4331 - Philosophy of Language

Philosophy 4340 - Metaphysics

Political Science 3330 - Ancient & Medieval Political Theory

Political Science 3331 - Introduction to Political Philosophy

Political Science 3332 - Modern Political Theory

Political Science 3333 - Contemporary Political Theory

Visual and Performing Arts 3301 - Critical Issues in Arts & Culture

Women's Studies 2300 - Introduction to Women's Studies

Women's Studies 3341 - Women in European Civilization

Women's Studies 4327 - Gender, Race and Class in U.S. Law

Women's Studies 4373 - Love, Death & Magic in Europe, 1500-1800

# 50 - Visual and Performing Arts (1 course)

3-4 credit hours

Architecture 1412 - Architectonics Studio

Architecture 1441 - Architectural Delineation I

Architecture 1442 - Architectural Delineation II

Art (all Art History courses except 3311 and 4315, all studio courses)

Art 1309 - Art Appreciation

Dance 3313 - History of the Dance

Honors 3304 - Honors Seminar in Fine Arts

Landscape Architecture 1401 - Landscape Architecture Drawing & Drafting

Music 1001 - Applied Music Instrument or Voice

Music 1002 - Applied Music Instrument or Voice

Music 2001 - Applied Music Instrument or Voice

Music 2002 - Applied Music Instrument or Voice

Music 3001 - Applied Music Instrument or Voice

Music 3002 - Applied Music Instrument or Voice

Music 4001 - Applied Music Instrument or Voice

Music 4002 - Applied Music Instrument or Voice

Music 1123 - Group Keyboard Instruction I

Music 1124 - Group Keyboard Instruction II

Music 2123 - Group Keyboard Instruction III

Music 2124 - Group Keyboard Instruction IV

Music 2133 - Class Guitar

Music 2134 - Class Guitar

Music 3205 - Jazz Improvisation

Music 1201 - Introduction to Contemporary Music

Music 1202 - Introduction to Contemporary Music

Music (all courses except Marching Band)

Music History 1308 - Music Appreciation

Music History 2301 - History of Music(music majors)

Music History 2302 - History of Music(music majors)

Music History 2308 - Heritage of Music

Music History 2309 - Heritage of Music

Music History 3304 - History of Jazz

Music History 3308 - Masterpieces in Music

Music 2301 - Essential Elements of Music

Music Theory 1300 - Songwriting

Music Theory 1301 - Introduction to Music Theory

Music Theory 1101 - Developmental Aural Skills

Music Theory 1303 - Elementary Music Theory I

Music Theory 1103 - Elementary Aural Skills I

Music Theory 1304 - Elementary Music Theory II

Music Theory 1104 - Elementary Aural Skills II

Theatre Arts 2301 - Introduction to Acting

Theatre Arts 2303 - Theatre Appreciation

Theatre Arts 2304 - Introduction to Cinema

Theatre Arts 2305 - Fundamentals of Oral Interpretation

Theatre Arts 3308 - History of Theatre I

Theatre Arts 3309 - History of Theatre II

Theatre Arts 4303 - Theory & Practice of Playwriting

### 60 - History (2 courses)

6 credit hours

History 2300 - History of the United States to 1877

History 2301 - History of the United States since 1877

History 3310 - History of Texas

Women's Studies 3323 - History of Women in America

#### 70 - Government (2 courses)

6 credit hours

Political Science 1301 - American Government, Organization

Political Science 2302 - American Public Policy

# 80 - Social and Behavioral Sciences (1 course)

3 credit hours

Agricultural and Applied Economics 2305 - Fundamentals of Agricultural & Applied Economics

Advertising 4313 - International Advertising

Anthropology 1301 - Understanding Multicultural America

Anthropology 2301 - Introduction to Archaeology

Anthropology 2302 - Cultural Anthropology

Anthropology 3305 - Anthropological Linguistics

Anthropology 3306 - Women in Culture & Society

Anthropology 3315 - Health, Medicine & Culture

Anthropology 3331 - Indians of North America

Anthropology 3332 - Peoples of Latin America

Anthropology 3345 - North American Archaeology

Anthropology 3371 - Peoples of the Southwest

Anthropology 4372 - Society & Culture of Mexico

Architecture 1311 - Design, Environment & Society

Art 3311 - Native American Arts

Art 4315 - Arts of Pre-Columbian America

Communication Studies 1301 - Interpersonal Communication

Communication Studies 3313 - Persuasion

Communication Studies 3331 - Nonverbal Communication

Communication Studies 3332 - Intercultural Communication

Communication Studies 3334 - Gender & Communication

Communication Studies 3353 - Small Group Communication

Communication Studies 3355 - Communication in Organizations

Communication Studies 3356 - Leadership & Communication

Economics 2301 - Principles of Economics I

Economics 2302 - Principles of Economics II

Economics 2305 - Principles of Economics

Elementary Education 2300 - Schools, Society & Diversity

Special Education 2300 - Schools, Society & Diversity

Exercise and Sports Science 3307 - Gender Issues in Sports

Exercise and Sports Science 3308 - Sport in World Cultures

Foods and Nutrition 4380 - Cultural Aspects of Food

Family Studies 2322 - Courtship & Marriage

Family Studies 3320 - The Contemporary Family

Family Studies 3321 - Human Sexuality through Family Life Cycle

Family Studies 3322 - The Family in the Community

Family Studies 3325 - Family Dynamics of Addiction

Family Studies 3331 - Parenting

Family Studies 3332 - Aging in the Family

Geography 2351 - Regional Geography of the World

Geography 3337 - Man's Economic Environment

Human Development 2303 - Life Span Human Development

Human Development 3301 - Theories of Human Development & the Family

Human Development & Family Studies 3331 - Parenting

Health 1305 - Human Sexuality

Health 2302 - Environmental Health & Awareness

Health 3325 - Health Concerns in Chemical Dependencies

Honors 3303 - Honors Seminar in Social Sciences

Industrial Engineering 3301 - Engineering Economic Analysis

Industrial Engineering 4361 - Engineering Design for People

Journalism 4330 - Public Opinion & Propaganda

Mass Communications 1300 - Introduction to Mass Communications

Personal Financial Planning 3301 - Financial Planning for Young Adults

Philosophy 3321 - Philosophy of Law

Philosophy 3331 - Philosophy of Social & Human Sciences

Political Science 3326 - Women in Politics

Political Science 3341 - The Administrative Process

Political Science 3351 - The Judicial Process

Political Science 3361 - International Politics

Political Science 3371 - Comparative Politics

Psychology 1300 - General Psychology

Psychology 2301 - Child Psychology

Psychology 3398 - Ethnic Minority Psychology

Psychology 4300 - Psychology of Human Sexual Behavior

Psychology 4325 - Drugs, Alcohol & Behavior

Psychology 4330 - Psychology of Life Span Development & Aging

Sociology 1301 - Introduction to Sociology

Sociology 1320 - Current Social Problems

Sociology 2331 - The Sociology of Marriage

Sociology (all advanced courses except for Sociology 3391 and 4391)

Social Work 2301 - Introduction to Social Welfare

Social Work 3311 - Human Behavior & the Social Environment I

Women's Studies 1305 - Human Sexuality

Women's Studies 2331 - Sociology of Marriage

Women's Studies 3306 - Women in Culture & Society

Women's Studies 3312 - Gender & Communication

Women's Studies 3321 - Human Sexuality through the Family Life Cycle

Women's Studies 3325 - Women in the Modern World

Women's Studies 3326 - Women in Politics

Women's Studies 3331 - Sociology of the Family

Women's Studies 3337 - Inequality in America

Women's Studies 4302 - Psychology of Human Sexual Behavior

Women's Studies 4399 - Women's Studies Seminar

# 90 - Institutionally Designated Option

#### 3-4 credit hours

One course chosen from the following:

Agricultural Education 4302 - Transfer of Agricultural Technology

Agricultural Systems Management 2302 - Agricultural Surveying & Land Conservation

Agricultural Systems Management 3303 - Internal Combustion Engine Theory & Operation

Agricultural Systems Management 4302 - Agricultural Buildings & Environmental Control

Animal Science 1401 - General Animal Science

Animal Science 2303 - Care & Management of Companion Animals

Animal Science 3402 - Animal Breeding & Genetics

Architecture 2351 - Building Systems I

Architecture 3350 - Building Technology

Art 3362 - Technology in the Visual Arts

Atmospheric Science 2301 - Weather, Climate & Human Activities

Atmospheric Science 3303 - General Meteorology

Civil Engineering 1130 - Civil Engineering Seminar

Chemical Engineering 1305 - Engineering Analysis I

Chemistry 3305 - Organic Chemistry I

Computer Science 1300 - Computers & Modern Society

Computer Science 1412 - Programming Principles II

Computer Science 3368 - Introduction to Artificial Intelligence

Construction Engineering Technology 1312 - Construction Methods

Construction Engineering Technology 2301 - Surveying & Surveys

Educational Instructional Technology 2318 - Computing & Information Technology

Educational Instructional Technology 3318 - Applications of Technology in Elementary Education

Electrical Engineering 1305 - Introduction to Engineering & Computer Programming

Fashion Design 3305 - Computer Applications in Apparel Design

Foods and Nutrition 2310 - Principles of Food Preparation

Food Technology 2300 - Principles of Food Technology

Food Technology 2302 - Elementary Analysis of Foods

Food Technology 3301 - Food Microbiology

Food Technology 3303 - Food Sanitation

Geography 3353 - Man, Resources & Environment

Geography 3360 - Technology & the Human Landscape

Geography 4301 - Geomorphology in Environmental Management

Geology 3323 - Environmental Geology

Geology 3428 - GIS in Natural Sciences & Engineering

General Engineering Technology 1312 - Alternating & Direct Current Technology

Honors 3302 - Honors Seminar in Sciences

Interior Design 4383 - Computer Aided Drafting for Interior Designers II

Industrial Engineering 1305 - Engineering Analysis

Industrial Engineering 3351 - Manufacturing Engineering I

Industrial Engineering 4363 - Work & Product Safety Engineering

Information Systems and Quantitative Sciences 2440 - Introduction to Computer Systems in Business

Information Systems and Quantitative Sciences 3344 - Introduction to

**Production & Operations Management** 

Math 3430 - Computational Techniques for Science & Mathematics

Microbiology 4307 - Industrial Microbiology

Mechanical Engineering 1315 - Introduction to Mechanical Engineering

Mechanical Engineering 2322 - Engineering Thermodynamics I

Mechanical Technology 1312 - Mechanical Technology

Music 3001 - Projects in Electronic & Experimental Music

Music 3341 - Introduction to Technology for Musicians

Petroleum Engineering 1305 - Engineering Analysis I

Philosophy 3330 - Philosophy of Science

Physics 1305 - Engineering Physics Analysis I

Plant and Soil Science 1321 - Agronomic Plant Science

Plant and Soil Science 2311 - Vegetable Crops

Plant and Soil Science 2312 - Propagation Methods

Plant and Soil Science 2432 - Principles & Practices in Soils

Restaurant, Hotel and Institutional Management 1303 - Computers in the Hospitality Industry

Range, Wildlife and Fisheries Management 2302 - The Ecology & Conservation of Natural Resources

Range, Wildlife and Fisheries Management 2305 - Freshwater Ecology & Fisheries

Range, Wildlife and Fisheries Management 2307 - The Diversity of Life

Range, Wildlife and Fisheries Management 4314 - Watershed Planning

Sociology 3352 - Technology and Society

Telecommunications 3300 - Telecommunications Technologies & Society

Telecommunications 3310 - Introduction to Telecommunications

Theatre Arts 3304 - Principles of Theatrical Lighting

47-51 total credit hours