

## **ACADEMIC AFFAIRS COMMITTEE**

**October 12, 2007**

### **Minutes**

**Present:** Paul Matney, LaVon Barrett, Robert Boyd, Diane Brice, Toni Gordy, Ann Hamblin, Judy Jackman, Michael Kopenits, Duane Lintner, Shawna Lopez, Ed Nolte, Jim Powell, Rathna Prabhakar,

**Absent:** Bob Austin, Sally Evans, Courtney Milleson, Jerry Moller

### **WELCOME**

Dr. Matney welcomed the members to the 2007-08 Academic Affairs Committee. He noted that the committee is the “quality control” for academic affairs at Amarillo College and outlined responsibilities of the committee. Dr. Matney noted that in the future the agenda, along with supporting documents, will be distributed to members of the committee prior to the scheduled meeting. He directed members to read the documents and research agenda items if necessary in order to make informed decisions.

Matney announced the plan for EduServe to be on campus October 22-24 to evaluate AC’s IT status and they will submit an IT Tactical Plan to the Board in January.

Faculty Supervisors Council provides a forum for all faculty to come together and share information.

Matney indicated his intent over the next year to re-prioritize the importance of the developmental education program.

Lintner will be heading up a faculty work group on emerging technology on campus.

### **BEHAVIORAL STUDIES**

#### **HIST 2322—Inclusion into the Humanities General Education List**

Brice asked where most students expect to apply the credit when they complete this course. She is concerned that the programming required to apply courses correctly may cause difficulties at graduation and in marking students “core complete”. Matney suggested we talk to Moller to clarify the need for the course to be listed under both Humanities and Social/Behavioral Sciences.

Matney asked the committee if they would like to have a faculty member who teaches the course to present to the committee justification for listing the course under both categories. Jackman indicated she would. Hamblin expressed concern that cross-listing courses in multiple areas might “open the gate” for many more.

Jackman moved, seconded by Lintner to table the issue until a discipline person can speak to the committee. The motion carried.

## **BUSINESS DIVISION**

### **Real Estate**

Linter expressed concern there is no justification for removal of courses from curriculum other than that they haven't been taught recently. Is there no one to teach them or do they no longer apply? Matney asked whether the online options have already been purchased? Hamblin asked why a 3 hour course is still active with a 2 hour course available online?

Boyd moved, seconded by Kopenits to table requests until Lintner gets more information from Beverly Vinson. The motion carried.

## **LANGUAGE, COMMUNICATION & FINE ARTS**

### **Humanities**

Boyd indicated that the Coordinating Board no longer approves **Mythology (HUMA 1371)** to be taught at the lower division level. The recommendation is to remove the course from Amarillo College curriculum.

Prabakar moved, seconded by Nolte to remove the course from the course inventory/catalog. The motion carried.

### **Speech and Theatre**

Boyd indicated the need to delete **SPCH 1144, SPCH 1145, SPCH 2144** and **SPCH 2145** because the department has not offered forensics courses in many years and has no intention to do so in the future. The department has not had an active forensics team in many years.

Jackman expressed concern regarding the elimination of **SPCH 1171**. We are now teaching the course at a developmental level (**STSU 0211**) but the course is under evaluation. Matney indicated the Co Board has told AC that teaching **SPCH 1171** is in violation of ACGM. Prabakar is concerned that students choose not to take **STSU 0211** because no credit is awarded.

Brice moved, seconded by Linter, to remove **SPCH 1144, SPCH 1145, SPCH 2144, SPCH 2145** and **SPCH 1171** from the inventory. The motion carried.

## **SCIENCES & ENGINEERING**

### **Engineering**

Nolte updated the committee about the Wagner/Peyser grant AC received for a transfer aerospace engineering program with UT-Arlington and a BAAS transfer to WTAMU. AC aerospace manufacturing students will transfer to WTAMU.

The ACGM currently has only a one-hour and a two-hour introductory engineering course. Wetzels request is to add a unique needs 3-hour Introduction to Engineering course. She is

currently working with Texas Tech and West Texas A&M to get transfer approval letters.

Brice moved, seconded by Boyd, to table the item until the unique needs application and the 2 letters from senior universities have been submitted to the Coordinating Board. The motion carried.

Wetzel submitted a request to add **ENGR 2332-Mechanics of Materials** to the Amarillo College course inventory/catalog. The course will also be applied to the Aerospace Engineering program through the grant. Committee members discussed the required pre-requisites for the course.

Boyd motioned, seconded by Linter to table the motion until submission of the course description and pre-requisites. The motion carried.

### **Geology**

**GEOL 1445-Oceanography** Matney asked how the lab is conducted online. Dr. Richard Hobbs will serve as instructor of the course.

Matney noted the ACGM course description was quite broad.

Matney asked why we want to add this course; we have a large number of science courses already. Prabakhar indicated there is an increase in environmental science majors and this course applies.

Kopenits asked what the cost is to purchase this course. Barrett expressed that if it is a “hot topic” course, it may be worthwhile to approve.

Lintner motioned, seconded by Kopenits to table the issue pending further review of cost, need and number of students served. The motion carried.

### **Physics**

Prabhakar expressed concern that students who take the lecture without the corresponding lab do not pass the lecture course. The proposal is to delete **PHYS 1301** and **PHYS 1101** and replace with **PHYS 1401**; delete **PHYS 1302** and **PHYS 1102** and replace with **PHYS 1402**.

Lintner motioned, seconded by Nolte, to approve the deletion of **PHYS 1301**, **PHYS 1101**, **PHYS 1302** and **PHYS 1102** and the addition **PHYS 1401** and **PHYS 1402**. The motion carried.

## **ACADEMIC AFFAIRS COMMITTEE**

Friday, October 12, 2007

Library 112, 9:00am

- Academic Affairs Procedures
- BEHAVIORAL STUDIES (Cream)
  - History
- BUSINESS DIVISION (White)
  - Real Estate
- LANGUAGE, COMMUNICATION AND FINE ART (Green)
  - Humanities
  - Speech
- SCIENCES & ENGINEERING
  - Engineering (Blue)
  - Geology (Yellow)
  - Physics (Lavender)

# Attachments

**GENERAL EDUCATION COURSE LIST\***

\*Courses appearing in two categories will satisfy the requirement for only one.

**Communication**

ENGL	1301	Freshman Composition I
ENGL	1302	Freshman Composition II
SPCH	1315	Public Speaking
SPCH	1318	Interpersonal Communication
SPCH	1321	Business and Professional Speaking

**Mathematics**

MATH	1314	College Algebra
MATH	1316	Trigonometry
MATH	1324	Mathematics for Business Decisions I
MATH	1325	Mathematics for Business Decisions II
MATH	1332	Contemporary Mathematics I
MATH	1342	Statistics
MATH	1348	Analytic Geometry
MATH	2412	Precalculus
MATH	2413	Calculus I
MATH	2414	Calculus II

MATH (or any MATH course for which the above math. courses are a prerequisite)

**Natural Sciences**

BIOL	2306	Environmental Science
BIOL	2106	Environmental Science Lab
BIOL	1308	Life Science I
BIOL	1108	Life Science Lab I
BIOL	1309	Life Science II
BIOL	1109	Life Science II Lab
BIOL	1411	Botany
BIOL	1413	Zoology
BIOL	1406	Biology I
BIOL	1407	Biology II
BIOL	2421	Microbiology
BIOL	2401	Human Anatomy and Physiology I
BIOL	2402	Human Anatomy and Physiology II
BIOL	2404	Human Physiology
CHEM	1305	Introductory Chemistry I
CHEM	1105	Introductory Chemistry I Lab
CHEM	1406	General Organic and Biological Chemistry
CHEM	1405	Essentials of Chemistry I
CHEM	1419	Introductory Organic Chemistry
CHEM	1311	Principles of Chemistry I
CHEM	1111	Principles of Chemistry I Lab
CHEM	1312	Principles of Chemistry II
CHEM	1112	Principles of Chemistry II Lab
CHEM	2323	Organic Chemistry I
CHEM	2223	Organic Chemistry I Lab
CHEM	2325	Organic Chemistry II
CHEM	2225	Organic Chemistry II Lab
GEOL	1303	Physical Geology
GEOL	1103	Physical Geology Lab
GEOL	1304	Historical Geology
GEOL	1104	Historical Geology Lab
GEOL	1447	Meteorology
PHYS	1301	College Physics I
PHYS	1101	College Physics I Lab
PHYS	1302	College Physics II
PHYS	1102	College Physics II Lab
PHYS	1311	Astronomy I: Stars and Galaxies
PHYS	1111	Astronomy I: Stars and Galaxies LAB
PHYS	1312	Astronomy II: Solar Systems
PHYS	1112	Astronomy II: Solar Systems LAB
PHYS	2425	Principles of Physics I
PHYS	2426	Principles of Physics II
PHYS	1305	Introductory Physics I
PHYS	1105	Introductory Physics I Lab

PHYS	1315	Concepts of Physical Science I
PHYS	1317	Concepts of Physical Science II

The following four courses may satisfy Natural Sciences core curriculum requirements for EC-8th elementary education majors.

BIOL	2374	Integrated Biology I
CHEM	1375	Integrated Chemistry I
PHYS	1375	Integrated Physics I
PHYS	2373	Integrated Earth Science

**HUMANITIES/FINE ARTS****Fine Arts (Visual and Performing Arts)**

ARTS	1301	Art Appreciation
ARTS	1303	Art History I
ARTS	1304	Art History II
ARTS	1311	Design I
ARTS	1316	Drawing I
ARTS	2356	Fundamentals of Photography I
COMM	1336	Introduction to Radio-Television Production
DRAM	1310	Introduction to Theater
DRAM	1351	Acting I
DRAM	2366	American Cinema
HUMA	1315	Survey of Art and Music
MUSI	1306	Music Appreciation
MUSI	1310	American Music

MUSI or MUAP (Any Music course or combination of courses with a Common Course Number)

**Humanities**

ANTH	2302	Introduction to Archaeology
ANTH	2346	General Anthropology and the Humanities
ANTH	2351	Cultural Anthropology
ENGL	2322	Masterworks of English Literature
ENGL	2323	Masterworks of English Literature
ENGL	2327	American Literature: Beginning to Civil War
ENGL	2328	American Literature: Civil War to Present
ENGL	2331	Literature of the Non-Western World
ENGL	2332	Literature of the Western World
ENGL	2333	Literature of the Western World
ENGL	2341	Selected Studies in Literature
FREN	2311	Second-Year French I
FREN	2312	Second-Year French II
GERM	2311	Second-year German I
GERM	2312	Second-year German II
HIST	2311	Western Civilization
HUMA	1301	Humanities - Ancient to Medieval
HUMA	1302	Humanities - Renaissance to Modern
HUMA	1315	Survey of Art and Music
PHIL	1301	Introduction to Philosophy
PHIL	1304	Introduction to World Religion
PHIL	2306	Introduction to Ethics
RELG	1301	The Old Testament
RELG	1302	The New Testament
SOCI	2319	Minority Studies
SPAN	2311	Second-year Spanish I
SPAN	2312	Second-year Spanish II

**Social and Behavioral Sciences**

ANTH	2302	Introduction to Archeology
ANTH	2346	General Anthropology and the Humanities
ANTH	2351	Cultural Anthropology
CRIJ	1301	Introduction to Criminal Justice
CRIJ	1307	Crimes in America
ECON	1301	Introduction to Economics
ECON	2301	Principles of Economics I
ECON	2302	Principles of Economics II
GEOG	1302	Cultural Geography
GOVT	2305	Government of the United States
GOVT	2306	Government of Texas
HIST	1301	History of the United States I
HIST	1302	History of United States II



HIST	2311	Western Civilization
HIST	2322	Comparative World History
PHED	1304	Concepts of Healthful Living
PSYC	2301	General Psychology
PSYC	2306	Human Sexuality
PSYC	2308	Child Psychology
PSYC	2314	Life - Span Developmental Psychology
PSYC	2315	Human Behavior and Personal Adjustment
PSYC	2319	Social Psychology
SOCI	2301	Marriage and the Family
SOCI	1301	Introduction to Sociology
SOCI	1306	Modern Social Problems
SOCI	2319	Minority Studies
SOCI	2326	Social Psychology

#### Lifetime Fitness

Any PHED course numbered 1101-1122.

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## 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. However, 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 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, 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 F: Funding Categories**

## E. Humanities: 3 hours

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. Any foreign language courses not used to satisfy the foreign language requirement or other Core Curriculum requirements may be used to satisfy the humanities requirement.

### TTU Course

ADM 3312	History and Philosophy of Dress
ANTH 3323	Religion of Culture
ANTH 3325	Anthropological Folklore
ANTH 3346	Ancient Civilizations of Middle and South America
ANTH 3351	Language and Culture
ARCH—All architecture history courses	
CLAS 3302	Classical Mythology
CLAS 3303	Sports and Public Spectacles in the Ancient World
CLAS 3320	The World of Greece
CLAS 3330	The World of Rome
CLAS 3350	Comparative Mythology
C LT 4305	Contemporary Theories of Cultural Meaning
COMS 3311	Rhetoric in Western Thought
COMS 3318	Persuasion and Social Movements
ENGL—All English courses in literature or linguistics. Excludes courses in technical writing.	
ENGR 4392	Engineering Ethics and Its Relationship to Society
<b>HIST—Any history courses not used to fulfill Core Curriculum American history requirement</b>	
HONS 1301	Honors First-Year Seminar in Humanities
HONS 3301	Honors Seminar in Humanities
HUM 2301	Introduction to Humanities
HUM 2302	Introduction to Humanities
JOUR 3350	History of American Journalism
LAIS 2300	Latin America and Iberia: An Interdisciplinary Introduction
LAIS 3300	Topics in Latin American and Iberian Studies
LAIS 4300	Seminar in Latin American and Iberian Studies
LARC 3302	Dev. of Landscape Architecture
NHH 1301	Natural History and Humanities Seminar
PHIL 2300	Beginning Philosophy
PHIL 2320	Introduction to Ethics
PHIL 2350	World Religions and Philosophy
PHIL 3301	Classical Greek Philosophy
PHIL 3302	Asian Philosophy
PHIL 3303	Modern European Philosophy
PHIL 3304	Existentialism and Phenomenology
PHIL 3320	Introduction to Political Philosophy (POLS 3331)*
PHIL 3322	Biomedical Ethics
PHIL 3324	Philosophy of Religion
PHIL 3332	Feminism and Philosophy
PHIL 4320	Ethics
PHIL 4323	Aesthetics
PHIL 4330	Epistemology
PHIL 4331	Philosophy of Language
PHIL 4340	Metaphysics
-POLS 3330	Ancient and Medieval Political Theory

### TCCNS

HUMA 1301  
HUMA 1302

PHIL 1301  
PHIL 2306  
PHIL 1304

POLS 3331	Introduction to Political Philosophy (PHIL 3320)*
POLS 3332	Modern Political Theory
POLS 3333	Contemporary Political Theory
VPA 3301	Critical Issues in Arts and Culture
W S 2300	Introduction to Women's Studies
W S 3341	Women in European Civilization (HIST 3341)*
W S 4327	Gender, Race, and Class in U.S. Law (HIST 4327)*
W S 4374	Love, Death, and Magic in Europe 1500-1800 (HIST 4374)*

## G. Social and Behavioral Sciences: 15 hours

The objective of a social and behavioral science component of a core curriculum is to increase the student's 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.

### 1. U.S. History: 6 hours

Under state law all students who receive bachelor's degrees from Texas Tech University must complete 6 hours in American history. Students will normally fulfill this requirement by completing HIST 2300 and 2301. However, this requirement may be satisfied by juniors and seniors by completing any 6 hours from among the American history courses listed under the Department of History portion of the catalog. Also, 3 semester hours of Texas history, HIST 3310, may be substituted for 3 of the American history hours.

### TTU Course

HIST 2300	History of the U.S. to 1877
HIST 2301	History of the U.S. Since 1877
HIST 3310	History of Texas
W S 3323	History of Women in America (HIST 3323)*

### TCCNS

HIST 1301  
HIST 1302

### 2. Political Science: U.S. and Texas – 6 hours

Under state law all students must have received credit for 6 semester hours in political science, covering the federal and Texas constitutions. Students will normally fulfill this requirement by completing POLS 1301, which is a prerequisite for all other political science courses, and POLS 2302. If a student earns AP credit for or a grade of A or B in POLS 1301, he or she may substitute in place of POLS 2302 one of the upper-level courses marked with an asterisk in the course list under the Department of Political Science portion of the catalog. (Permission of the instructor may be required for such substitution.)

### TTU Course

POLS 1301	American Government, Organization
POLS 2302	American Public Policy

### TCCNS

GOVT 2301  
GOVT 2302



### 3. Individual or Group Behavior: 3 hours

TTU Course		
AAEC 2305	Fundamentals of Agricultural and Applied Economics	AGRI 2317
ADRS 3325	Family Dynamics of Addiction and Recovery	
ADV 4313	International Advertising	
ANTH 1301	Understanding Multicultural America	
ANTH 2301	Introduction to Archeology	ANTH 2302
ANTH 2302	Cultural Anthropology	ANTH 2351
ANTH 3305	Anthropological Linguistics	
ANTH 3306	Women in Culture and Society	
ANTH 3315	Health, Medicine, and Culture	
ANTH 3331	Indians of North America	
ANTH 3332	Peoples of Latin America	
ANTH 3345	North American Archeology	
ANTH 3371	Peoples of the Southwest	
ANTH 4372	Society and Culture of Mexico	
ARCH 1311	Design, Environment, and Society	
ART 3311	Native American Arts	
ART 4315	Arts of Pre-Columbian America	
COMS 1301	Interpersonal Communication	SPCH 1318
COMS 2350	Intro. to Communication Disorders	
COMS 3313	Persuasion	
COMS 3331	Nonverbal Communication	
COMS 3332	Intercultural Communication	
COMS 3334	Gender and Communication	
COMS 3353	Small Group Communication	
COMS 3355	Communication in Organizations	
COMS 3356	Leadership and Communication	
ECO 2301	Principles of Economics I	ECON 2302
ECO 2302	Principles of Economics II	ECON 2301
ECO 2305	Principles of Economics	
EDEL 2300	Schools, Society, and Diversity	
EDSE 2300	Schools, Society, and Diversity	
ESS 3352	Gender Issues in Sports	
ESS 3354	Sport in World Cultures	
F&N 4380	Cultural Aspects of Food	
GEOG 2300	Introduction to Human Geography	GEOG 1302
GEOG 2351	Regional Geography of the World	GEOG 1303
GEOG 3337	Economic Geography	
HDFS 2303	Life Span Human Development	PSYC 2314
HDFS 2322	Partnering: The Development of Intimate Relationships	
HDFS 3301	Theories of Human Development and the Family	
HDFS 3321	Human Sexuality Through Family Life Cycle	
HDFS 3322	The Family in the Community	
HDFS 3331	Parenting	
HDFS 3332	Aging in the Family	
HLTH 1305	Human Sexuality	SOCI 2306
HLTH 2302	Environmental Health and Awareness	
HLTH 3325	Health Concerns in Chemical Dependencies	
HONS 1303	Honors First-Year Seminar in Social Studies	
HONS 3303	Honors Seminar in Social Sciences	
IE 3301	Engineering Economic Analysis	
IE 4361	Engineering Design for People	
JOUR 4330	Public Opinion and Propaganda	
MCOM 1300	Intro. to Mass Communication	COMM 1307
PPF 3301	Financial Planning for Young Adults	
PHIL 3321	Philosophy of Law	
PHIL 3331	Philosophy of Social and Human Sciences	
POLS 3326	Women in Politics	
POLS 3341	The Administrative Process	
POLS 3351	The Judicial Process	
POLS 3361	International Politics	
POLS 3371	Comparative Politics	
PSY 1300	General Psychology	PSYC 2301
PSY 2301	Child Psychology	PSYC 2308
PSY 3398	Ethnic Minority Psychology	
PSY 4300	Psych. of Human Sexual Behavior	
PSY 4325	Drugs, Alcohol, and Behavior	
PSY 4330	Psychology of Life Span Development and Aging	
SOC 1301	Introduction to Sociology	SOCI 1301
SOC 1320	Current Social Problems	SOCI 1306
SOC 2331	The Sociology of Marriage	SOCI 2301
SOC — All sociology advanced courses except SOC 3391 and 4395		
S W 2301	Introduction to the Social Welfare Institution	SOCW 2361
S W 3311	Human Behavior and the Social Environment I	
W S 1305	Human Sexuality (HLTH 1305)*	
W S 2331	Sociology of Marriage (SOC 2331)*	
W S 3306	Women in Culture and Society (ANTH 3306)*	
W S 3312	Gender and Communication (COMS 3334)*	
W S 3321	Human Sexuality Through Family Life Cycle (HDFS 3321)*	
W S 3325	Gendered Lives (SOC 3325)*	
W S 3326	Women in Politics (POLS 3326)*	
W S 3331	Sociology of the Family (SOC 3331)*	
W S 3337	Inequality in America (SOC 3337)*	
W S 4302	Psychology of Human Sexual Behavior (PSY 4300)*	
W S 4399	Women's Studies Seminar	

\*Cross-listed courses: Cannot receive credit for both courses.

### **HIST 2322—Comparative World History Since 1500**

According to Academic Affairs minutes from 2/24/04, HIST-2311 and HIST-2322 were approved for addition for the General Education Course List. HIST-2311 was added to both the Humanities and Social/Behavioral Sciences list; however, HIST-2322 was only added to the Social/Behavioral Sciences list. Jerry Moller believes it was the intent of the committee at the time to add HIST-2322 to the Humanities list as well and proposes the addition of the course to the list effective Fall 2007.

**AMARILLO COLLEGE**  
**REAL ESTATE – Spring 2008**

1. **Division/Department/Program Name:**  
Division of Business/Real Estate Department
2. **Prepared by:**  
Beverly Vinson
3. **Request:**  
Remove the following courses from the entire Real Estate curriculum

**AAS DEGREE (Major Code RELE.AAS)**

Remove from **Major Options** listing

RELE 1191: Seminar for Real Estate Assistants

RELE 1223: Real Estate Computer Application

**CERTIFICATE OF COMPLETION (Major Code: RELE: CERT)**

Remove from **Related Course Requirements** listing

RELE 1191: Seminar for Real Estate Assistants

RELE 1223: Real Estate Computer Application

**SALESPERSON CERTIFICATE (Major Code: RELE.CERT.SAL)**

Remove from **Major or Related Requirements** listing

RELE 1191: Seminar for Real Estate Assistants

RELE 1223: Real Estate Computer Application

**Rationale:**

These courses have not been offered in several years; therefore, should not be included in the options

**REAL ESTATE**

Program Advisor: Beverly Vinson, 371-5262 ([vinson-ba@actx.edu](mailto:vinson-ba@actx.edu)) or contact the Business Division office, 371-269

**ASSOCIATE IN APPLIED SCIENCE****Major Code - RELE.AAS**

Upon completion of this program, the student will have met the educational requirements for Real Estate Salesperson/Broker licensure. Students completing this curriculum may qualify to enter a bachelor of applied arts and sciences degree program or a bachelor of general studies degree program at a four-year institution. Students seeking a Bachelor of Business Administration degree should follow the Business Administration degree plan.

SEMESTER HOURS

**GENERAL EDUCATION REQUIREMENTS\* ..... 15****Communication**

ENGL 1301: Freshman Composition I

SPCH\*

**Humanities/Fine Arts\*****Mathematics/Natural Sciences**

MATH 1332: Contemporary Mathematics I (or any MATH\*)

**Social/Behavioral Sciences**

ECON 2301: Principles of Economics I

**MAJOR COURSE REQUIREMENTS ..... 19-22**

RELE 1406: Principles of Real Estate

or

RELE 1201: Real Estate Principles I

and

RELE 1238: Real Estate Principles II

RELE 1211 or 1311: Real Estate Contracts

RELE 2201 or 2301: Law of Agency

RELE 1325: Real Estate Mathematics

RELE 1321: Real Estate Marketing

RELE 1303: Real Estate Appraisal

RELE 1219 or 1319: Real Estate Finance

Students who choose RELE 2201, RELE 1238, RELE 1219, and/or RELE 1211 are required to take 9 hours under "Major Options."

Students choosing fields of specialization other than sales or brokerage may request substitutions for selected Major Course Requirements.

**MAJOR OPTIONS ..... 6-9****SELECT 6-9 HOURS FROM THESE COURSES:**

RELE 1307: Real Estate Investment

RELE 1309: Real Estate Law

RELE 1315: Property Management

RELE 2305: Real Estate Inspections

RELE 2331: Real Estate Brokerage

RELE 1191: Seminar for Real Estate Assistants

RELE 1223: Real Estate Computer Application

RELE 1266 or other Practicum - Real Estate

~~RELE 1191: Seminar for Real Estate Assistants~~~~RELE 1223: Real Estate Computer Application~~**RELATED COURSE REQUIREMENTS ..... 16**

ACCT 2301: Accounting Principles I

BCIS 1305: Business Computer Applications

BCIS 1401: Microcomputer Applications

BMGT 1305: Communications in Management

HRPO 1311: Human Relations

**RELATED OPTIONS ..... 3-6****SELECT 3-6 HOURS FROM THESE COURSES**

RELE 2307: Real Estate Title and Settlement

BMGT 1301: Supervision

BNKG 1353: Mortgage Lending

BUSI 1301: Introduction to Business

BUSI 2301: Business Law I

PSYC 2301: General Psychology

**TOTAL ..... 62-65**

## CURRENT

## PROPOSED

### REAL ESTATE

Program Advisor: Beverly Vinson, 371-5262 ([vinson-a@actx.edu](mailto:vinson-a@actx.edu)) or contact the Business Division office, 371-5269

### CERTIFICATE OF COMPLETION

Major Code - RELE.CERT

Contact the Testing Center or Program Advisor for testing requirements. Testing requirements are based on the unique needs of the certificate program.

This program is the first year of the two-year real estate degree and serves as a stepping-stone from the Salesperson Certificate toward the two-year AAS degree and meets broker requirements. Students satisfactorily completing the one-year certificate will have met the educational requirements for Real Estate Salesperson licensure.

#### SEMESTER HOURS

GENERAL EDUCATION REQUIREMENTS\* .....6

ENGL 1301: Freshman Composition I  
SPCH\*

MAJOR COURSE REQUIREMENTS..... 19-22

RELE 1406: Principles of Real Estate

or

RELE 1201: Principles of Real Estate I

and

RELE 1238: Principles of Real Estate II

RELE 1211 or 1311: Real Estate Contracts

RELE 2201 or 2301: Law of Agency

RELE 1325: Real Estate Mathematics

RELE 1321: Real Estate Marketing

RELE 1303: Real Estate Appraisal

RELE 1219 or 1319: Real Estate Finance

Students who choose RELE 2201, RELE 1238, RELE 1219, and/or RELE 1211 are required to take 9 hours under "Related Course Requirements."

Students choosing fields of specialization other than sales or brokerage may request substitutions for selected Major Course Requirements.

RELATED COURSE REQUIREMENTS ..... 6-10

SELECT 3 HOURS FROM THESE COURSES:

BCIS 1305: Business Computer Applications

BCIS 1401: Microcomputer Applications

BNKG 1353: Mortgage Lending

ECON 2301: Principles of Economics I

HRPO 1311: Human Relations

MATH 1332: Contemporary Mathematics I (or any MATH\*)

PSYC 2301: General Psychology

RELE 1191: Seminar for Real Estate Assistants

RELE 1307: Real Estate Investment

RELE 1309: Real Estate Law

RELE 1315: Property Management

RELE 2305: Real Estate Inspections

RELE 2307: Real Estate Title and Settlement

RELE 2331: Real Estate Brokerage

RELE 1223: Real Estate Computer Application

RELE 1266 or other Practicum - Real Estate

~~RELE 1191: Seminar for Real Estate Assistants~~

~~RELE 1223: Real Estate Computer Application~~

TOTAL..... 34-35



## CURRENT

## PROPOSED

### REAL ESTATE

Program Advisor: Beverly Vinson, 371-5262 ([vinson-ba@actx.edu](mailto:vinson-ba@actx.edu)) or contact the Business Division office, 371-5269

### SALESPERSON CERTIFICATE

Major Code: RELE .CERT.SAL

Contact the Testing Center or Program Advisor for testing requirements. Testing requirements are based on the unique needs of the certificate program.

This certificate is designed for those students who complete the pre-licensing courses and the Salesperson Annual Education (SAE) required by the Texas Real Estate Commission.

SEMESTER HOURS

#### MAJOR COURSE REQUIREMENTS.....8-10

RELE 1406: Principles of Real Estate

Or

RELE 1201: Principles of Real Estate I

And

RELE 1238: Principles of Real Estate II

RELE 1211 or 1311: Real Estate Contracts

RELE 2201 or 2301: Law of Agency

Students who choose RELE 1201, RELE 1238, RELE 1211, and/or RELE 2201 are required to take 10 hours under "Major or Related Requirements"

#### MAJOR OR RELATED REQUIREMENTS ..... 9-10

Select 3 courses accepted by the Texas Real Estate Commission for Core or Related credit and approved by the major advisor. Among the accepted courses are:

BCIS 1305: Business Computer Applications

BNKG 1353: Mortgage Lending

ECON 2301: Principles of Economics

ENGL 1301: Freshman Composition I

HRPO 1311: Human Relations

MATH 1332: Contemporary Mathematics I (or any MATH\*)

PSYC 2301: General Psychology

RELE 1191: Seminar for Real Estate Assistants

RELE 1219 or 1319: Real Estate Finance

RELE 1223: Real Estate Computer Application

RELE 1303: Real Estate Appraisal

RELE 1307: Real Estate Investment

RELE 1309: Real Estate Law

RELE 1315: Property Management

RELE 1321: Real Estate Marketing

RELE 1325: Real Estate Mathematics

RELE 2305: Real Estate Inspections

RELE 2307: Real Estate Title and Settlement

RELE 2331: Real Estate Brokerage

SPCH 1318: Interpersonal Communication

~~RELE 1191: Seminar for Real Estate Assistants~~

~~RELE 1223: Real Estate Computer Application~~

TOTAL.....18-19

**AMARILLO COLLEGE  
REAL ESTATE – Spring 2008**

1. **Division/Department/Program Name:**  
Division of Business/Real Estate Department
2. **Prepared by:**  
Beverly Vinson
3. **Request:**  
**AAS DEGREE (Major Code RELE.AAS)**  
Change listing under **Major Options**  
From: RELE 1307: Real Estate Investment  
To: RELE 1207 or RELE 1307: Real Estate Investment

**CERTIFICATE OF COMPLETION (Major Code: RELE: CERT)**

Change listing under **Related Course Requirements**  
From: RELE 1307: Real Estate Investment  
To: RELE 1207 or RELE 1307: Real Estate Investment

**SALESPERSON CERTIFICATE (Major Code: RELE.CERT.SAL)**

Change listing under **Major or Related Requirements**  
From: RELE 1307: Real Estate Investment  
To: RELE 1207 or RELE 1307: Real Estate Investment

**Rationale:**

For several semesters the Real Estate Coordinator has been unable to secure an instructor for RELE 1307. In order for students to choose this option we are adding the online course, RELE 1207.

**REAL ESTATE**

Program Advisor: Beverly Vinson, 371-5262 ([vinson-ha@actx.edu](mailto:vinson-ha@actx.edu)) or contact the Business Division office, 371-269

**ASSOCIATE IN APPLIED SCIENCE****Major Code - RELE.AAS**

Upon completion of this program, the student will have met the educational requirements for Real Estate Salesperson/Broker licensure. Students completing this curriculum may qualify to enter a bachelor of applied arts and sciences degree program or a bachelor of general studies degree program at a four-year institution. Students seeking a Bachelor of Business Administration degree should follow the Business Administration degree plan.

SEMESTER HOURS

**GENERAL EDUCATION REQUIREMENTS\* ..... 15****Communication**

ENGL 1301: Freshman Composition I

SPCH\*

**Humanities/Fine Arts\*****Mathematics/Natural Sciences**

MATH 1332: Contemporary Mathematics I (or any MATH\*)

**Social/Behavioral Sciences**

ECON 2301: Principles of Economics I

**MAJOR COURSE REQUIREMENTS ..... 19-22**

RELE 1406: Principles of Real Estate

or

RELE 1201: Real Estate Principles I

and

RELE 1238: Real Estate Principles II

RELE 1211 or 1311: Real Estate Contracts

RELE 2201 or 2301: Law of Agency

RELE 1325: Real Estate Mathematics

RELE 1321: Real Estate Marketing

RELE 1303: Real Estate Appraisal

RELE 1219 or 1319: Real Estate Finance

Students who choose RELE 2201, RELE 1238, RELE 1219, and/or RELE 1211 are required to take 9 hours under "Major Options."

Students choosing fields of specialization other than sales or brokerage may request substitutions for selected Major Course Requirements.

**MAJOR OPTIONS ..... 6-9****SELECT 6-9 HOURS FROM THESE COURSES:**

RELE 1307: Real Estate Investment

RELE 1309: Real Estate Law

RELE 1315: Property Management

RELE 2305: Real Estate Inspections

RELE 2331: Real Estate Brokerage

RELE 1191: Seminar for Real Estate Assistants

RELE 1223: Real Estate Computer Application

RELE 1266 or other Practicum - Real Estate

RELE 1207 or RELE 1307: Real Estate Investment

**RELATED COURSE REQUIREMENTS ..... 16**

ACCT 2301: Accounting Principles I

BCIS 1305: Business Computer Applications

BCIS 1401: Microcomputer Applications

BMGT 1305: Communications in Management

HRPO 1311: Human Relations

**RELATED OPTIONS ..... 3-6****SELECT 3-6 HOURS FROM THESE COURSES**

RELE 2307: Real Estate Title and Settlement

BMGT 1301: Supervision

BNKG 1353: Mortgage Lending

BUSI 1301: Introduction to Business

BUSI 2301: Business Law I

PSYC 2301: General Psychology

**TOTAL ..... 62-65**

**REAL ESTATE**

Program Advisor: Beverly Vinson, 371-5262 (vinson-ba@actx.edu) or contact the Business Division office, 371-5269

**CERTIFICATE OF COMPLETION**

Major Code - RELE.CERT

Contact the Testing Center or Program Advisor for testing requirements. Testing requirements are based on the unique needs of the certificate program.

This program is the first year of the two-year real estate degree and serves as a stepping-stone from the Salesperson Certificate toward the two-year AAS degree and meets broker requirements. Students satisfactorily completing the one-year certificate will have met the educational requirements for Real Estate Salesperson licensure.

## SEMESTER HOURS

**GENERAL EDUCATION REQUIREMENTS\* .....6**

ENGL 1301: Freshman Composition I

SPCH\*

**MAJOR COURSE REQUIREMENTS..... 19-22**

RELE 1406: Principles of Real Estate

or

RELE 1201: Principles of Real Estate I

and

RELE 1238: Principles of Real Estate II

RELE 1211 or 1311: Real Estate Contracts

RELE 2201 or 2301: Law of Agency

RELE 1325: Real Estate Mathematics

RELE 1321: Real Estate Marketing

RELE 1303: Real Estate Appraisal

RELE 1219 or 1319: Real Estate Finance

Students who choose RELE 2201, RELE 1238, RELE 1219, and/or RELE 1211 are required to take 9 hours under "Related Course Requirements."

Students choosing fields of specialization other than sales or brokerage may request substitutions for selected Major Course Requirements.

**RELATED COURSE REQUIREMENTS ..... 6-10**

SELECT 3 HOURS FROM THESE COURSES:

BCIS 1305: Business Computer Applications

BCIS 1401: Microcomputer Applications

BNKG 1353: Mortgage Lending

ECON 2301: Principles of Economics I

HRPO 1311: Human Relations

MATH 1332: Contemporary Mathematics I (or any MATH\*)

PSYC 2301: General Psychology

RELE 1191: Seminar for Real Estate Assistants

RELE 1307: Real Estate Investment

RELE 1309: Real Estate Law

RELE 1315: Property Management

RELE 2305: Real Estate Inspections

RELE 2307: Real Estate Title and Settlement

RELE 2331: Real Estate Brokerage

RELE 1223: Real Estate Computer Application

RELE 1266 or other Practicum - Real Estate

RELE 1207 or RELE 1307: Real Estate Investment

**TOTAL..... 34-35**

## CURRENT

## PROPOSED

### REAL ESTATE

Program Advisor: Beverly Vinson, 371-5262 ([vinson-ha@actx.edu](mailto:vinson-ha@actx.edu)) or contact the Business Division office, 371-269

### SALESPERSON CERTIFICATE

Major Code: RELE .CERT.SAL

Contact the Testing Center or Program Advisor for testing requirements. Testing requirements are based on the unique needs of the certificate program.

This certificate is designed for those students who complete the pre-licensing courses and the Salesperson Annual Education (SAE) required by the Texas Real Estate Commission.

SEMESTER HOURS

### MAJOR COURSE REQUIREMENTS.....8-10

RELE 1406: Principles of Real Estate

Or

RELE 1201: Principles of Real Estate I

And

RELE 1238: Principles of Real Estate II

RELE 1211 or 1311: Real Estate Contracts

RELE 2201 or 2301: Law of Agency

Students who choose RELE 1201, RELE 1238, RELE 1211, and/or RELE 2201 are required to take 10 hours under "Major or Related Requirements"

### MAJOR OR RELATED REQUIREMENTS ..... 9-10

Select 3 courses accepted by the Texas Real Estate Commission for Core or Related credit and approved by the major advisor. Among the accepted courses are:

BCIS 1305: Business Computer Applications

BNKG 1353: Mortgage Lending

ECON 2301: Principles of Economics

ENGL 1301: Freshman Composition I

HRPO 1311: Human Relations

MATH 1332: Contemporary Mathematics I (or any MATH\*)

PSYC 2301: General Psychology

RELE 1191: Seminar for Real Estate Assistants

RELE 1219 or 1319: Real Estate Finance

RELE 1223: Real Estate Computer Application

RELE 1303: Real Estate Appraisal

RELE 1307: Real Estate Investment

RELE 1309: Real Estate Law

RELE 1315: Property Management

RELE 1321: Real Estate Marketing

RELE 1325: Real Estate Mathematics

RELE 2305: Real Estate Inspections

RELE 2307: Real Estate Title and Settlement

RELE 2331: Real Estate Brokerage

SPCH 1318: Interpersonal Communication

RELE 1207 or RELE 1307: Real Estate Investment

TOTAL..... 18-19



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## Amarillo College Program Revision Request

**1. STATEMENT OF REQUEST:** Delete humanities course which is no longer offered.

**2. DEPARTMENT:** Humanities  
**DIVISION:** Language, Communication & Fine Arts  
**Faculty preparing proposal:** Joan Urban

**3. DESCRIPTION OF THE REQUEST:** To delete **Humanities 1371: Mythology**. This course has not been offered in some time and is no longer allowed by the Coordinating Board to be offered.

**4. NEEDS ASSESSMENT**

Because these courses are no longer being offered there will be no impact from removing them from the Amarillo College Catalog.

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## Amarillo College Program Revision Request

1. **STATEMENT OF REQUEST:** Delete humanities course which is no longer offered.
2. **DEPARTMENT:** Humanities  
**DIVISION:** Language, Communication & Fine Arts  
**Faculty preparing proposal:** Joan Urban
3. **DESCRIPTION OF THE REQUEST:** To delete **Humanities 1371: Mythology**. This course has not been offered in some time and is no longer allowed by the Coordinating Board to be offered.
4. **NEEDS ASSESSMENT**  
Because these courses are no longer being offered there will be no impact from removing them from the Amarillo College Catalog.

## **Amarillo College Program Revision Request**

**1. STATEMENT OF REQUEST:** Delete speech courses which are no longer offered.

**2. DEPARTMENT:** Speech Communication  
**DIVISION:** Language, Communication & Fine Arts  
**Faculty preparing proposal:** Lynae' Jacob

**3. DESCRIPTION OF THE REQUEST:** To delete **Speech 1144, 1145, 2144, and 2145**. These are all one semester hour courses labeled **Intercollegiate Forensics**. These courses have not been offered since the late 1980's. Deleting them from the catalog will leave only speech courses which are regularly offered each year.

To delete **Speech 1171, College Success Techniques**. This one semester hour course is no longer offered. It was replaced with a two semester hour course entitled **Student Success 0211**. The speech course will no longer be offered.

### **4. NEEDS ASSESSMENT**

Because these courses are no longer being offered there will be no impact from removing them from the Amarillo College Catalog. The decrease in speech enrollment from discontinuing SPCH 1171 has been more than offset by the enrollment in STUD 0211.

## SPEECH COMMUNICATION

### ~~SPCH 1171: College Success Techniques~~

~~Practical study designed to acquaint the student with college life; aid the student in acquiring skills needed for academic success; promote student development and personal growth; and encourage the student's acceptance of responsibility and involvement in the learning process.~~

~~(1 sem hrs; 1 lec) (SPCOM 3111)#~~

### ~~SPCH 1144\*, 1145\*, 2144\*, 2145\*: Intercollegiate Forensics~~

~~Prepare for or participate in intercollegiate debate, speaking and interpretation events. Advanced instruction and extensive practice sessions for each student.~~

~~(1 sem hr each; 3 lab) (SPCOM 3031, 3041, 4031, 4041)#~~

### SPCH 1315\*: Public Speaking

A basic course which acquaints students with principles of successful public speaking; provides activities which lead to the development of good speaking, listening, and organizational skills. Gives students opportunities to analyze speaker effectiveness.

(3 sem hrs; 3 lec) (SPCOM 3203)#

### SPCH 1318\*: Interpersonal Communication

Theory and practice in one-to-one and small group communication with emphasis on the development and improvement of verbal and non-verbal skills.

(3 sem hrs; 3 lec) (SPCOM 3103)#

Note: Students completing HUSC 1301 cannot earn credit for SPCH 1318).

### SPCH 1321\*: Business and Professional Speaking

Theory and practice of speech communication as applied to business and professional situations with emphasis on oral reports, informative and persuasive/sales presentations, interviewing, and organizational communication.

(3 sem hrs; 3 lec) (SPCOM 3303)#

### SPCH 2341\*: Oral Interpretation

Techniques of interpretative readings as well as voice production and oral readings of literature, requiring oral presentation by students. (3 sem hrs; 3 lec) (SPCOM 3503)#

# SPEECH COMMUNICATION

Program Advisor: Lynae Jacob, 371-5343 (jacob-ll@actx.edu) or contact the Language, Communication and Fine Arts Division, 371-5267

## ASSOCIATE IN ARTS

Major Code - SPCH.AA

SEMESTER HOURS

GENERAL EDUCATION REQUIREMENTS\* .....42

### Communication

ENGL 1301: Freshman Composition I

ENGL 1302: Freshman Composition II

SPCH 1315: Public Speaking

### Social/Behavioral Sciences

HIST 1301: History of the U.S. I

HIST 1302: History of the U.S. II

GOVT 2305: Government of the U.S.

GOVT 2306: Government of Texas

Social/Behavioral Sciences\* Elective

### Humanities/Fine Arts

Humanities\*

Fine Arts\*

### Mathematics/Natural Sciences

MATH\*

Natural Sciences\*

### Lifetime Fitness

Any PHED course numbered 1101-1122

MAJOR COURSE REQUIREMENTS .....12-14

SPCH 1318: Interpersonal Communication

SPCH 2341: Oral Interpretation

Modern Language (French, German or Spanish; 6-8 hours)

RECOMMENDED COURSES .....8-9

Student will be advised for other courses based on the university to which he/she plans to transfer.

TOTAL .....62-63

# SPEECH COMMUNICATION

Program Advisor: Lynae Jacob, 371-5343 (jacob-ll@actx.edu) or contact the Language, Communication and Fine Arts Division, 371-5267

## ASSOCIATE IN SCIENCE

Major Code - SPCH.AS

SEMESTER HOURS

GENERAL EDUCATION REQUIREMENTS\* .....42

### Communication

ENGL 1301: Freshman Composition I

ENGL 1302: Freshman Composition II

SPCH 1315: Public Speaking

### Social/Behavioral Sciences

HIST 1301: History of the U.S. I

HIST 1302: History of the U.S. II

GOVT 2305: Government of the U.S.

GOVT 2306: Government of Texas

Social/Behavioral Sciences\* Elective

### Humanities/Fine Arts

Humanities\*

Fine Arts\*

### Mathematics/Natural Sciences

MATH\*

Natural Sciences\*

### Lifetime Fitness

Any PHED course numbered 1101-1122

MAJOR COURSE REQUIREMENTS .....6

SPCH 1318: Interpersonal Communication

SPCH 2341: Oral Interpretation

RECOMMENDED COURSES .....15

Student will be advised for other courses based on the university to which he/she plans to transfer.

TOTAL .....63

Blue in  
Packet

1. DIVISION OF SCIENCES & ENGINEERING AND THE MATHEMATICS AND ENGINEERING DEPARTMENT, Jack Stanley, Sciences and Engineering Division Chair and Kathy Wetzel, Mathematics and Engineering Department Chair, wish to add 2 courses to the offerings of the Mathematics and Engineering Department.
2. STATEMENT OF REQUEST: Add a unique needs course ENGR 1371, Introduction to Engineering, to the course offerings of the Mathematics and Engineering department.
3. RATIONALE: This course, ENGR 1371, would be a three hour version of the ENGR 1201 course listed on page 61 of the Lower-Division Academic Course Guide Manual., approval number 14.0101.51.10 CIP Area Engineering (see attached). It is a required course for most engineering majors. Most of the four year schools offer a three hour version (2 hour lecture, 1 hour lab) of this course. I am working with Texas Tech and West Texas A&M to have a unique course acceptance letter filled out and sent to the Co-Board. By offering it to the students here, they will be able to more seamlessly transfer to the four year colleges. Pending approval by the Co-Board of a three hour version of this class, I am asking your approval for inclusion in our curriculum.
4. AFFECTED COURSE CURRICULUM/COURSE DESCRIPTION: On page 66 of the 2007-2008 Amarillo Catalog, ENGR 1371 will be listed under Optional Courses as not all (but most) engineering majors must take this course.
5. SEMESTER CHANGE EFFECTIVE: Spring 2008

Tabled



**ENGL 2351 Mexican-American Literature**

A survey of Mexican-American/Chicano/a literature including fiction, non-fiction, poetry, and drama.

Approval Number.....05.0203.55 25  
 CIP Area..... Ethnic, Cultural Minority, & Gender Studies  
 maximum SCH per student .....3  
 maximum SCH per course .....3  
 maximum contact hours per course.....48

**ENGL 2289 Academic Cooperative (2 SCH version)**

**ENGL 2389 Academic Cooperative (3 SCH version)**

An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of English language and literature.

Approval Number.....24.0103.52 12  
 CIP Area..... Interdisciplinary  
 maximum SCH per student .....3  
 maximum SCH per course .....3  
 maximum contact hours per course.....336

**ENGR (Engineering)**

**ENGR 1101 Introduction to Engineering I**

**ENGR 1102 Introduction to Engineering II**

**ENGR 1201 Introduction to Engineering (single-semester course)**

Introduction to engineering as a discipline and a profession. Includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society.

Approval Number.....14.0101.51 10  
 CIP Area..... Engineering  
 maximum SCH per student .....2  
 maximum SCH per course .....2  
 maximum contact hours per course.....32

**ENGR 1204 Engineering Graphics I (2 SCH version)**

**ENGR 1304 Engineering Graphics I (3 SCH version)**

**ENGR 1205 Engineering Graphics II (Descriptive Geometry, 2 SCH version)**

**ENGR 1305 Engineering Graphics II (Descriptive Geometry, 3 SCH version)**

Introduction to spatial relationships, multiview projection and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics.

Approval Number.....15.1301.51 11  
 CIP Area..... Drafting & Design Technology/Technician, General  
 maximum SCH per student .....6  
 maximum SCH per course .....3  
 maximum contact hours per course.....96

To the Academic Affairs Committee

1. DIVISION OF SCIENCES & ENGINEERING and the MATHEMATICS AND ENGINEERING DEPARTMENT, Jack Stanley, Sciences and Engineering Division Chair and Kathryn Wetzel, Department Chair wish to add ENGR 1371, Introduction to Engineering, to the offerings of the Mathematics and Engineering Department.
2. STATEMENT OF REQUEST:
  - a) Add a special needs three hour course ENGR 1371, Introduction to Engineering, to the list of Engineering Courses on page 125 of the current catalog pending approval by the Texas Coordinating Board. (See Part 4 below for description and prerequisites.)
  - b) Add ENGR 1371 to the degree curriculum on page 65 of the current catalog. The course would be included under "Optional Courses" as most (approximately 80%), but not all, of the engineering majors are required to take this course for their four year degree.
3. RATIONALE:

ENGR 1201, Introduction to Engineering, is listed on page 61 of the Academic Course Guide Manual (see attached). Most universities have a three hour version of this class. For example, WTAMU is converting their introductory class from two 2 hour classes to a single 3 hour class. TTU requires a 3 hour (2 lecture, 2 lab) course for their mechanical and civil engineering degrees. Both schools will accept a 2 hour version and have the students make up the difference in hour with a seminar or other elective. Both would prefer a 3 hour (2 lecture, 2 lab) in which students learn various software packages. Without benefit of these software packages (Mathcad, Matlab, Excel, etc.) our students are at a disadvantage in later classes.

Thus, pending approval from the Texas Coordinating Board (see attached petition and letters of support), we are petitioning to offer ENGR 1371 as a 3 hour special needs course. In order to more closely align the Engineering curriculum with the courses offered in other two and four year institutions (such as WTAMU and TTU), we propose the addition of an ENGR 1371, Introduction to Engineering course. When our engineering majors who specialize in **mechanical, civil and aeronautical engineering** (approximately 80% of our engineering majors) transfer to their four year institutions, they lack this class. While they can often pick it up in later semesters, it is designed to be a freshman level course which, among other things, discusses the various types of engineering and the level of commitment that will be required from the student. This helps students to determine their specialization at an earlier stage in their educational career (saving them from taking courses that may not be suitable to their particular specialization) and readies them mentally for the workload required, increasing their chances for success. For students who only have a passing interest in engineering it would help them to identify that they may need to look into other educational opportunities, saving time and money. This course is also required as part of the new aeronautical engineering emphasis supported by the Wagner Peyser grant.

In addition, pending approval, we will petition the Texas Coordinating Board to add a three hour Introduction to Engineering to those Introduction to Engineering courses currently listed in the ACGM on page 61.



4. **AFFECTED CURRICULUM/COURSE DESCRIPTIONS:**  
**ADD: ENGR 1371 Introduction to Engineering**  
Prerequisite: A grade of C or better in Math 1316, Trigonometry, or consent of the Department Chair. This course serves as an introduction to engineering as a discipline and profession. Includes applications of mathematical and scientific principles to the systematic solution of typical engineering problems, the use of computer analysis tools and techniques including Excel, MatLab and MathCAD, discussions of professionalism, contemporary issues and ethics, and experience in team design projects. (3 semester hours credit; 2 hours lecture, 2 hours lab).
5. **PAGES REFERENCED** in the current catalog: **Curriculum for Engineering, ENGR.AS.GEN, on page 65; and course descriptions on page 125** (see attached pages).
6. **SEMESTER CHANGE EFFECTIVE:** Spring 2008.
7. **FACULTY AND STAFF REQUIREMENTS:** Existing faculty will teach this course. The Wagner Peyser grant provides money for release time needed to develop this course.
8. **FACILITIES:** Engineering 208, a smart classroom, is being modified to allow for storage and use of 20 laptop computers by the students. In addition, various hands-on models, measuring devices, other learning devices and storage for all these devices are being bought and paid for by the Wagner Peyser grant.
9. **INCOME PROJECTION:** This course will serve 60-80 students a year. The Wagner Peyser grant brought a little over \$230,000 into the AC budget for development of three courses to support an aeronautical emphasis in our engineering associate degree, one course of which is ENGR 1371, Introduction to Engineering.

**ENGL 2351 Mexican-American Literature**

A survey of Mexican-American/Chicano/a literature including fiction, non-fiction, poetry, and drama.

Approval Number.....05.0203.55 25  
 CIP Area..... Ethnic, Cultural Minority, & Gender Studies  
 maximum SCH per student .....3  
 maximum SCH per course .....3  
 maximum contact hours per course.....48

**ENGL 2289 Academic Cooperative (2 SCH version)**

**ENGL 2389 Academic Cooperative (3 SCH version)**

An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of English language and literature.

Approval Number.....24.0103.52 12  
 CIP Area..... Interdisciplinary  
 maximum SCH per student .....3  
 maximum SCH per course .....3  
 maximum contact hours per course.....336

**ENGR (Engineering)**

**ENGR 1101 Introduction to Engineering I**

**ENGR 1102 Introduction to Engineering II**

**ENGR 1201 Introduction to Engineering (single-semester course)**

Introduction to engineering as a discipline and a profession. Includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society.

Approval Number.....14.0101.51 10  
 CIP Area..... Engineering  
 maximum SCH per student .....2  
 maximum SCH per course .....2  
 maximum contact hours per course.....32

**ENGR 1204 Engineering Graphics I (2 SCH version)**

**ENGR 1304 Engineering Graphics I (3 SCH version)**

**ENGR 1205 Engineering Graphics II (Descriptive Geometry, 2 SCH version)**

**ENGR 1305 Engineering Graphics II (Descriptive Geometry, 3 SCH version)**

Introduction to spatial relationships, multiview projection and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics.

Approval Number.....15.1301.51 11  
 CIP Area..... Drafting & Design Technology/Technician, General  
 maximum SCH per student .....6  
 maximum SCH per course .....3  
 maximum contact hours per course.....96

<b>ELECTIVE</b> .....	3
<b>TOTAL</b> .....	66

## EMERGENCY MEDICAL SERVICES PROFESSIONS

Program Advisor: Paul Whitfield, 354-6077 (whitfield-pe@actx.edu) or contact the Allied Health Division, 354-6055

### CERTIFICATE OF COMPLETION

#### Major Code - EMSP.CERT

Contact the Testing Center or the Program Advisor for testing requirements. Testing requirements are based on the unique needs of the certificate program.

This program is designed for students who wish to earn a Certificate of Completion in addition to completing the academic, clinical, and field internship requirements for certification through the Texas Department of Health as a Paramedic. Successful completion also meets eligibility requirements for the National Registry of EMTs Paramedic examination process. Successful completion of selected course work satisfies the academic, clinical and field internship requirements for prospective certification with the Texas Department of Health and the National Registry of EMTs as an Emergency Medical Technician (EMT) Basic, or EMT Intermediate.

A grade of C or higher is required for satisfactory completion of all courses in this curriculum.

EMSP 1501 and EMSP 1163 are open-admission courses; satisfying admission requirements to Amarillo College will satisfy admission requirements to these courses. A student seeking admission into any EMSP course other than EMSP 1501 and EMSP 1163 must file a specific program application form and/or requirements prior to course enrollment.

SEMESTER HOURS

### MAJOR COURSE REQUIREMENTS .....40

- EMSP 1147: Pediatric Advanced Life Support
- EMSP 1149: Pre-Hospital Trauma Life Support
- EMSP 1163: Clinical - Emergency Medical Technology/Technician
- EMSP 1438: Introduction to Advanced Practice
- EMSP 1455: Trauma Management
- EMSP 1456: Patient Assessment and Airway Management
- EMSP 1501: Emergency Medical Technician - Basic
- EMSP 2135: Advanced Cardiac Life Support
- EMSP 2266: Practicum/Field Experience I
- EMSP 2267: Practicum/Field Experience II
- EMSP 2430: Special Populations
- EMSP 2434: Medical Emergencies
- EMSP 2444: Cardiology
- EMSP 2348: Emergency Pharmacology

### RELATED REQUIRED COURSES .....11

#### Mathematics/Natural Sciences

- MATH 1332: Contemporary Mathematics I (or any MATH\*)
- BIOL 2401: Human Anatomy and Physiology I
- BIOL 2402: Human Anatomy and Physiology II

**TOTAL** .....51

## ENGINEERING

Program Advisor: Dr. Kathryn Wetzel, 371-5097 (wetzel-kc@actx.edu) or Chair, Sciences and Engineering Division, 371-5092

### ASSOCIATE IN SCIENCE

#### Major Code - ENGR.AS.GEN

Provides basic courses for the first two years of a four or five-year curriculum leading to a Bachelor of Science degree. Designed to accommodate most specialties in engineering. Credits generally transfer to an engineering college. #MATH 2413: 3 hours satisfy General Education Requirements; additional hour will satisfy engineering major transfer to four-year institutions.

SEMESTER HOURS

### GENERAL EDUCATION REQUIREMENTS\* .....42

#### Communication

- ENGL 1301: Freshman Composition I
- ENGL 1302: Freshman Composition II
- SPCH 1321: Business and Professional Speaking

#### Social/Behavioral Sciences

- HIST 1301: History of the U.S. I
- HIST 1302: History of the U.S. II
- GOVT 2305: Government of the U.S.
- GOVT 2306: Government of Texas
- Social/Behavioral Sciences\* Elective

#### Humanities/Fine Arts

- Humanities\*
- Fine Arts\*

#### Mathematics/Natural Sciences

- MATH 2413: Calculus I#
- PHYS 2425: Principles of Physics I
- PHYS 2426: Principles of Physics II

### MAJOR COURSE REQUIREMENTS .....18

- MATH 2414/2415: Calculus II and III
- MATH 2320: Differential Equations
- ENGR 2301: Engineering Mechanics I<sup>1</sup>
- CHEM 1311/1111: Principles of Chemistry I/Lab

### RECOMMENDED COURSES .....6

Student will be advised for other courses based on the university to which they plan to transfer.

**TOTAL** .....66

#### Optional Courses:

- ENGL 2311: Technical Writing
- ENGR 1304: Engineering Graphics
- ENGR 1307: Surveying
- ENGR 2302: Engineering Mechanics II<sup>1</sup> ← ENGR 1371
- ENGR 2405: Electrical Circuits
- COSC 1436: Programming Fundamentals I
- COSC 1437: Programming Fundamentals II
- COSC 1317: Computer Programming for Engineers and Scientists
- GEOL 1303/1103: Physical Geology and Lab
- GEOL 1304/1104: Historical Geology and Lab
- CHEM 1312/1112: Principles of Chemistry II/Lab
- CHEM 2323/2223: Organic Chemistry I/Lab
- CHEM 2325/2225: Organic Chemistry II/Lab
- MATH 2318: Linear Algebra

<sup>1</sup> Consult with the program advisor prior to enrollment in this course.

## ENGINEERING COMPUTER SCIENCE

Program Advisor: Mark Usnick, 371-5239 (usnick-mc@actx.edu) or chair, Sciences and Engineering Division, 371-5092

### ASSOCIATE IN SCIENCE

#### Major Code - ENGR.AS.COMPSC

Provides the first two years of a four year Bachelor of Science degree in computer science, software engineering, or computer

**EMSP 2434: Medical Emergencies**

*Prerequisites:* EMSP 2266, BIOL 2401, MATH from approved list

*Corequisites:* EMSP 2430, EMSP 2444

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies.

(4 sem hrs; 3 lec, 3 lab) (PMT 4304)#

**EMSP 2444: Cardiology**

*Prerequisites:* EMSP 2266, BIOL 2401, MATH from approved list

*Corequisites:* EMSP 2430, EMSP 2434

Assessment and management of patients with cardiac emergencies. Includes basic dysrhythmia interpretation, recognition of 12-lead EKGs for field diagnosis, and electrical and pharmacological interventions.

(4 sem hrs; 3 lec, 3 lab) (PMT 4315)#

**EMSP 2458: Critical Care Paramedics**

Prepares healthcare personnel to function as members of critical care transport.

(4 sem hrs; 4 lec, 1 lab)

**ENGINEERING****ENGR 1304\*: Engineering Graphics**

*Prerequisite:* One year high school drafting or DFTG1309 or consent of instructor

Use of orthographic principles for engineering, drafting and architecture majors. Basic orthographic projection principles, auxiliary views, intersection of planes, parallelism, perpendicularity, mining and engineering problems, concurrent vectors, plane tangencies, intersection of surfaces, developments, shades, shadows and perspective projections. Introduction to computer graphics.

(3 sem hrs; 2 lec, 3 lab) (ENGR 3123)#

**ENGR 1307\*: Surveying**

*Prerequisite:* MATH 1316

Use of instruments; direct and tachometric linear measurement; elevation and angle measurement; determining directions; traverses, errors and adjustment; area and earthwork calculations, observations for meridian, land surveying.

(3 sem hrs; 2 lec, 3 lab) (ENGR 4163)#

**ENGR 2301\*: Engineering Mechanics I - Fall Only**

*Prerequisites:* PHYS 2425, MATH 2414 with a grade of C or higher

Vectors, vector algebra, forces, force systems, equilibrium of rigid bodies, analysis of trusses, friction, particle kinematics, particle kinetics, particle work and energy.

(3 sem hrs; 3 lec) (ENGR 4213)#

**ENGR 2302\*: Engineering Mechanics II - Spring Only**

*Prerequisites:* ENGR 2301, Math 2415 with a grade of C or higher

Particle dynamics, particle impulse and momentum, area and mass moments, rigid body kinetics, rigid body dynamics including forces, work, energy, impulse and momentum.

(3 sem hrs; 3 lec) (ENGR 4223)#

ENGR 1371 INTRODUCTION TO  
ENGINEERING

**ENGR 2405\*: Electrical Circuits - Spring Only**

*Prerequisites/Corequisites:* PHYS 2426, MATH 2415 with a grade of C or higher

Linear circuit elements; circuit analysis, transient and steady state; network-theorems; laboratory measurement of circuit phenomena. For engineer majors.

(4 sem hrs; 3 lec, 3 lab) (ENGR 4254)#

**COSC 1317\*: Computer Programming for Engineers and Scientists - Spring only**

*Prerequisites/Corequisites:* A grade of C or higher in MATH 2413

Current engineering programming language (C, C++ or other); problems in engineering applications and numerical analysis.

(3 sem hrs; 3 lec, 3 lab) (MATH 4823)#

**COSC 1436\*: Programming Fundamentals I - Fall only**

*Prerequisites:* A grade of C or higher in Math 1348 or Math 2412 or consent of the Department Chair

Introduces the fundamental concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy.

(4 sem hrs; 3 lec, 2 lab)

**COSC 1437\*: Programming Fundamentals II - Spring only**

*Prerequisites:* A grade of C or higher in COSC 1436

Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction software engineering.

(4 sem hrs; 3 lec, 2 lab)

**COSC 2436\*: Programming Fundamentals III - Fall only**

*Prerequisites:* A grade of C or higher in COSC 1437

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis.

(4 sem hrs; 3 lec, 2 lab)

**COSC 2425\*: Computer Organization and Assembly Language Programming - Spring only**

*Prerequisites:* A grade of C or higher in COSC 1437

Syntax and semantics of a typical assembly language; macros and macro processors; design, construction, and execution of assembly language programs; data representation; and addressing techniques.

(4 sem hrs; 3 lec, 2 lab)

**ENGLISH****ENGL 0301: Basic Grammar and Writing I**

*Prerequisite:* Acceptable THEA writing test scores or equivalent on state-approved alternative tests

Practice in formulating simple and compound sentences, simple tense formation, basic subject-verb agreement, punctuation and basic spelling rules. Practice in writing clear, logically developed paragraphs using standard American English.

(3 sem hrs; 3 lec, 1 lab)

**TEXAS HIGHER EDUCATION COORDINATING BOARD**  
**ACADEMIC AFFAIRS & RESEARCH DIVISION**  
P.O. BOX 12788 Austin, Texas 78711  
512-427-6250— Fax 512-427-6444

**Academic Course Inventory Update**  
**Unique Need Course: Request For Approval Form**

1. Amarillo College 2. Kathryn C. Wetzel, Ph.D. 3. 01/01/2008  
Institution College Official Effective Date

4. Complete Course Title:  
Introduction to Engineering (single semester course)

5. Course Description:

This course serves as an introduction to engineering as a discipline and profession. Includes applications of mathematical and scientific principles to the systematic solution of typical engineering problems, the use of computer analysis tools and techniques including Excel, MatLab and MathCAD, discussions of professionalism, contemporary issues and ethics, and experience in team design projects. (3 semester hours credit; 2 hours lecture, 2 hours lab).

6. Unique Course Criteria: Unique courses must meet the criteria as identified by CB Rule 9.74 (Check appropriate criteria.)

- ☒ a. This is a general academic course that will transfer and count toward the general education or degree program requirements for a degree at two regional universities. *At least two letters documenting transferability or two completed university recommendation forms are attached.*
- ☒ b. This course has college level rigor.
- ☒ c. A course syllabus including course description, detailed course outline, and course objectives is attached.
- ☒ d. This is not a junior or senior level course.
- ☒ e. This is not a community service, leisure, or a vocational course.
- ☐ f. This a vocational transfer course and:  
\_\_\_\_ (1) The course will transfer and fulfill specific program requirements at a regional university.  
\_\_\_\_ (2) The course instructor meets SACS requirements for faculty of transfer courses.  
\_\_\_\_ (3) Appropriate equipment is available.
- ☒ g. Justification of need is attached.

Date Submitted

806.371.5126

Phone number

Chief Academic Officer

806.345.5504

Fax number

matney-jp@actx.edu

E-Mail Address

7. Data:

a. Update Code	b. FICE Code	c. Approval Number	d. Subject Prefix	e. Course Number	f. SCH
A	003540	Blank	ENGR	1371	3
g. Course Short Title: Intr to Eng.			h. Contact Hours		i. Total Contact Hours
			Lecture	Lab	
			2	2	
					64

Coordinating Board Official

Date

Return this form to: Assistant Commissioner, Academic Affairs & Research

THECB Rev. 4/2006

## Unique Needs Proposal

The ACGM currently offers two alternatives for an Introduction to Engineering I class. They are one hour (ENGR 1101) and two hour (ENGR 1201) alternatives. The majority of our engineering students transfer to one of two schools: West Texas A&M University (WTAMU) or Texas Tech University (TTU). At both schools, the Introduction to Engineering course is a 3 hour credit class. In order to ensure transferability and to meet the course content requirements at the universities we wish to create a special needs 3 hour course for Introduction to Engineering. Attached is a proposed syllabus including the proposed course description, course outline and course objectives as well as two Unique Needs Course Request Forms signed by officials of both WTAMU and TTU.

# Amarillo College Course Syllabus

**PROPOSED COURSE NAME:**

**ENGR 1371 Introduction to Engineering**

**COREQUISITE:**

MATH 2413 (Calculus I) or consent of the department chairman.

**COURSE DESCRIPTION:**

This course serves as an introduction to engineering as a discipline and profession. Includes applications of mathematical and scientific principles to the systematic solution of typical engineering problems, the use of computer analysis tools and techniques including Excel, MatLab and MathCAD, discussions of professionalism, contemporary issues and ethics, and experience in team design projects. (3 semester hours credit; 2 hours lecture, 2 hours lab).

**INSTRUCTOR:**

Name: Dr. K. C. Wetzel

Office: ENGR 205

Phone: 371-5097

**TEXTBOOK:**

Yet to be determined

**CALCULATOR:**

A graphing calculator is required for this course. All computations and demonstrations in class will be done using a TI-83. If you already own another brand of graphing calculator you will not be required to purchase a TI-83.

**SOFTWARE:**

Students will be using Excel spreadsheets, MatLab and MathCAD as part of the problem solving process. Students will be able to use the software loaded on the computers in the Math Outreach Center (ENGR 104), the Calculus Lab (ENGR 102) and ENGR 208

**COURSE OUTLINE:**

1. Engineering Profession
2. Different types of Engineering and Career Choices
3. Engineering vs. Engineering Technology
4. Engineering Ethics and Professionalism
5. Contemporary Issues in Engineering
6. Writing a Technical Report
7. Measurements and Calculations
8. Conversions
9. Engineering Analysis and Design Process
10. Group Design Project
11. Microsoft Excel, Mathworks MATLAB, and Mathsoft Math CAD for engineering analyses

**PERFORMANCE/LEARNING OBJECTIVES:**

After completing this course, the student will be able to demonstrate knowledge of the following topics:

1. summarize and give examples of the professional roles of an engineer,
2. summarize and give examples of the ethical and professional issues characteristic of an engineering career,
3. apply Microsoft Excel, Mathsoft MathCAD, and Mathworks MATLAB to engineering analyses,
4. explain and apply the design process to solve a typical engineering problem, and
5. prepare and submit a properly formatted and detailed technical report,

**INSTRUCTIONAL METHOD/EXAMINATIONS:**

This course is a lecture/lab based course. There will be a minimum of four major exams, one design project, and a comprehensive final. Major exams will be administered in class (in which case they must be completed by the end of class), in the testing center, or as a take home test. There will be periodic “pop” tests that will be averaged into your homework grade. Expect to have homework assigned each day. Please note the homework format requirements on the back of the assignment handout.

**EVALUATION:**

The final grades of A (90-100), B (80-89), C (70-79), D (60-69), and F (below 60) will be computed as the average of the earned grades as follows if there are only four major exams:

$$\frac{\text{Homework avg.} + \text{four exam scores} + \text{design project} + \text{final exam grade}}{7}$$

If there are more than four major exams, increase the numerator and denominator accordingly.

**ATTENDANCE POLICY:**

Please remember the deadline for dropping any class at AC during the Spring Semester is ??????. If you stop attending class and your average drops below a 60 due to missed assignments and you do not officially drop the course by this deadline, you will receive an “F” for the course.

**FINAL EXAMINATION:**

The final exam for this course will be given on May ??, 2007 at ?????:00 a.m..

**TENTATIVE SCHEDULE:** (This schedule is subject to change by the instructor at any time.)  
To be determined.

**FOOD/DRINK:**

It is the policy of the Mathematics Department that food and drink be allowed in the classroom setting, at the instructor’s discretion, but food and drink are not allowed in the Computer Labs.



**PHONE/PAGERS:**

It is the policy of the Mathematics Department that cell phones and pagers must be turned off or in silent mode in the classrooms and the Computer Labs.

**DISABILITY STATEMENT:**

Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact Accessibility Services (SS-125, Phone 371-5436) as soon as possible.

1. DIVISION OF SCIENCES & ENGINEERING AND THE MATHEMATICS AND ENGINEERING DEPARTMENT, Jack Stanley, Sciences and Engineering Division Chair and Kathy Wetzel, Mathematics and Engineering Department Chair, wish to add 2 courses to the offerings of the Mathematics and Engineering Department.
2. STATEMENT OF REQUEST: Add Mechanics of Materials to the course offerings of the Mathematics and Engineering department.
3. RATIONALE: This course, ENGR 2322, is listed on page 63 of the Lower-Division Academic Course Guide Manual., approval number 14.1101.51.10 CIP Area Engineering (see attached). It is a required course for most engineering majors. By offering it to the students here, they will be able to more seamlessly transfer to the four year colleges.
4. AFFECTED COURSE CURRICULUM/COURSE DESCRIPTION: On page 66 of the 2007-2008 Amarillo Catalog, ENGR 2332 will be listed under Optional Courses as not all (but most) engineering majors must take this course.
5. SEMESTER CHANGE EFFECTIVE: Spring 2008

**ENGR 2304    Programming for Engineers**

Introduction to computer programming. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files.

Approval Number.....11.0201.52 07  
 CIP Area..... Computer & Information Sciences  
 maximum SCH per student .....12  
 maximum SCH per course .....4  
 maximum contact hours per course.....96

**ENGR 2305    Circuits I for Electrical Engineering**

Principles of electrical circuits and systems. DC, transient, and sinusoidal steady-state analysis. This course must have three lecture hours per week and could include one hour per week of a lab. Prerequisite: up to 12 SCH of calculus.

Approval Number.....14.1001.51 10  
 CIP Area.....Electrical Engineering  
 maximum SCH per student .....3  
 maximum SCH per course .....3  
 maximum contact hours per course.....64

**ENGR 2332    Mechanics of Materials (3 SCH version)**

**ENGR 2432    Mechanics of Materials (4 SCH version)**

Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses.

Approval Number.....14.1101.51 10  
 CIP Area..... Engineering  
 maximum SCH per student .....4  
 maximum SCH per course .....4  
 maximum contact hours per course.....64

*yellow in  
packet*

1. **DIVISION OF SCIENCES & ENGINEERING AND THE PHYSICAL SCIENCES DEPARTMENT**, Jack Stanley, Sciences and Engineering Division Chair and Mary Graff, Physical Sciences Department Chair, wish to add a course to the offerings of the Physical Sciences Department.

2. **STATEMENT OF REQUEST:** Add Oceanography to the course offerings of the Physical Sciences department. This course would have a common course number of GEOL 1445, as found on page 77 of the Lower-Division Academic Course Guide Manual. Approval number 40.0601.51.03. CIP Area Physical Sciences. (see attached)

4. **AFFECTED COURSE DESCRIPTION:** Following is the requested catalog description for this course.

GEOL 1445: Oceanography. The study of the world ocean and the role of the ocean in the Earth system including the flow and transformations of water and energy into and out of the ocean, the physical and chemical properties of seawater, circulation, marine life and its adaptations, and interactions between the ocean and the other components of the Earth. (3 lec, 3 lab)

This course should be added to the General Education Course List in the Natural Science course section, as a core curriculum choice.

5. N/A

6. **SEMESTER CHANGES EFFECTIVE:** Spring 2008

7-12. N/A

**NOTE:**

1. This course will be offered as an on-line course for the physical sciences department. Because it is a lecture/lab course, it will broaden the options students have for completing general science graduation requirements.

2. There will be an ~~\$18.00~~ lab fee for this course.

*25<sup>00</sup> Dist Ed*

*tabled*

maximum SCH per student .....	8
maximum SCH per course .....	4
maximum contact hours per course .....	96

- GEOL 1403**    **Physical Geology (lecture + lab)**  
**GEOL 1303**    **Physical Geology (lecture)**  
**GEOL 1103**    **Physical Geology Laboratory (lab)**

Principles of physical and historical geology. Study of the earth's composition, structure, and internal and external processes. Includes the geologic history of the earth and the evolution of life.

Approval Number .....	40.0601.54 03
CIP Area .....	Physical Sciences
maximum SCH per student .....	4
maximum SCH per course .....	4
maximum contact hours per course .....	112

- GEOL 1404**    **Historical Geology (lecture + lab)**  
**GEOL 1304**    **Historical Geology (lecture)**  
**GEOL 1104**    **Historical Geology Laboratory (lab)**

Principles of physical and historical geology. Study of the earth's composition, structure, and internal and external processes. Includes the geologic history of the earth and the evolution of life.

Approval Number .....	40.0601.54 03
CIP Area .....	Physical Sciences
maximum SCH per student .....	4
maximum SCH per course .....	4
maximum contact hours per course .....	112

- GEOL 1405**    **Environmental Geology (lecture + lab)**  
**GEOL 1305**    **Environmental Geology (lecture)**  
**GEOL 1105**    **Environmental Geology Laboratory (lab)**

The earth as a habitat. Interrelationships between humans and the environment. Geologic factors in urban and regional land use planning.

Approval Number .....	03.0103.53 01
CIP Area .....	Renewable Natural Resources
maximum SCH per student .....	4
maximum SCH per course .....	4
maximum contact hours per course .....	96

- GEOL 1445**    **Oceanography (lecture + lab)**  
**GEOL 1345**    **Oceanography (lecture)**  
**GEOL 1145**    **Oceanography (lab)**

Survey of physical and historical geology, astronomy, meteorology, oceanography, and related sciences.

Approval Number .....	40.0601.51 03
CIP Area .....	Physical Sciences
maximum SCH per student .....	4
maximum SCH per course .....	4



maximum contact hours per course.....96

**GEOL 1446 Astronomy (lecture + lab)**

**GEOL 1346 Astronomy (lecture)**

**GEOL 1146 Astronomy (lab)**

Survey of physical and historical geology, astronomy, meteorology, oceanography, and related sciences. (*Course under review for deletion. See Deleted Courses section.*)

Approval Number.....40.0601.51 03

CIP Area..... Physical Sciences

maximum SCH per student .....8

maximum SCH per course .....4

maximum contact hours per course.....96

**GEOL 1447 Meteorology (lecture + lab)**

**GEOL 1347 Meteorology (lecture)**

**GEOL 1147 Meteorology (lab)**

Survey of meteorology and related sciences.

Approval Number.....40.0601.51 03

CIP Area..... Physical Sciences

maximum SCH per student .....4

maximum SCH per course .....4

maximum contact hours per course.....96

**GEOL 2405 Optical Mineralogy (lecture + lab)**

**GEOL 2305 Optical Mineralogy (lecture)**

**GEOL 2105 Optical Mineralogy (lab)**

Principles and methods of optical crystallography and optical properties of minerals.

Approval Number.....40.0601.53 03

CIP Area..... Physical Sciences

maximum SCH per student .....4

maximum SCH per course .....4

maximum contact hours per course.....96

**GEOL 2407 Geological Field Methods (lecture + lab)**

**GEOL 2307 Geological Field Methods (lecture)**

**GEOL 2107 Geological Field Methods (lab)**

Collection of field data, interpretation and construction of geologic and topographic maps, and examination of petrologic systems in a field setting.

Approval Number.....40.0601.55 03

CIP Area..... Physical Sciences

maximum SCH per student .....4

maximum SCH per course .....4

maximum contact hours per course.....96

## AMS Online Ocean Studies

### A Local - National Teaching Partnership



An introductory college course provided by the American Meteorological Society for undergraduate institutions nationwide.

**Now**, your college can expand its science offerings by:

- *Adding* study in an area which is at the heart of major contemporary environmental issues
- *Presenting* an online course which captures the essence of the Information Age --- developing problem solving skills based on current real-world data.
- *Delivering* exciting learning experiences for traditional and non-traditional students at their convenience.

Online Ocean Studies  
Faculty Workshop  
June 2008

Promoting participation in  
*Online Ocean Studies* by  
minority-serving institutions.

Supported by the National  
Science Foundation, *add*  
this course now if you would  
like to attend the June 2008  
faculty workshop.



This course was developed in cooperation with the National Oceanic and Atmospheric Administration

#### At a Glance: Course Description

Online Ocean Studies  
examines the world ocean  
from an *Earth system*  
*perspective*.

#### What is the course?

Online Ocean Studies is an innovative, 12- to 15-week course prepared by an experienced team of oceanographers and science educators. At the instructor's option, students are introduced to the dynamic ocean:

The course emphasizes (1) the flow and transformations of water and energy into and out of the ocean, (2) the physical and chemical properties of seawater, (3) ocean circulation, (4) marine life and its adaptations, (5) interactions between the ocean and the other components of the Earth system (i.e., hydrosphere, atmosphere, geosphere, and biosphere), and (6) the human societal impacts on and response to those Earth System interactions.

Online Ocean Studies is modeled after the highly successfully AMS Online Weather Studies course, which has been licensed by over 250 institutions.

- in near real-time, by working with current oceanographic data delivered via the Internet and coordinated with learning investigations keyed to current ocean products;
- via study of archived real-world ocean data and learning investigations; or
- via a combination of the foregoing approaches, where archived lessons are supplemented with current ocean news and data.

### How can the course be implemented?

- As a NEW institutional course offering.
- To REVISE an existing course at your institution.
- To EXPAND an existing course by adding a laboratory component.
- As the FOCUS of an online course, or as individual directed study.

[AMS Online Ocean Studies Course Description](#) [Course Objectives](#) [Course Materials](#) [Course License](#)

#### Course Description

##### Course Aim:

##### Objectives:

##### Course Content:

The course has been designed for offering in a variety of teaching environments: by professors already teaching oceanography as well as by those who have no prior teaching experience or formal training in the ocean sciences.

Collegial assistance will be available from faculty members who have already offered Online Ocean Studies. Also, AMS science educators will answer any questions on all aspects of course delivery and content. This course enables faculty members to expand or update their curriculum and join the ranks of colleagues teaching with the latest technology.

[AMS Online Ocean Studies Course Description](#) [Course Objectives](#) [Course Materials](#) [Course License](#) [AMS Online Ocean Studies](#)

### At a Glance: Course Components

- Textbook
- Online Course Modules
- Laboratory Component
  - Virtual Oceanography
  - Oceanographic Data
  - Oceanographic Research
  - Oceanographic Education

»Textbook - The full-color, hardcover *Online Ocean Studies* textbook features up-to-date comprehensive descriptions of oceanographic phenomena and research topics from an Earth system perspective. The text contains 15 chapters each written to a weekly topic. Each chapter is designed for one week of study by the student.

Oceanographers M. Grant Gross of Washington College (MD) and Elizabeth Gross of the Scientific Committee on Oceanic Research were major contributors to the writing of the textbook. The managing



- **Investigations Manual** - The *Investigations Manual* is the primary textbook for the course. The editor for the text was Joseph M. Moran (AMS education program), author of several leading meteorology and environmental science textbooks at the introductory college level. Topical coverage is similar to that found in most introductory oceanography texts.

The Online Ocean Studies textbook may be used alone as part of a course offering. Textbook-only users will have access to a special Internet homepage that will deliver the Weekly Ocean News, current ocean and satellite products, and chapter review and critical thinking questions. A license is not required for this option.

» **Investigations Manual** - In the *Investigations Manual*, a set of student learning investigations is coordinated with the text chapters. Each investigation (two per week) contains introductory and *Applications* sections. The investigation can be completed using the two sections in the Manual or by using the introductory section plus *Current Ocean Studies* available on the Course Website. The *Investigations Manual Applications* section and *Current Ocean Studies* are similar in format, topic, and length. Investigations lead the student through analysis and interpretation of real-world oceanographic data.

The *Investigations Manual* is designed to function as a self-contained course for those wishing to have all course material in their hands before the course starts, those wanting to preload all course material into their institution's e-learning course management system at the beginning of each term and/or those whose academic calendars do not match the *Online Ocean Studies* delivery schedule.

The *Investigations Manual* is packaged with an inflatable globe (to represent the ocean in true three-dimensional spatial relationships) used in many investigations. The *Investigations Manual* also contains Questions for Review and Critical Thinking Questions that correspond to each text chapter.

#### At a Glance: Course Components

- **Investigations Manual**
- **Investigations Manual Applications**
- **Current Ocean Studies**
- **Course Website**
- **Investigations Manual**
- **Investigations Manual Applications**
- **Current Ocean Studies**
- **Course Website**

The current twice-weekly ocean investigations (*Investigations Manual Applications*) are prepared by Joseph M. Moran (AMS education program), Robert S. Weinbeck (State University of New York - Brockport and AMS education program), Ira W. Geer (Director, AMS education program), and oceanographer H. Joseph Niebauer (University of Wisconsin - Madison). All have extensive experience teaching introductory environmental science courses and conducting NSF- and NOAA-funded faculty and teacher enhancement projects.

» **Course Website** - The Course Website delivers *Current Ocean Studies*, current ocean data and graphics, and satellite imagery. To access the Course Website, a Login ID and Password are required by all licensed students and faculty. A special site is available for all faculty considering this course offering, where the course website and course delivery mechanisms may be previewed. Go to the

### Investigations Manual Components

- **Current Ocean Studies** - The real-world case studies in the *Applications* section of the Investigations Manual allow the combination of manual and textbook to function as a full course. Many institutions offering the course during fall and spring semesters may choose to use the introduction section of the Manual investigations with *Current Ocean Studies* to expand on important concepts using current or recent oceanographic data. *Current Ocean Studies* are delivered on the *Investigations Manual* schedule described below. Each week's *Current Ocean Studies* "A" investigation is posted about Tuesday noon Eastern Time. The "B" investigation is posted about Thursday noon ET. During fall and spring semesters, *Current Ocean Studies* files accumulate in the "Archives" section of the course website as the semester progresses. "Current Ocean Studies" activities for Chapter A, B, and C, designed for use at any point during the course, are updated at the beginning of each fall semester and available all year.
- **Weekly Ocean News** - The Weekly Ocean News, which contains links to the latest ocean news items year round, is an important part of the Course Website. Current oceanographic products allow the Weekly Ocean News reader to investigate the details of the items being described. The news files are prepared by Dr. Edward J. Hopkins (University of Wisconsin - Madison).
- **Investigations Manual Images** - The course website contains a link to electronic versions of Investigations Manual images. Many Manual investigations require that students access these online images in order to answer certain questions. In such cases, notices in the text and on the image in the Manual direct students to the website. These website images will also be helpful if the course instructor prefers to have students submit selected images they have marked or processed electronically (e.g., via e-mail or drop box on a course management system website).

» **Faculty Resource CD and Website** - The CD contains the faculty manual, Investigations Manual answer forms compatible with course management systems, test bank questions, and textbook images. The faculty manual describes the course and its components and contains suggestions for course implementation in a variety of classroom settings. Included for each text chapter is an outline, summary, and learning objectives.

The CD Investigations Manual answer forms are files compatible with *Investigations Manual*, test-generating software for which your institution may have a license. This program opens formatted files and converts

Week 7	Oct 16	Oct 18
Week 8	Oct 23	Oct 25
Week 9	Oct 30	Nov 1
Week 10	Nov 6	Nov 8
Week 11	Nov 13	Nov 15
<i>Thanksgiving Break</i>	-----	-----
Week 12	Nov 27	Nov 29

### Spring 2008

Week	Tuesday Investigation A Posting	Thursday Investigation B Posting
Preview Week	Jan 15	Jan 17
Week 1	Jan 22	Jan 24
Week 2	Jan 29	Jan 31
Week 3	Feb 5	Feb 7
Week 4	Feb 12	Feb 14
Week 5	Feb 19	Feb 21
Week 6	Feb 26	Feb 28
<i>Spring Break</i>	-----	-----
Week 7	Mar 11	Mar 13
Week 8	Mar 18	Mar 20
Week 9	Mar 25	Mar 27
Week 10	Apr 1	Apr 3
Week 11	Apr 8	Apr 10
Week 12	Apr 15	Apr 17

[Home](#)
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[Contact Us](#)
[Feedback](#)

If you would like to use the entire course package, which includes the textbook, Investigations Manual + globe, and access to our course and faculty websites, your college will need to have a completed license on file with the AMS Education Program. If you would like to use the ~~textbook only option~~, a license is not required.

With an Online Ocean Studies license, your college receives:

Lavender  
in  
packet

Memo

February 19, 2007

To: Mary Graff

From: Rathna Prabhakar

Subject: College Physics

AMARILLO COLLEGE  
Physical Sciences Department

1. Name of program: College Physics
2. Prepared by: Rathna prabhakar
3. Request: Combine Lecture and Lab  
Combine PHYS 1301 and PHYS 1101
4. Curriculum Listing - Page 158 of current catalog
5. Statement Concerning overall effect:
  - A. Faculty and Staff requirements: n/a
  - B. Facility and Equipment: n/a
  - C. Support areas: n/a
  - D. Income projection: n/a
6. Rational:
  - Labs go hand in hand with the concepts taught in the lecture classes – Labs reinforce the lecture.
  - Students who take only the lecture class, 100% are not successful in the past 15 semesters (same with Dr. Sun's classes too).
  - The students are forced to participate in the recitation class which helps them in passing the course.
  - Taking only the Lab course in Physics makes no sense either, since Lab is to reinforce the Principles, Theorems and Laws taught in the lecture class.
  - Most of the 2- year colleges and 4-year Universities in Texas have the lecture and lab classes going hand in hand and is considered as one subject with the course number PHYS 1401.
7. Effective Date: Fall 2008

Approved

1. **DIVISION OF SCIENCES & ENGINEERING AND THE PHYSICAL SCIENCES DEPARTMENT**, Jack Stanley, Sciences and Engineering Division Chair and Mary Graff, Physical Sciences Department Chair, wish to add a course to the offerings of the Physical Sciences Department.

2. **STATEMENT OF REQUEST:** The Physical Sciences Department requests that the college physics sequence, PHYS 1301 and PHYS 1101, and PHYS 1302 and PHYS 1102, each be combined into a single course, with a new rubric of PHYS 1401 for the first semester and PHYS 1402 for the second semester. The rationale for this request is that students are more successful if they take both lecture and lab at the same time. Attached is a statement from Rathna Prabhakar detailing this rationale. This change will also bring Amarillo College more in line with many colleges and universities in Texas who offer College Physics.

4. **AFFECTED COURSE DESCRIPTIONS:** The course descriptions for College Physics PHYS 1301, PHYS 1101, PHYS 1302, and PHYS 1102 are found on Page 158 of the 2006-2007 Catalog. The descriptions will need to be changed to reflect the new rubric of PHYS 1401.

**Current Descriptions for PHYS 1301 and PHYS 1101:**

PHYS 1301: College Physics I  
Prerequisite: Math 1316  
Fundamentals of classical physics. (3 sem hr; 3 lec) (PHYS 4213)##

PHYS 1101: College Physics I Laboratory  
Must be taken concurrently with PHYS 1301. Selected classical physics laboratory experiments, including problem solving seminars. (1 sem hr; 4 lab) (PHYS 4221)##

**Requested Change for Rubric and Catalog Description:**

PHYS 1401: College Physics I (Lecture and Lab).  
Prerequisite: Math 1316. Physics sequence including laboratories and covering topics of classical mechanics, heat related phenomena, and mechanical waves. Laboratory includes classical physics experiments and problem solving seminars (4 sem hrs: 3 lec, 4 lab)

**Current Descriptions for PHYS 1302 and PHYS 1102:**

PHYS 1302: College Physics II  
Prerequisite College Physics I or consent of instructor.  
Continuation of PHYS 1301. Fundamentals of classical electricity, and light, introduction to Modern Physics. (3 sme hr; 3 lec) (PHYS 4223)##

PHYS 1102: College Physics II Laboratory

Must be taken concurrently with PHYS 1302. Selected classical physics laboratory experiments, including problem solving seminars. (1 sem hr; 4 lab) (PHYS 4231)#

**Requested Change for Rubric and Catalog Description:**

PHYS 1402: College Physics II (Lecture and Lab)

Prerequisite: College Physics I or consent of instructor. Continuation of Physics 1401. Fundamentals of classical electricity, sound, optics, and introduction to Modern Physics. Including laboratories and problem solving seminars. (4 sem hrs; 3 lec, 4. lab)

5. **PAGE REFERENCE IN CURRENT CATALOG:** Page 158, 2006-2007 Catalog.

6. **SEMESTER CHANGES EFFECTIVE:** Fall 2008

7-12. N/A

Note 1: See attached for additional rationale for requested changes.

Note 2: Attached is page 103 from the Lower-Division Academic Course Guide Manual (ACGM) with the corresponding course information for PHYS 1401 and PHYS 1402.

Note 3: The current catalog descriptions for the laboratory section to accompany PHYS 1301 and PHYS 1302 say “Must be taken concurrently ...”, but having them listed as a separate class, allows for some students to opt out of the lab portion of this class. This change will eliminate that situation.

## PHYS (Physics)

PHYS 1401 College Physics I (*lecture + lab*)  
 PHYS 1301 College Physics I (*lecture*)  
 PHYS 1101 College Physics Laboratory I (*lab*)

PHYS 1402 College Physics II (*lecture + lab*)  
 PHYS 1302 College Physics II (*lecture*)  
 PHYS 1102 College Physics Laboratory II (*lab*)

Algebra-level physics sequence, with laboratories, that includes study of mechanics, heat, waves, electricity and magnetism, and modern physics.

Approval Number.....40.0801.53 03  
 CIP Area.....Physical Sciences  
 maximum SCH per student.....8  
 maximum SCH per course.....4  
 maximum contact hours per course.....112

PHYS 1405 Elementary Physics I (*lecture + lab*)  
 PHYS 1305 Elementary Physics I (*lecture*)  
 PHYS 1105 Elementary Physics Laboratory I (*lab*)

PHYS 1407 Elementary Physics II (*lecture + lab*)  
 PHYS 1307 Elementary Physics II (*lecture*)  
 PHYS 1107 Elementary Physics Laboratory II (*lab*)

PHYS 1410 Elementary Physics (*single-semester course, lecture + lab*)  
 PHYS 1310 Elementary Physics (*single-semester course, lecture*)  
 PHYS 1110 Elementary Physics (*single-semester course, lab*)

Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

Approval Number.....40.0801.51 03  
 CIP Area.....Physical Sciences  
 maximum SCH per student.....8  
 maximum SCH per course.....4  
 maximum contact hours per course.....96

PHYS 1403 Stars and Galaxies (*lecture + lab*)  
 PHYS 1303 Stars and Galaxies (*lecture*)  
 PHYS 1103 Stars and Galaxies Laboratory (*lab*)

Study of stars, galaxies, and the universe outside our solar system. May or may not include a laboratory. (*Cross-listed as ASTR 1403, 1303, & 1103*)

Approval Number.....40.0201.51 03  
 CIP Area.....Physical Sciences  
 maximum SCH per student.....4  
 maximum SCH per course.....4  
 maximum contact hours per course.....96