

# Lower-Division Academic Course Guide Manual

**Revised Fall 2010** 

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#### Introduction

The Lower-Division Academic Course Guide Manual (ACGM) is the official list of approved courses for general academic transfer that may be offered (for state funding) by public community and technical colleges in Texas. Questions concerning the content or implementation of the procedures in this manual should be directed to:

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The provisions for approval of general academic courses for state appropriations are outlined in the Coordinating Board's Rules and Regulations, Chapter 9, Subchapter D. Accordingly, the Coordinating Board established an Academic Course Guide Manual Advisory Committee with equal representation from public community colleges and public universities. This standing committee meets at least twice annually to recommend to the Coordinating Board staff appropriate courses to be added to, revised in, or deleted from the ACGM. The members of the committee who contributed to this edition of the ACGM are listed at the beginning of this manual.

#### Changes in the ACGM

The fall 2010 edition of the ACGM incorporates new Classification of Instructional Programs (CIP) codes included in the migration to CIP 2010. Reporting officials should review the approval numbers carefully because some have changed.

This edition of the ACGM lists alphabetically by discipline the academic courses that are funded by the state for public community and technical colleges and are transferable to public universities. (For information regarding workforce education courses, see the *Workforce* Education Course Manual.) Course additions include new courses incorporated into field-of-study curricula or otherwise needed to reflect new curriculum trends.

#### The ACGM and the Academic Unique Need Inventory

The ACGM serves as the generic academic course inventory for all community and technical colleges in Texas. Individual institutions are not required to maintain separate general academic course inventories. Courses listed in this manual may be offered and reported for funding without requesting approval from the Coordinating Board.

If a community or technical college wishes to offer a course not listed here, or offer an ACGM course for more credit or contact hours than listed, it must request approval for such a course on a "unique need" basis. There are no provisions in this edition for special topics courses. A resulting inventory of Unique Need courses is the only academic inventory required of individual institutions. Colleges must continue to report academic courses according to instructions in the most recent edition of the Reporting and Procedures Manual for Public Community and Technical Colleges published by the Educational Data Center of the Coordinating Board. All edits of reports must be in accordance with the ACGM and the individual institutions' Unique Need course inventories. The state will not fund academic courses at community and technical colleges that are not listed in the

ACGM or on the college's Academic Unique Need inventory. Note: Inaccurate reporting of courses that differ significantly in content from the reported course numbers may result in an audit finding. An audit finding could cause an institution to lose some or all of its state reimbursement for any or all courses reported inaccurately.

#### Instructions: How to Read and Use the ACGM

The 2010 edition of the *ACGM* is organized alphabetically by academic disciplines currently taught at community and technical colleges. All common courses listed in the *ACGM* have been numbered to correspond to course numbers assigned by the Texas Common Course Numbering System (TCCNS). Where available, each entry begins with a list of common course prefixes and numbers. For course descriptions with no common numbers currently assigned, a content descriptor (for example, "Environmental Science") is listed. Beneath the course list, a brief course description appears along with a line listing the 10-digit approval number for the course, the matching CIP descriptor, and information about maximum semester credit hours (SCH) per student, maximum SCH per course, and maximum contact hours per course.

#### For example:

#### CHEM 1311 General Chemistry I (lecture)

Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry.

Co-requisite: CHEM 1111—General Chemistry I Laboratory
Prerequisite: MATH 1314—College Algebra or equivalent academic preparation
High school chemistry is strongly recommended

Approval Number	40.0501.52 03
CIP Area	Physical Sciences
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

This edition also has learning outcomes listed for certain courses. Student learning outcomes describe what students are able to demonstrate in terms of knowledge, skills, and attitudes upon completion of a course. (NOTE: See Appendix B – Voluntary Mechanical Engineering Transfer Compact.)

#### Learning Outcomes (for General Chemistry I)

Upon successful completion of this course, students will:

- 1. Define the fundamental properties of matter.
- 2. Classify matter, compounds, and chemical reactions.
- 3. Determine the basic nuclear and electronic structure of atoms.
- 4. Identify trends in chemical and physical properties of the elements using the Periodic Table.
- 5. Describe the bonding in and the shape of simple molecules and ions.
- 6. Solve stoichiometric problems.
- 7. Write chemical formulas.

- 8. Write and balance equations.
- 9. Use the rules of nomenclature to name chemical compounds.
- 10. Define the types and characteristics of chemical reactions.
- 11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems.
- 12. Determine the role of energy in physical changes and chemical reactions.
- 13. Convert units of measure and demonstrate dimensional analysis skills.

In this example, the 10-digit approval number is 40.0501.52 03. The first six digits of the approval number indicate subject matter and are based upon current CIP codes. Coordinating Board staff assign the last four digits. The seventh and eighth digits further delineate course content, sequence, or approval category. The ninth and tenth digits indicate the funding category.

### Reporting officials should review the approval numbers carefully because some have changed.

40.0501 is the CIP code for General Chemistry

- <u>52</u> is the code for the content listed in the course description. The range for these numbers is typically 51 to 59. However, if a course is approved as a Unique Need course, the seventh digit will be a seven instead of a five. If the course is approved for excessive credit and/or contact hours (more than allowed in the approved listing), the seventh digit will be an eight instead of a five.
- <u>03</u> is the current state funding code for biological sciences in public community and technical colleges. These codes range from 01 to 26.

A complete listing of the academic funding codes is contained in Appendix F.

### IMPORTANT NOTE: The 2010 edition of the ACGM reflects current state funding codes. Some of these codes will not match funding codes found in older versions of the ACGM.

After the CIP descriptor, "General Chemistry," the maximum hours per student, semester credit hours (SCH) per course, and contact hours per course are listed:

- <u>3</u> is the maximum number of semester credit hours per student for courses applicable toward an associate degree under this specific approval number. In this example, a college may allow students to take three SCHs of general chemistry courses and count them toward an associate degree.
- is the maximum number of semester credit hours per course under this specific approval number. A college could offer a course under this approval number for three or fewer SCH, but not more. The college should award the SCH in proportion to the number of contact hours and type of instruction under the assigned common course number.
  - A traditional course offered for 48 contact hours of lecture over a 16-week semester will earn three semester credit hours and carry a "3" in the second digit of the common course number. Similarly, a traditional lecture/lab course offered for 48 contact hours of lecture and 32 contact hours of laboratory over a 16-week semester would earn four semester credit hours and carry a "4" in the second digit of the common course number. In general, one semester credit hour is awarded per 16 contact hours of lecture instruction and one semester credit hour is awarded per 32 to 48 contact hours of laboratory instruction.

48 is the total maximum number of contact hours per course according to this specific approval number. Thus, a college can offer a course under the General Chemistry approval number for 48 or fewer contact hours, but not more. In this example, a three SCH biology course may be offered for up to a maximum 48 contact hours. During a regular 16-week semester, 48 contact hours in this particular course might be broken down into three hours of lecture per week and three hours of lab per week or into other combinations that total 48 contact hours.

In rare cases, no common courses have been identified for specific approval numbers. Approval numbers for developmental courses, listed under the heading "Developmental Courses" in this manual, are one example. In such cases, the college may designate its own course prefixes and numbers.

#### The Texas Common Course Numbering System (TCCNS)

The TCCNS is a cooperative effort among Texas community colleges and universities to facilitate transfer of freshman- and sophomore-level general academic courses. The TCCNS provides a shared, uniform set of course designations for students and their advisors to use in determining both course equivalency and degree applicability of transfer credit on a statewide basis. When students transfer between two participating TCCNS institutions, a course taken at the sending institution transfers as the course carrying, or cross-referenced with the same TCCNS designation at the receiving institution.

For additional information about the TCCNS, consult the TCCNS Matrix Online (http://www.tccns.org) hosted by The University of Texas-Pan American. This website contains a list of participating TCCNS institutions, the TCCNS taxonomy, the TCCNS history, and the TCCNS board members. The site also contains the master list of the common courses offered in Texas. The list is organized by institution and by TCCNS designation. (For more information on the TCCNS, see Appendix G.)

#### **Addition and Deletion of Courses**

At an institution's request, Coordinating Board staff and the ACGM Advisory Committee may consider a course for placement in the *ACGM*. If CB staff determine there is continuing need for that course at that particular institution, then the course will be presented to the ACGM Committee for review. If a majority of the committee votes that the course should be included in the *ACGM*, then the course description used by the institution initiating the request will be evaluated and revised by the committee if necessary.

The ACGM Committee, working in cooperation with the TCCNS Board and CB staff, are now implementing a new process for accepting and adopting new courses. All institutions wishing to obtain a TCCNS number for a new course, or to place a course in the *ACGM*, should fill out the "Request to Add a New Course" form. This simplifies the application process so that institutions need to fill out only one form in order to apply to both bodies. The form can be found on the TCCNS website at this address:

http://www.tccns.org/ccn/TCCNS\_FOR\_PDF/General\_Info/New\_Course\_Form.pdf

The ACGM Advisory Committee may consider information from the following categories to determine whether to include the course in the *ACGM*. The committee may request additional information from the institution submitting the request; institutions are encouraged to submit any additional information for consideration they deem relevant. However, the information that the Committee considers most vital is requested on the "New Course" form, so institutions should be sure to fill out that form correctly and completely.

## NOTE: THE FOLLOWING IS NOT INTENDED TO BE AN EXHAUSTIVE LIST OF INFORMATIONAL CATEGORIES, NOR IS IT INTENDED THAT INSTITUTIONS SUBMITTING REQUESTS MUST SCORE HIGH MARKS IN ALL CATEGORIES.

The information for consideration may include the following:

- Unique Need approval history. Normally the course will have had Unique Need approval for at least the three previous years (one previous year if the course is applicable to the core curriculum).
- Course frequency and enrollments for the preceding three years have been adequate.
- The course has current applicability to baccalaureate degree plans.
- Application to the TCCNS. Final approval for inclusion in the *ACGM* may be contingent upon the assignment of a common course number.
- Applicability of the course to the institution's Core Curriculum.
- Frequency of similar courses statewide at both two- and four-year institutions.
- Applicability of the course to an academic major or a statewide field of study curriculum.
- Course description.
- Consultation with appropriate academic, professional, credentialing, or accrediting organizations.

If a majority of the committee votes that the course should be included in the *ACGM*, then the course description used by the institution initiating the request will be evaluated and revised by the committee if necessary. If the ACGM committee does not approve a course and CB staff determines that an institution has continued need of the course, the institution may continue to offer the course on a Unique Need basis.

The ACGM Advisory Committee may review and consider surveys of courses in the *ACGM*. Coordinating Board staff, using the CBM004 and other means to determine how frequently courses are taught, will conduct the surveys upon request of the committee. The ACGM committee may also consider recommendations for deletion from institutions or academic, professional, credentialing, or accrediting organizations. The course recommended for deletion will be placed under review for at least two years by a majority vote of the ACGM committee, and will be marked as such in the *ACGM*. Any course under review for two years will be removed from the *ACGM*.

Reasons for deletion may include the following:

- Infrequently offered courses, or low enrollments in courses statewide.
- Lack of applicability to a four-year degree, or obsolescence in a discipline.

#### **Unique Need Courses**

Unique Need Courses are academic transfer courses approved by Coordinating Board staff for use only by the institution making the application for approval. If a community or technical college wishes to offer a course not listed here, or offer an ACGM course with credit and/or contact hours in excess of the limits prescribed by the *ACGM*, a request for approval must be submitted to the Coordinating Board according to Board rules. When applying for a Unique Need course, institutions must submit a Request for Approval and ensure that all information requested is addressed or attached as needed. A copy of this form appears in Appendix D.

For courses to be included in an institution's inventory as Unique Need courses, each specific course must meet the following two criteria:

- 1. The course must be acceptable for transfer to two or more Texas and/or regional universities. Copies of letters documenting transferability must be included in the application. The letters must state that the course will be applied to degree requirements for the core curriculum or a specific major. Identification of a direct course substitution at the receiving institution strengthens the case for a Unique Need course. Courses that transfer only as elective credit are not eligible for Unique Need status. In certain cases, colleges may obtain Unique Need approval for courses that are documented for transfer to only one Texas university if the course is part of a 2 + 2 agreement or other special transfer agreement. In such a case, documentation of that agreement must be submitted along with the letter of transferability.
- 2. The course requested must have college- and university-level rigor. Courses designed to meet a community service, leisure, or a career/technical need are inappropriate for Unique Need approval and will not receive state (academic) funding.

Upper-division courses at community and technical colleges will not be funded by the state and may not be added to the *ACGM* [Note: The three community colleges authorized by the state to offer bachelor's degrees have their upper-division courses funded separately by the same formula as upper-division instruction at universities]. However, if regional universities decline to offer an upper-division course and if that course also meets the two criteria above, a community college may request approval to add the course to its inventory of Unique Need courses and to receive funding as such. The prerequisites of the proposed course must meet both institutions' prerequisites.

The procedures for Unique Need approval are:

- 1. The application for each Unique Need course submitted to the Coordinating Board must be accompanied by a proposal that states the various needs for the course and a syllabus that includes a course description, detailed course outline, and objectives. This proposal must also document that the course is transferable to two public universities, or that it is part of a special transfer agreement, and that it meets the requirement of college and university rigor.
- 2. Once approved, a Unique Need course shall be placed on the college inventory for three years. Colleges must reapply for approval of Unique Need courses at the end of every three-year term. Such requests must include the enrollments and frequency with which the course was offered during the preceding three years.

If you have suggestions or comments concerning Unique Need request procedures, please contact the Coordinating Board's Academic Affairs and Research Division.

#### **Distance Education**

Distance education may take the form of instruction offered face-to-face at off-campus sites, by telecommunications technology, or by correspondence. Unless specifically exempted by the Coordinating Board, all 100 and 200 level state-funded off-campus courses and programs - whether offered face-to-face or electronically to groups - must be submitted for annual review in an institution's *Off-Campus Instructional Plan* to the appropriate Higher Education Regional Council. Courses delivered via correspondence or electronically to individuals do not need to be included in an institution's *Off-Campus Instructional Plan*. See Chapter 4, Subchapter Q of Coordinating Board rules for the specific functions of the Regional Councils. The text of Subchapter Q is included in Appendix E of this manual.

The *Off-Campus Instructional Plan* consists of a listing by location of all off-campus courses and programs planned to be taught during an academic year by an institution. For public community colleges, the *Off-Campus Instructional Plan* will contain both out-of-service area courses and programs, which require Regional Council review and approval, and out-of-district-but-in-service-area courses and programs, which merely require Regional Council notification. Each college must prepare the *Plan* in January for the following academic year. The *Plan* will be submitted by the college to any and all potentially affected Higher Education Regional Council(s) for approval during council meetings in early spring. The Higher Education Regional Councils thereafter make recommendations to the Commissioner of Higher Education regarding the *Plans*. The Commissioner or his designated staff will resolve any disputes that cannot be mediated by the Higher Education Regional Councils.

Colleges wishing to offer academic courses for state funding for which all or part of the courses would be taught outside Texas must obtain prior approval from the Coordinating Board staff. The form needed to request approval for an out-of-state (or out-of-country) academic course and the required certification forms appear in Appendix D.

#### **Developmental Courses**

Developmental course work can be reported for state reimbursement but does not result in degree credit. Because developmental courses do not transfer, no common course numbers are used for developmental approval numbers. Colleges may designate their own course titles but should follow the specified restrictions for number of SCH per student, maximum SCH, and maximum contact hours. The first-digit developmental course numbers should be "0" to indicate that the course does not carry credit.

Developmental courses and assigned approval numbers are listed in a separate chapter of this manual (See Table of Contents).

#### Non-semester-length developmental education interventions

Rider 59, under the Texas Higher Education Coordinating Board's appropriation in Senate Bill 1 as passed by the Texas Legislature in the 81st Regular Session, allows institutions to offer non-semester-length developmental education interventions and claim formula funding for such interventions. The Rider language is below. More information on non-semester-length developmental interventions can be found under the Developmental Courses section of this manual.

#### 59. Funding for Non-Semester-Length Developmental Education.

Out of funds appropriated above, the Texas Higher Education Coordinating Board shall approve non-semester-length developmental education interventions (including course-based, non-course-based, alternative-entry/exit, and other intensive developmental education activities) in the Lower Division Academic Course Guide Manual before August 31, 2009. Approved non-semester-length developmental education interventions shall be eligible for formula funding beginning in fall 2010 and subject to limitations prescribed by law.

Institutions shall analyze the fiscal and instructional impacts on student outcomes for both semester-length and non-semester-length developmental education interventions. The institutions shall prepare a report to the Board no later than June 1, 2010. The Board, in conjunction with the Legislative Budget Board and institutions of higher education, shall use existing performance measures and data to assist in the evaluation of student outcomes for these interventions, including but not limited to, student success in first-college-level course by subject, persistence, transfer, and degree or certificate completion.

The Board shall analyze and compare all institution reports to determine the most effective and efficient combination of developmental education interventions and make recommendations to the Legislative Budget Board and the Governor before January 1, 2011.

#### **List of Approved Courses**

#### **ACCT (Accounting)**

ACCT 2301 ACCT 2401	Principles of Accounting I - Financial (3 SCH version) Principles of Accounting I - Financial (4 SCH version)
ACCT 2302 ACCT 2402	Principles of Accounting II - Managerial (3 SCH version) Principles of Accounting II - Managerial (4 SCH version)
preparation proprietorsh	concepts and their application in transaction analysis and financial statement; analysis of financial statements; and asset and equity accounting in hips, partnerships, and corporations. Introduction to cost behavior, budgeting, by accounting, cost control, and product costing.
CIP Area maximum S maximum S	Business, Management, & Administrative Support Administrative Support SCH per student 8 CH per course 4 CH per course 96
	AGRI (Agriculture)
AGRI 1307 AGRI 1407	Agronomy <i>(3 SCH version)</i> Agronomy <i>(4 SCH version)</i>
•	nd practices in the development, production, and management of field crops ant breeding, plant diseases, soils, insect control, and weed control.
CIP Area maximum S maximum S	umber
AGRI 1309	Computers in Agriculture
	puters in agricultural applications. Introduction to programming languages, word electronic spreadsheets, and agricultural software.
CIP Area maximum S maximum S	umber
AGRI 1311	Dairy Science
replacemen	ne dairy industry including dairy breeds, standards for selection and culling, herd ts, feeding, management, physiology, and health maintenance. Food value for milk mposition and quality, and use and processing of market milk and dairy products.
CIP Area maximum S maximum S	umber       01.0905.51 01

#### Plant Protection (freshman version) **AGRI 1413** Plant Protection (sophomore version) **AGRI 2313** Principles and practices of controlling and preventing economic loss caused by plant pests. Includes instruction in entomology, plant pathology, weed science, crop science, environmental toxicology, and related environmental protection measures. Approval Number......01.1105.51 01 CIP Area ......Plant Protection & Integrated Pest Management maximum SCH per course .......4 maximum contact hours per course .......96 **AGRI 1315** Horticulture (3 SCH version) **AGRI 1415** Horticulture (4 SCH version) (Also see HORT 1301 or 1401) Structure, growth, and development of horticultural plants from a practical and scientific approach. Environmental effects, basic principles of propagation, greenhouse and outdoor production, nutrition, pruning, chemical control of growth, pest control, and landscaping. (Cross-listed as HORT 1301 or 1401) CIP Area ......Agribusiness & Agriculture Production maximum SCH per course .......4 maximum contact hours per course .......96 **AGRI 1319 Introductory Animal Science** (3 SCH version) **AGRI 1419 Introductory Animal Science** (4 SCH version) Scientific animal agriculture. Importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of beef cattle, swine, sheep, goats, and horses. Approval Number......01.0901.51 01 CIP Area ...... Animal Sciences, General maximum SCH per student .......4

#### AGRI 1325 Marketing of Agricultural Products

Operations in the movement of agricultural commodities from producer to consumer, including the essential marketing functions of buying, selling, transporting, storing, financing, standardizing, pricing, and risk bearing.

Approval Number	01.0102.51 01
	Agribusiness & Agriculture Production
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

#### AGRI 1327 Poultry Science

Introduction to the poultry industry. Practices and principles in the production and marketing of turkeys, layers, broilers, and specialized fowl. Management, automated equipment, product technology, incubation, and production economics.

Approval Number	01.0907.51 01
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	64

#### AGRI 1329 Principles of Food Science

Biological and scientific aspects of modern industrial food supply systems. Food classification, modern processing, and quality control.

Approval Number	01.1001.51 01
CIP Area	Food Science
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	64

### AGRI 1131 The Agricultural Industry (1 SCH version) AGRI 1231 The Agricultural Industry (2 SCH version)

Overview of world agriculture, nature of the industry, resource conservation, and the American agricultural system, including production, distribution, and marketing.

Approval Number	01.0103.52 01
	Agribusiness & Agriculture Production
	2
•	2
•	

#### AGRI 2301 Agricultural Power Units

Fundamentals of internal combustion engines: gasoline, diesel, and liquefied petroleum. Maintenance and adjustments of the electrical, ignition, fuel, lubricating, and cooling systems of agricultural power machinery.

Approval Number	01.0204.51 01
	Agribusiness & Agriculture Production
maximum SCH per student	3
	3
	64

AGRI 2303 AGRI 2304 AGRI 2403 AGRI 2603	•	
	se, and maintenance of hand an materials and principles.	nd power tools; arc and oxy-acetylene welding; and
CIP Area maximum So maximum So maximum co	CH per student CH per courseontact hours per course	
AGRI 2317	Introduction to Agricultur	
Fundamenta agriculture.	al economic principles and their	applications to the problems of the industry of
CIP Area		01.0103.51 01 Agribusiness & Agriculture Production 3
maximum S	CH per course	
AGRI 2321 AGRI 2322 AGRI 1121 AGRI 2221	Livestock Evaluation I Livestock Evaluation II Livestock Judging (1 SCH, Livestock Evaluation (2 SC	single-semester course) CH, single-semester course)
Selection, ev	valuation, and classification of	livestock and livestock products.
CIP Area		01.0901.52 01 Animal Sciences, General
maximum S	CH per course	
AGRI 2330	Wildlife Conservation & M	anagement
	nd practices used in the produc cological, and recreational uses	tion and improvement of wildlife resources. s of public and private lands.
CIP Area maximum S maximum S	CH per studentCH per course	
maximum co	Jiliact nours per course	64

	ANTH (Anthropology)	
ANTH 2401 ANTH 2301 ANTH 2101 ANTH 2302 *( <i>Note: may</i>	Physical Anthropology ( <i>lecture + lab</i> ) Physical Anthropology ( <i>lecture</i> ) Physical Anthropology ( <i>lab</i> )* Introduction to Archeology ( <i>lecture</i> ) be taught as an accompaniment to ANTH 2301 only.)	
	of human origins and bio-cultural adaptations. Also introduces exation and interpretation of material remains of past cultures.	_
CIP Area maximum ! maximum !	umberSCH per studentSCH per course	Social Sciences 7 4
	General Anthropology MA 2323 World Cultures)	
institutions.	man beings, their antecedents and related primates, and their Introduces the major subfields: physical and cultural anthropoland ethnology. ( <i>Cross-listed as HUMA 2323</i> )	
	umber	
maximum S maximum S	CH per studentCH per courseontact hours per course	3 3
ANTH 2351	Cultural Anthropology	
	ts, methods and theory in the study of cultural diversity, social and culture change among world peoples.	l institutions,
CIP Area maximum S	CH per studentCH per course	Social Sciences 3
	ontact hours per course	
ANTH 2289 ANTH 2389 (Also see ECC	Academic Cooperative <i>(2 SCH version)</i> Academic Cooperative <i>(3 SCH version)</i> N 2389, GEOG 2389, GOVT 2389, HIST 2389, PSYC 238	89, SOCI 2389)
experience	onal program designed to integrate on-campus study with pra- in anthropology. In conjunction with class seminars, the indivi- Is and objectives in the study of human social behavior and/or	dual student will set
CIP Area maximum S maximum S	CH per student	Social Sciences 3

#### ARAB (Arabic Language)

ARAB 1311 ARAB 1411 ARAB 1511	Beginning Arabic I (1st sen	nester Arabic, 3 SCH version) nester Arabic, 4 SCH version) nester Arabic, 5 SCH version)
ARAB 1312 ARAB 1412 ARAB 1512	Beginning Arabic II (2nd se	emester Arabic, 3 SCH version) emester Arabic, 4 SCH version) emester Arabic, 5 SCH version)
	al skills in listening comprehensio grammatical structures, and cult	on, speaking, reading, and writing. Includes basic cure.
CIP Area maximum S maximum S	CCH per studentCH per course	
ARAB 2311 ARAB 2312	Intermediate Arabic I (3rd Intermediate Arabic II (4th	
		omprehension, speaking, reading, and writing. ition, reading, composition, and culture.
CIP Area maximum S maximum S	CH per studentCH per course	
	ARCH (A	rchitecture)
ARCH 1301 ARCH 1302	Architectural History I Architectural History II	
the relation	3	ancient civilizations to the present. Emphasis on te, natural resources, and materials to the
CIP Area maximum S maximum S	CCH per studentCH per course	

ARCH 1303 ARCH 1403	Architectural Design I (3 SCH version) Architectural Design I (4 SCH version)
ARCH 1304 ARCH 1404	Architectural Design II (3 SCH version) Architectural Design II (4 SCH version)
Introduction forms and s	to architectural concepts. The visual characteristics of two- and three-dimensional paces.
CIP Area maximum S maximum S	mber
ARCH 1205 ARCH 1305	Architectural Aesthetics (2 SCH version) Architectural Aesthetics (3 SCH version)
Architecture architecture	as a contemporary philosophical concept. Visual experiences in the aesthetics of
CIP Area maximum S maximum S	mber
ARCH 1307 ARCH 1407	Architectural Graphics I (3 SCH version) Architectural Graphics I (4 SCH version)
ARCH 1308 ARCH 1408	Architectural Graphics II (3 SCH version) Architectural Graphics II (4 SCH version)
	I drafting techniques including orthographic and axonometric studies. Principles of shadows, and perspective drawing.
CIP Area maximum S maximum S	mber
ARCH 1201 ARCH 1311	Introduction to Architecture (2 SCH version) Introduction to Architecture (3 SCH version)
An introduct	ion to the elements of the architectural profession.
CIP Area maximum S maximum S	mber

ARCH 1315	Architectural Computer Graphics
Introduction	n to computer graphics systems with emphasis on architectural applications.
CIP Area maximum S maximum S	Architectural Drafting & Architectural CAD/CADD CH per student 3 CCH per course 3 ontact hours per course 96
ARCH 2201 ARCH 2301	Architectural Freehand Drawing I (2 SCH version) Architectural Freehand Drawing I (3 SCH version)
ARCH 2202 ARCH 2302	Architectural Freehand Drawing II (2 SCH version) Architectural Freehand Drawing II (3 SCH version)
ARCH 2203	Architectural Freehand Drawing III (2 SCH version)
•	tional drawing using various media. Emphasis on principles of light, shade, scale, line, and tonal quality.
CIP Area maximum S maximum S maximum c	Architectural Drafting & Architectural CAD/CADD CCH per student 8 CCH per course 3 ontact hours per course 96
ARCH 2312 ARCH 2313	Architectural Technology I Architectural Technology II
	n to the properties, specifications, and application of materials related to all structures. Emphasis on the methods of construction and the effect of design.
CIP Area maximum S maximum S	imber
	ARTS (Studio Art & Art History)
ARTS 1301	Art Appreciation
Exploration	of purposes and processes in the visual arts including evaluation of selected works
CIP Area maximum S maximum S	umber       50.0703.51 26

#### **ARTS 1303 Art History I ARTS 1304 Art History II** Examination of painting, sculpture, architecture, and other arts from prehistoric to present time. CIP Area ......Visual & Performing Arts **ARTS 1311** Design I (2-dimensional) **ARTS 1312** Design II (3-dimensional) **ARTS 2311** Design III (may be 2-D, 3-D, color, or combinations thereof) Design IV (may be 2-D, 3-D, color, or combinations thereof) **ARTS 2312** Elements and principles of art using two- and three-dimensional concepts. CIP Area ......Visual & Performing Arts maximum contact hours per course .......96 **ARTS 1213** Foundations of Art (2 SCH version) Foundations of Art (3 SCH version) **ARTS 1313 ARTS 1413** Foundations of Art (4 SCH version) Introduction to the creative media designed to enhance artistic awareness and sensitivity through the creative and imaginative use of art materials and tools. Includes art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth. Approval Number ......50.0701.51 26 CIP Area ......Visual & Performing Arts maximum SCH per student .......4 maximum SCH per course .......4 maximum contact hours per course .......96 **ARTS 1316** Drawing I Drawing II **ARTS 1317** Investigation of drawing media and techniques including descriptive and expressive possibilities. CIP Area ......Visual & Performing Arts maximum SCH per student......6 maximum contact hours per course .......96

ARTS 2323 ARTS 2324	Life Drawing I (3rd semester drawing) Life Drawing II (4th semester drawing)
Basic study	of the human form.
CIP Area maximum S maximum S	Imber       50.0705.53 26         Visual & Performing Arts       CH per student         CH per course       3         ontact hours per course       144
ARTS 1320 ARTS 1321	Interior Design II Interior Design II
	se in interior design. Includes instruction in professional techniques of designing the homes, offices, and industrial buildings.
CIP Area maximum S maximum S	imber
ARTS 1325	Drawing & Painting
Drawing an	d painting for non-art majors.
CIP Area maximum S maximum S	Imber       50.0708.51 26         Visual & Performing Arts         CH per student       3         CH per course       3         ontact hours per course       96
ARTS 2313 ARTS 2314	Design Communications I Design Communications II
Communica	tion of ideas through processes and techniques of graphic design and illustration.
CIP Area maximum S maximum S	Imber       50.0401.51 26         Visual & Performing Arts       CH per student         CH per course       3         ontact hours per course       96
ARTS 2316 ARTS 2317	Painting I Painting II
Exploration	of ideas using painting media and techniques.
CIP Area maximum S maximum S	Imber       50.0708.52 26

ARTS 2326 ARTS 2327	•	
Exploration	of ideas using sculpture media and techniques.	
CIP Area maximum S maximum S	umber	Visual & Performing Arts 6
ARTS 2333 ARTS 2334	Printmaking I Printmaking II	
Exploration	of ideas using various printmaking processes.	
CIP Area maximum S maximum S	umber	Visual & Performing Arts6
ARTS 2336 ARTS 2337	Fiber Arts I Fiber Arts II	
Structure ar	nd design of woven and non-woven fiber forms.	
CIP Area maximum S maximum S	umber	Visual & Performing Arts6
ARTS 2341 ARTS 2342	Art Metals I Art Metals II	
Exploration	of ideas using basic techniques in jewelry and me	tal construction.
CIP Area maximum S maximum S	umberSCH per studentSCH per coursescontact hours per course	Visual & Performing Arts 6 3
ARTS 2346 ARTS 2347	Ceramics I Ceramics II	
Exploration	of ideas using basic ceramic processes.	
CIP Area maximum S maximum S	umber SCH per student SCH per course contact hours per course	Visual & Performing Arts6

#### ARTS 2348 Digital Art I ARTS 2349 Digital Art II

Studio art courses that explore the potential of the computer hardware and software medium for their visual, conceptual, and practical uses in the visual arts.

Approval Number	50.0402.52 26
CIP Area	
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	
· ·	

### ARTS 2356 Photography I (fine arts emphasis) (Also see COMM 1318 for journalism emphasis)

Introduction to the basics of photography. Includes camera operation, techniques, knowledge of chemistry, and presentation skills. Emphasis on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics. (*Cross-listed, with journalism emphasis, as COMM 1318*)

### ARTS 2357 Photography II *(fine arts emphasis)* (Also see COMM 1319 for journalism emphasis)

Extends the students' knowledge of technique and guides them in developing personal outlooks toward specific applications of the photographic process.

Prerequisite: Photography I or its equivalent. (*Cross-listed, with journalism emphasis, as COMM 1319*)

Approval Number	50.0605.52 26
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	96

### ARTS 2366 Watercolor I ARTS 2367 Watercolor II

Exploration of ideas using water-based painting media and techniques.

Approval Number	50.0708.53 26
CIP Area	Visual & Performing Arts
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	96

#### Academic Cooperative (2*SCH version*) **ARTS 2289** Academic Cooperative (3 SCH version) **ARTS 2389**

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 studio art and/or art history.

Approval Number	24.0103.52 12
CIP Area	Interdisciplinary
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	144

#### ASTR (Astronomy)

ASTR (ASTROLOUTY)		
ASTR 1403 ASTR 1303 ASTR 1103	Stars and Galaxies (lecture + la Stars and Galaxies (lecture) Stars and Galaxies Laboratory (	
•	ars, galaxies, and the universe outside (Cross-listed as PHYS 1403, 1303, &	e our solar system. May or may not include a 1103)
CIP Area maximum S maximum S	SCH per studentSCH per course	
ASTR 1404 ASTR 1304 ASTR 1104	Solar System <i>(lecture + lab)</i> Solar System <i>(lecture)</i> Solar System Laboratory <i>(lab)</i>	
•	e sun and its solar system, including i	ts origin. May or may not include a laboratory

'n. (Cross-listed as PHYS 1404, 1304, & 1104)

Approval Number	40.0201.52 03
CIP Area	Physical Sciences
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	

#### **BCIS (Business Computer Information Systems)**

(Refer to COSC for computer science programming courses.)

### BCIS 1301 Microcomputer Applications (3 SCH version) BCIS 1401 Microcomputer Applications (4 SCH version)

Overview of computer information systems. Introduces computer hardware, software, procedures, systems, and human resources and explores their integration and application in business and other segments in society. The fundamentals of computer problem solving and programming in a higher level programming language may be discussed and applied. (*These courses are no longer cross-listed as COSC 1301 and 1401*)

Approval Number	11.0202.52 04
CIP Area	Computer Programming Special Applications
maximum SCH per student	
	4
maximum contact hours per course	96

### BCIS 1305 Business Computer Applications (3 SCH version) BCIS 1405 Business Computer Applications (4 SCH version)

Computer terminology, hardware, software, operating systems, and information systems relating to the business environment. The main focus of this course is on business applications of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. (*This course is part of the Business Field of Study Curriculum*)

Approval Number	11.0202.54 04
	Computer Programming Special Applications
	4
•	4
	96

## BCIS 1310 BASIC Programming BCIS 1311 FORTRAN Programming BCIS 1312 PASCAL Programming

Course designed to teach software theory and structured programming methods used to solve business data problems. Includes discussion of business applications, testing, documentation, input specification, and report generation.

Approval Number	11.0202.51 04
	Computer Programming Special Applications
maximum SCH per student	3
•	3
·	80

#### Computer Programming-BASIC (3 SCH version) **BCIS 1316 BCIS 1416** Computer Programming-BASIC (4 SCH version) Introduction to business programming techniques. Includes structured programming methods, designing customized software applications, testing documentation, input specification, and report generation. CIP Area ...... Computer Programming Special Applications maximum SCH per course .......4 maximum contact hours per course .......96 **BCIS 1320 Introductory C Programming (3 SCH version) Introductory C Programming (4 SCH version) BCIS 1420** (Also see COSC 1320 & 1420) Introduction to business programming techniques. Includes structured programming methods, designing customized software applications, testing documentation, input specification, and report generation. (Cross-listed as COSC 1320 & 1420) CIP Area ...... Computer Programming Special Applications maximum contact hours per course .......96 Programming in BASIC I (3 SCH version) **BCIS 1331 BCIS 1431** Programming in BASIC I (4 SCH version) Introduction to business programming techniques. Includes structured programming methods, designing customized software applications, testing documentation, input specification, and report generation. CIP Area ...... Computer Programming Special Applications maximum SCH per course ......4 maximum contact hours per course .......96 **BCIS 1332** COBOL Programming I (3 SCH version) **BCIS 1432** COBOL Programming I (4 SCH version) Introduction to business programming techniques. Includes structured programming methods, designing customized software applications, testing documentation, input specification, and report generation. CIP Area ...... Computer Programming Special Applications

### BCIS 2316 Advanced Structured Programming Techniques BASIC (3 SCH version) BCIS 2416 Advanced Structured Programming Techniques BASIC (4 SCH version)

Further applications of business programming techniques. Advanced topics may include varied file access techniques, system profiles and security, control language programming, data validation program design and testing, and other topics not normally covered in an introductory information systems programming course.

Approval Number	11.0202.53 04
CIP Area	Computer Programming Special Applications
maximum SCH per student	8
maximum SCH per course	4
maximum contact hours per course	

## BCIS 2320 Advanced C Programming (3 SCH version) BCIS 2420 Advanced C Programming (4 SCH version) (Also see COSC 2320 & 2420)

Further applications of business programming techniques. Advanced topics may include varied file access techniques, system profiles and security, control language programming, data validation program design and testing, and other topics not normally covered in an introductory information systems programming course.

(Cross-listed as COSC 2320 & 2420)

Approval Number	11.0202.53 04
CIP Area	
maximum SCH per student	8
maximum SCH per course	4
maximum contact hours per course	

### BCIS 2331 Advanced Programming BASIC (3 SCH version) BCIS 2431 Advanced Programming BASIC (4 SCH version)

Further applications of business programming techniques. Advanced topics may include varied file access techniques, system profiles and security, control language programming, data validation program design and testing, and other topics not normally covered in an introductory information systems programming course.

Approval Number	11.0202.53 04
CIP Area	Computer Programming Special Applications
maximum SCH per student	8
maximum SCH per course	4
maximum contact hours per course	96

### BCIS 2332 Advanced Programming COBOL (3 SCH version) BCIS 2432 Advanced Programming COBOL (4 SCH version)

Further applications of business programming techniques. Advanced topics may include varied file access techniques, system profiles and security, control language programming, data validation program design and testing, and other topics not normally covered in an introductory information systems programming course.

CIP Area maximum S maximum S	Computer Programming Special Applications SCH per student 8 SCH per course 4 contact hours per course 96
BCIS 2390	Systems Analysis & Design
appropriate	business information needs and preparation of specifications and requirements for data system solutions. Includes instruction in information requirements analysis, a development and writing, prototype evaluation, and network application
	umber
	SCH per course
maximum c	ontact hours per course80
	BIOL (Biology)
BIOL 1406 BIOL 1306 BIOL 1106	Biology for Science Majors I ( <i>lecture + lab</i> ) Biology for Science Majors I ( <i>lecture</i> ) Biology for Science Majors Laboratory I ( <i>lab</i> )
BIOL 1407 BIOL 1307 BIOL 1107	Biology for Science Majors II ( <i>lecture + lab</i> ) Biology for Science Majors II ( <i>lecture</i> ) Biology for Science Majors Laboratory II ( <i>lab</i> )
organization	al principles of living organisms including physical and chemical properties of life, n, function, evolutionary adaptation, and classification. Concepts of reproduction, cology, and the scientific method are included.
CIP Area	umber       26.0101.51 03         Life Sciences       SCH per student
maximum S	SCH per course
BIOL 1408 BIOL 1308 BIOL 1108	Biology for Non-Science Majors I ( <i>lecture + lab</i> ) Biology for Non-Science Majors I ( <i>lecture</i> ) Biology for Non-Science Majors Laboratory I ( <i>lab</i> )
BIOL 1409 BIOL 1309 BIOL 1109	Biology for Non-Science Majors II ( <i>lecture + lab</i> ) Biology for Non-Science Majors II ( <i>lecture</i> ) Biology for Non-Science Majors Laboratory II ( <i>lab</i> )

Fundamental principles of living organisms including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of reproduction, genetics, ecology, and the scientific method are included.

#### **Lower-Division Academic Course Guide Manual**

CIP Area maximum S maximum S	CH per studentCH per course	
BIOL 1411 BIOL 1311 BIOL 1111	General Botany <i>(lecture + lab)</i> General Botany <i>(lecture)</i> General Botany <i>(lab)</i>	
survey and liverworts, f	ucture and function of plant cells, tissue life histories of the following representat ferns, and seed producing organisms. Planvironment and with humans. Selected I	tive groups: algae, fungi, mosses, ant reproductive and functional interactions
• • •		26.0301.51 03
		Life Sciences
	•	4
maximum c	ontact hours per course	112
BIOL 1413 BIOL 1313 BIOL 1113	General Zoology <i>(lecture + lab)</i> General Zoology <i>(lecture)</i> General Zoology <i>(lab)</i>	
	e principles of taxonomy, molecular biolo nction, diversity, behavior, and evolution	ogy, and ecology as they relate to animal n.
		26.0701.51 03
		Life Sciences
	•	4
maximum c	ontact hours per course	112
BIOL 1322 BIOL 1323 (Also see HEO	Nutrition & Diet Therapy I <i>(may a</i> Nutrition & Diet Therapy II ( <i>2nd d</i> 30 1322)	•
•	e chemical, physical, and sensory proper t applications. (C <i>ross-listed as HECO 13</i>	ties of food; nutritional quality; and food 322)
CIP Area maximum S maximum S	CH per studentCH per course	

#### BIOL 1414 Introduction to Biotechnology I

Overview of classical genetics, DNA structure, the flow of genetic information, DNA replication, gene transcription, protein translation. Principles of major molecular biology and genetic engineering techniques, including restriction enzymes and their uses, major types of cloning vectors, construction of libraries, Southern and Northern blotting, hybridization, PCR, DNA typing. Applications of these techniques in human health and welfare, medicine, agriculture and the environment. Introduction to the human genome project, gene therapy, molecular diagnostics, forensics, creation and uses of transgenic plants and animal and animal cloning and of the ethical, legal, and social issues and scientific problems associated with these technologies. Relevant practical exercises in the above areas.

Approval Number	26.1201.51 03
CIP Area	Biotechnology
Maximum SCH per student	4
Maximum SCH per course	
Maximum contact hours per course	

#### BIOL 1415 Introduction to Biotechnology II (New Course)

Biology course that focuses on an integrative approach to studying biomolecules with an emphasis on protein structures, functions and uses in the modern bioscience laboratory. Students will investigate the mechanisms involved in the transfer of information from DNA sequences to proteins to biochemical functions. The course will integrate biological and chemical concepts with techniques that are used in research and industry. Critical thinking will be applied in laboratory exercises using inquiry-based approaches, troubleshooting, and analyzing experimental data.

Approval Number	26.1201.52 03
CIP Area	
Maximum SCH per student	4
Maximum SCH per course	4
Maximum contact hours per course	112

BIOL 1424 Systematic Botany (lecture + lab)
BIOL 1324 Systematic Botany (lecture)
BIOL 1124 Systematic Botany (lab)

Introduction to the identification, classification, and evolutionary relationships of vascular plants with emphasis on flowering plants. Includes the importance of herbaria, collection techniques, and the construction and use of taxonomic keys.

Approval Number	26.0301.52 03
CIP Area	
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	112

BIOL 2401 BIOL 2301 BIOL 2101	Anatomy & Physiology I <i>(lecture + lab)</i> Anatomy & Physiology I <i>(lecture)</i> Anatomy & Physiology Laboratory I <i>(lab)</i>
BIOL 2402 BIOL 2302 BIOL 2102	Anatomy & Physiology II <i>(lecture + lab)</i> Anatomy & Physiology II <i>(lecture)</i> Anatomy & Physiology II <i>(lab)</i>
BIOL 2304 BIOL 2305 BIOL 2404	Anatomy & Physiology I (specialized, lecture only) Anatomy & Physiology II (specialized, lecture only) Anatomy & Physiology (specialized, single-semester course, lecture + lab)
integument	e structure and function of human anatomy, including the neuroendocrine, tary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory ontent may be either integrated or specialized.
CIP Area maximum ! maximum !	umber
BIOL 2206 BIOL 2406 BIOL 2306 BIOL 2106	Environmental Biology <i>(lecture)</i> Environmental Biology <i>(lecture + lab)</i> Environmental Biology <i>(lecture)</i> Environmental Biology <i>(lab)</i>
	eraction with and effect upon plant and animal communities. Conservation, energy, and other contemporary ecological problems.
CIP Area maximum s maximum s	umber
maximum	contact hours per course96
BIOL 2416 BIOL 2316 BIOL 2116	·
BIOL 2416 BIOL 2316 BIOL 2116 Study of th	Genetics ( <i>lecture + lab</i> ) Genetics ( <i>lecture</i> )

BIOL 2420 BIOL 2320 BIOL 2120	Microbiology for Non-Science Majors ( <i>lecture + I</i> Microbiology for Non-Science Majors ( <i>lecture</i> ) Microbiology for Non-Science Majors Laboratory	
and nonpat are used in	e morphology, physiology, and taxonomy of representative thogenic microorganisms. Pure cultures of microorganisms learning laboratory techniques. Includes a brief preview limmunology.	s grown on selected media
	umber	
maximum S maximum S	SCH per studentSCH per course	4 4
BIOL 2421 BIOL 2321 BIOL 2121	Microbiology for Science Majors ( <i>lecture + lab</i> ) Microbiology for Science Majors ( <i>lecture</i> ) Microbiology for Science Majors Laboratory ( <i>lab</i> )	
and nonpat are used in	e morphology, physiology, and taxonomy of representative thogenic microorganisms. Pure cultures of microorganisms learning laboratory techniques. Includes a brief preview immunology.	s grown on selected media
CIP Area maximum S maximum S	umberSCH per studentSCH per coursecontact hours per course	Life Sciences 4 4
BIOL 2428	Vertebrate Zoology (lecture + lab)	
	development, physiology, and natural history of the verte on comparative evolution.	brate animals with
CIP Area maximum S maximum S	umberSCH per studentSCH per coursecontact hours per course	Life Sciences 4 4
BIOL 2289 BIOL 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)	
experience	ional program designed to integrate on-campus study wit in the biological sciences/life sciences. In conjunction wit student will set specific goals and objectives in the study ones.	th class seminars, the
	umber	
maximum S maximum S	SCH per studentSCH per course	3

#### **BUSI (Business)**

#### **BUSI 1301 Business Principles**

Introduction to the role of business in modern society. Includes overview of business operations, analysis of the specialized fields within the business organization, and development of a business vocabulary.

Approval N	umber	52.0101.51 04
		Business, Management, & Administrative Support
	•	3
maximum S	SCH per course	
maximum (	ontact hours per course	48
BUSI 1304	Rusiness Report Writing	& Correspondence (freshman level version)
BUSI 2304		& Correspondence (sophomore level version)
BUSI 2304	<b>Business Report Writing</b>	

#### **BUSI 1307** Personal Finance

Personal and family accounts, budgets and budgetary control, bank accounts, charge accounts, borrowing, investing, insurance, standards of living, renting or home ownership, and wills and trust plans. (Cross-listed as HECO 1307) **NOTE:** This course is not part of the business field of study and may not transfer toward a degree in business.

Approval Number	19.0401.51 09
	Family and Consumer Sciences/Human Sciences
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

#### BUSI 2301 Business Law (1st semester Business Law)

Principles of law which form the legal framework for business activity.

Approval Number	22.0101.51 24
CIP Area	Law
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

### **CHEM (Chemistry)**

Introductory Chemistry I <i>(lecture + lab)</i>
Introductory Chemistry I (lecture)
Introductory Chemistry Laboratory I (lab)
Introductory Chemistry II (lecture + lab)
Introductory Chemistry II (lecture)
Introductory Chemistry Laboratory II (lab)
Introductory Chemistry I (lecture + lab, allied health emphasis)
Introductory Chemistry I (lecture, allied health emphasis)
Introductory Chemistry I (lab, allied health emphasis)
Introductory Chemistry II (lecture + lab, allied health emphasis)

Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for nonscience and allied health students.

Approval Number	40.0501.51 03
CIP Area	Physical Sciences
maximum SCH per student	8
maximum SCH per course	
maximum contact hours per course	112

#### **CHEM 1311** General Chemistry I (lecture)

Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry.

Co-requisite: CHEM 1111—General Chemistry I Laboratory Prerequisite: MATH 1314—College Algebra or equivalent academic preparation

High school chemistry is strongly recommended

Approval Number	40.0501.52 03
CIP Area	
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Define the fundamental properties of matter.
- Classify matter, compounds, and chemical reactions. 2.
- Determine the basic nuclear and electronic structure of atoms. 3.
- Identify trends in chemical and physical properties of the elements using the Periodic Table. 4.
- Describe the bonding in and the shape of simple molecules and ions. 5.
- Solve stoichiometric problems. 6.
- 7. Write chemical formulas.
- Write and balance equations. 8.

- 9. Use the rules of nomenclature to name chemical compounds.
- 10. Define the types and characteristics of chemical reactions.
- 11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems.
- 12. Determine the role of energy in physical changes and chemical reactions.
- 13. Convert units of measure and demonstrate dimensional analysis skills.

#### CHEM 1111 General Chemistry I (lab)

Basic laboratory experiments supporting theoretical principles presented in CHEM 1311; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports.

Co-requisite: CHEM 1311—General Chemistry I

Approval Number	40.0501.53 03
CIP Area	Physical Sciences
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
- 2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
- 3. Conduct basic laboratory experiments with proper laboratory techniques.
- 4. Make careful and accurate experimental observations.
- 5. Relate physical observations and measurements to theoretical principles.
- 6. Interpret laboratory results and experimental data, and reach logical conclusions.
- 7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
- 8. Design fundamental experiments involving principles of chemistry.
- 9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

#### CHEM 1411 General Chemistry I (lecture + lab)

**Note:** This lecture and lab course should combine all of the elements of 1314 General Chemistry I Lecture and 1111 General Chemistry I Lab, including the learning outcomes listed for both courses.

Approval Number	40.0501.54 03
CIP Area	
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	96

#### CHEM 1312 General Chemistry II (lecture)

Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry.

Co-requisite: CHEM 1112—General Chemistry II Laboratory

Prerequisite: CHEM 1311—General Chemistry I and CHEM 1111—General Chemistry I

Laboratory, or CHEM 1411—General Chemistry I (Lecture and Laboratory)

Approval Number	40.0501.55 03
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. State the characteristics of liquids and solids, including phase diagrams and spectrometry.
- 2. Articulate the importance of intermolecular interactions and predict trends in physical properties.
- 3. Identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships.
- 4. Identify and balance oxidation-reduction equations, and solve redox titration problems.
- 5. Determine the rate of a reaction and its dependence on concentration, time, and temperature.
- 6. Apply the principles of equilibrium to aqueous systems using LeChatelier's Principle to predict the effects of concentration, pressure, and temperature changes on equilibrium mixtures.
- 7. Analyze and perform calculations with the thermodynamic functions, enthalpy, entropy, and free energy.
- 8. Discuss the construction and operation of galvanic and electrolytic electrochemical cells, and determine standard and non-standard cell potentials.
- 9. Define nuclear decay processes.
- 10. Describe basic principles of organic chemistry and descriptive inorganic chemistry

#### CHEM 1112 General Chemistry II (lab)

Basic laboratory experiments supporting theoretical principles presented in CHEM 1312; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports.

Co-requisite: CHEM 1312—General Chemistry II

40.0501.56 03
Physical Sciences
48

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
- 2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
- 3. Conduct basic laboratory experiments with proper laboratory techniques.
- 4. Make careful and accurate experimental observations.
- 5. Relate physical observations and measurements to theoretical principles.
- 6. Interpret laboratory results and experimental data, and reach logical conclusions.
- 7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
- 8. Design fundamental experiments involving principles of chemistry and chemical instrumentation.
- 9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

### CHEM 1412 General Chemistry II (lecture + lab)

**Note:** This lecture and lab course should combine all of the elements of 1312 General Chemistry II Lecture and 1112 General Chemistry II Lab, including the learning outcomes listed for both courses.

Approval Number	40.0501.57 03
CIP Area	
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	

### CHEM 1413 General Chemistry I (*lecture + lab, allied health emphasis*) CHEM 1414 General Chemistry II (*lecture + lab, allied health emphasis*)

General principles, problems, fundamental laws, and theories. Course content provides a foundation for work in advanced chemistry and related sciences.

Approval Number	40.0501.58 03
CIP Area	
maximum SCH per student	8
maximum SCH per course	4
maximum contact hours per course	112

CH	IEM 2301 IEM 2301 IEM 2101	Analytical Chemistry I (lecture + lab)  Analytical Chemistry I (lecture)  Analytical Chemistry Laboratory I (lab)	
CH	IEM 2402 IEM 2302 IEM 2102	Analytical Chemistry II (lecture + lab) Analytical Chemistry II (lecture) Analytical Chemistry Laboratory II (lab)	
		d methods of quantitative chemical analysis dealing prima analysis and containing a brief introduction to physical me	
	CIP Area maximum So maximum So	mberCH per studentCH per course	Physical Sciences 8
	IEM 1104 IEM 1204	Chemical Calculations (1 SCH version) Chemical Calculations (2 SCH version)	
	Study of the engineering	mathematical applications used in chemistry. Designed fostudents.	or science and
	CIP Area maximum S0 maximum S0	mber  CH per student  CH per course  ontact hours per course	Physical Sciences 2
	IEM 1419 IEM 1420	Introductory Organic Chemistry I Introductory Organic Chemistry II	
	Survey cours professional	se introducing organic chemistry. Not designed for studen programs.	ts in science or pre-
	CIP Area maximum So maximum So	mberCH per studentCH per course	Physical Sciences 8 4

CHEM 2423 CHEM 2323 CHEM 2223 CHEM 2123	Organic Chemistry I (lecture + lab) Organic Chemistry I (lecture) Organic Chemistry Laboratory I (lab, 2 SCH version) Organic Chemistry Laboratory I (lab, 1 SCH version)		
CHEM 2425 CHEM 2325 CHEM 2225 CHEM 2125	Organic Chemistry II (lecture + lab) Organic Chemistry II (lecture) Organic Chemistry Laboratory II (lab, 2 SCH version) Organic Chemistry Laboratory II (lab, 1 SCH version)		
•	e properties and behavior of hydrocarbon compounds and their derivatives. or students in science or pre-professional programs.		
CIP Area maximum S maximum S	umber       40.0504.52 03		
CHEM 2289 CHEM 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)		
An instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual students will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.			
CIP Area maximum S maximum S	umber       40.0101.53 03		
CHIN (Chinese Language)			
CHIN 1311 CHIN 1411 CHIN 1511	Beginning Chinese I (1st semester <i>Chinese, 3 SCH version</i> ) Beginning Chinese I (1st semester Chinese, 4 SCH version) Beginning Chinese I (1st semester Chinese, 5 SCH version)		
CHIN 1312 CHIN 1412 CHIN 1512	Beginning Chinese II (2nd semester Chinese, 3 SCH version) Beginning Chinese II (2nd semester Chinese, 4 SCH version) Beginning Chinese II (2nd semester Chinese, 5 SCH version)		
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.			
CIP Area maximum S maximum S	umber		

### CHIN 2311 Intermediate Chinese I (3rd semester Chinese) CHIN 2312 Intermediate Chinese II (4th semester Chinese)

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

Approval Number	16.0301.52 13
CIP Area	Foreign Languages
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	80

#### **COMM (Communication)**

#### **COMM 1307** Introduction to Mass Communication

Study of the media by which entertainment and information messages are delivered. Includes an overview of the traditional mass media: their functions, structures, supports, and influences.

Approval Number	09.0102.51 06
CIP Area	Communication
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

### COMM 1316 News Photography I COMM 1317 News Photography II

Problems and practices of photography for newspapers. Includes instruction in camera and equipment operation and maintenance, film and plate developing, and printing media.

Approval Number	09.0401.55 06
CIP Area	
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	

# COMM 1318 Photography I (1st semester, journalism emphasis) (Also see ARTS 2356 for fine arts emphasis)

Introduction to the basics of photography. Includes camera operation, techniques, knowledge of chemistry, and presentation skills. Emphasis on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics. (*Cross-listed, with fine arts emphasis, as ARTS 2356*)

Approval Number	50.0605.51 26
CIP Area	Visual & Performing Arts
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	96

## COMM 1319 Photography II (2nd semester, journalism emphasis) (Also see ARTS 2357 for fine arts emphasis)

Extends the students' knowledge of technique and guides them in developing personal outlooks toward specific applications of the photographic process.

Prerequisite: Photography I or its equivalent. (*Cross-listed, with fine arts emphasis, as ARTS 2357*)

Approval Number	50.0605.52 26
CIP Area	Visual & Performing Arts
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

COMM 1129 News Publications I
COMM 1130 News Publications II
COMM 2129 News Publications III
COMM 2130 News Publications IV
COMM 1131 Other Publications II
COMM 2131 Other Publications III
COMM 2132 Other Publications III
COMM 2132 Other Publications IV

Work on the staff of one of the college publications. Students are required to work on the staff of at least one of the official college publications for prescribed periods under faculty supervision.

Approval Number	09.0401.54 06
CIP Area	Communication
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	

#### COMM 1335 Survey of Radio/Television

Study of the development, regulation, economics, social impact, and industry practices in broadcasting and cable communication. Includes non-broadcast television, new technologies, and other communication systems.

Approval Number	09.0102.52 06
CIP Area	Communication
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

COMM 1136 COMM 1236 COMM 1336	Television Production I (1 SCH version) Television Production I (2 SCH version) Television Production I (3 SCH version)
COMM 1137 COMM 1237 COMM 1337	Television Production II (1 SCH version) Television Production II (2 SCH version) Television Production II (3 SCH version)
COMM 1138 COMM 1238	Television Production III (1 SCH version) Television Production III (2 SCH version)
	perience in the operation of television studio and control room equipment, including and post-production needs.
CIP Area maximum S maximum S	imber
COMM 2300	Media Literacy
society from media forma the media. Approval Nu CIP Area maximum S maximum S	d analysis of the function, role, and responsibility of the mass media in modern the consumer perspective. Includes the ethical problems and issues facing each at, with the effect of political, economic, and cultural factors on the operation of mber
COMM 2301	Introduction to Technology and Human Communication
communicat	emerging interactive communication technologies and how they influence human ion, including interpersonal, group decision-making, and public and private ion contexts. ( <i>Cross-listed as SPCH 2301</i> )
CIP Area maximum S maximum S	Imber
COMM 2302	Principles of Journalism
Exploration journalist.	of ethical and legal boundaries as well as issues and problems facing today's
CIP Area maximum S	Imber       .09.0401.52 06
	ontact hours per course

COMM 2303	Audio/Radio Production
•	nd techniques of sound production, including the coordinating and directing Hands-on experience with equipment, sound sources, and direction of talent.
CIP Area	umber
maximum S	SCH per student 3 SCH per course 3 ontact hours per course 64
<b>COMM 2304</b>	Introduction to Cinematic Production
Basic single	-camera production concepts and techniques.
CIP Area maximum S maximum S	umber
COMM 2305	Editing & Layout
Editing and	layout processes, with emphasis on accuracy and fairness, including the principles uses of design.
	umber
maximum S	SCH per course
COMM 2209 COMM 2309	News Editing & Copy Reading I (2 SCH version) News Editing & Copy Reading I (3 SCH version)
COMM 2210 COMM 2310	News Editing & Copy Reading II (2 SCH version) News Editing & Copy Reading II (3 SCH version)
	g for errors of fact and interpretation of English. Includes newspaper style, headlir ofreading, and page makeup.
Approval Nu	umber
	SCH per student 6 SCH per course 3
	ontact hours per course
COMM 2311	News Gathering & Writing I
	als of writing news for the mass media. Includes instruction in methods and for gathering, processing, and delivering news in a professional manner.
	umber
	iCH per course
	ontact hours per course

### COMM 2315 News Gathering & Writing II

Continuation of the aims and objectives of news gathering and writing with emphasis on advanced reporting techniques.

Approval Number	09.0401.58 06
CIP Area	
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

### COMM 2316 Interviewing

Application of communication concepts in selected interview settings with emphasis on dyadic communication, questioning techniques, interview structure, and persuasion. (*Cross-listed as SPCH 2316*)

Approval Number	09.0101.52 06
CIP Area	Communication Studies
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	48

COMM 2120	Practicum in Electronic Media (1 SCH version)
<b>COMM 2121</b>	Practicum in Electronic Media (1 SCH version)
<b>COMM 2122</b>	Practicum in Electronic Media (1 SCH version)
COMM 2220	Practicum in Electronic Media (2 SCH version)
<b>COMM 2324</b>	Practicum in Electronic Media (3 SCH version)
<b>COMM 2325</b>	Practicum in Electronic Media (3 SCH version)
<b>COMM 2326</b>	Practicum in Electronic Media (3 SCH version)

Lecture and laboratory instruction and participation.

Approval Number	09.0701.53 06
CIP Area	Communication
maximum SCH per student	12
maximum SCH per course	
maximum contact hours per course	96

### COMM 2327 Introduction to Advertising

Fundamentals of advertising including marketing theory and strategy, copy writing, design, and selection of media.

Approval Number	09.0903.51 06
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

### **COMM 2328** Advertising Art I **COMM 2329 Advertising Art II** Communication of ideas through processes and techniques of graphic design and illustration. CIP Area ......Visual & Performing Arts Introduction to Public Relations **COMM 2330** Exploration of the history and development of public relations. Presentation of the theory behind and process of public relations, including the planning, implementation, and evaluation of PR campaigns. CIP Area ......Public Relations maximum contact hours per course .......48 Radio/Television Announcing **COMM 2331** Principles of announcing: study of voice, diction, pronunciation, and delivery. Experience in various types of announcing. Study of phonetics is recommended. COMM 2332 Radio/Television News Preparation and analysis of news styles for the electronic media. Approval Number......09.0402.52 06 maximum contact hours per course .......96 **COMM 2339** Writing for Radio, Television, & Film Introduction to basic script formats, terminology, and writing techniques, including the writing of commercials, public service announcements, promotions, news, documentary, and fictional materials. Approval Number......09.0402.51 06

#### COMM 2366 Introduction to Film

Emphasis on the analysis of the visual and aural aspects of selected motion pictures, dramatic aspects of narrative films, and historical growth and sociological effect of film as an art. (*Cross-listed as DRAM 2366*)

Approval Number	50.0602.51 26
CIP Area	Visual & Performing Arts
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	96

### COMM 2289 Academic Cooperative (2 SCH version) COMM 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 communication.

Approval Number	24.0103.52 12
CIP Area	Interdisciplinary
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	144

#### **COSC (Computer Science)**

(Refer to BCIS for business-oriented programming courses.)

# COSC 1301 Introduction to Computing *(3 SCH version)*COSC 1401 Introduction to Computing *(4 SCH version)*

Overview of computer systems—hardware, operating systems, and microcomputer application software, including the Internet, word processing, spreadsheets, presentation graphics, and databases. Current issues such as the effect of computers on society, and the history and use of computers in business, educational, and other modern settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science. (*These courses are no longer cross-listed as BCIS 1301 and 1401*)

Approval Number	11.0101.51 07
CIP Area	
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	

#### COSC 1309 Logic Design

A discipline approach to problem solving with structured techniques and representation of algorithms using pseudo code and graphical tools. Discussion of methods for testing, evaluation, and documentation.

Approval Number	11.0201.51 07
CIP Area	
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	80

## COSC 1315 Fundamentals of Programming (3 SCH version) COSC 1415 Fundamentals of Programming (4 SCH version)

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
	Computer & Information Sciences
maximum SCH per student	12
	4
	96

## COSC 1317 FORTRAN Programming I (3 SCH version) COSC 1417 FORTRAN Programming I (4 SCH version)

Introduction to computer programming in the FORTRAN programming language. 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	
maximum SCH per course	4
maximum contact hours per course	96

### COSC 1318 PASCAL Programming I (3 SCH freshman version) COSC 1418 PASCAL Programming I (4 SCH freshman version)

Introduction to computer programming in the PASCAL programming language. 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	
maximum SCH per student	12
maximum SCH per course	4
maximum contact hours per course	96

### **COSC 1319** Assembly Language Programming I (3 SCH freshman version) COSC 1419 Assembly Language Programming I (4 SCH freshman version) Introduction to Assembly Language 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. CIP Area ....... Computer & Information Sciences maximum SCH per course .......4 maximum contact hours per course .......96 **COSC 1320** "C" Programming I (3 SCH version) "C" Programming I (4 SCH version) **COSC 1420** (Also see BCIS 1320 or 1420) Introduction to computer programming in the "C" programming language. 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. (Cross-listed as BCIS 1320 or 1420) Approval Number......11.0201.52 07 CIP Area ....... Computer & Information Sciences maximum SCH per course ......4 maximum contact hours per course .......96 Computer Programming (3 SCH version) **COSC 1330 COSC 1430** Computer Programming (4 SCH version) Introduction to computer programming in various programming languages. 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. CIP Area ....... Computer & Information Sciences maximum SCH per course .......4 maximum contact hours per course .......96 COSC 1333 PL/1 Programming I (3 SCH version) **COSC 1433** PL/1 Programming I (4 SCH version) Introduction to computer programming in the PL/1 programming language. 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. CIP Area ....... Computer & Information Sciences maximum SCH per course .......4

maximum contact hours per course .......96

### COSC 1336 Programming Fundamentals I (3 SCH version) COSC 1436 Programming Fundamentals I (4 SCH version)

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. (This course is included in the Field of Study Curriculum for Computer Science.)

Approval Number	11.0201.5507
CIP Area	
	4
•	4
maximum contact hours per course	96

### COSC 1337 Programming Fundamentals II (3 SCH version) COSC 1437 Programming Fundamentals II (4 SCH version)

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 to software engineering. Prerequisite: COSC 1336/1436. (This course is included in the Field of Study Curriculum for Computer Science.)

Approval Number	11.0201.5607
CIP Area	Computer & Information Sciences
maximum SCH per student	4
·	4
maximum contact hours per course	96

### COSC 2315 Data Structures (3 SCH version) COSC 2415 Data Structures (4 SCH version)

Further applications of programming techniques. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course.

Approval Number	11.0201.53 07
CIP Area	Computer & Information Sciences
maximum SCH per student	•
maximum SCH per course	4
maximum contact hours per course	96

## COSC 2317 FORTRAN Programming II (3 SCH version) COSC 2417 FORTRAN Programming II (4 SCH version)

Further applications of programming techniques in the FORTRAN programming language. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course.

Approval Number	11.0201.53 07
CIP Area	Computer & Information Sciences
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	96

### COSC 2318 PASCAL Programming II (3 SCH version) COSC 2418 PASCAL Programming II (4 SCH version)

Further applications of programming techniques in the PASCAL programming language. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course.

Approval Number	11.0201.53 07
CIP Area	
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	96

## COSC 2319 Assembly Language Programming II (3 SCH version) COSC 2419 Assembly Language Programming II (4 SCH version)

Further applications of Assembly Language programming techniques. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course.

Approval Number	11.0201.53 07
CIP Area	
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	

### COSC 2320 "C" Programming II (3 SCH version) COSC 2420 "C" Programming II (4 SCH version)

Further applications of programming techniques in the "C" programming language. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course. (*Cross-listed as BCIS 2320 or 2340*)

Approval Number	11.0201.53 07
CIP Area	
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	96

### COSC 2325 Computer Organization and Machine Language (3 SCH version) COSC 2425 Computer Organization and Machine Language (4 SCH version)

Basic computer organization; machine cycle, digital representation of data and instructions; assembly language programming, assembler, loader, macros, subroutines, and program linkages.

Prerequisite: COSC 1336/1436.

(This course is included in the Field of Study Curriculum for Computer Science.)

Approval Number	11.0201.54 07
	Computer & Information Sciences
maximum SCH per student	4
•	4
maximum contact hours per course	96

### COSC 2330 Advanced Structured Languages (3 SCH version) COSC 2430 Advanced Structured Languages (4 SCH version)

Further applications of programming techniques. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course.

Approval Number	11.0201.53 07
	Computer & Information Sciences
maximum SCH per student	·4
· · · · · · · · · · · · · · · · · · ·	4
•	96

### COSC 2333 PL/1 Programming II (3 SCH version) COSC 2433 PL/1 Programming II (4 SCH version)

Further applications of programming techniques in the PL/1 programming language. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course.

Approval Number	11.0201.53 07
maximum SCH per student	4
·	4
maximum contact hours per course	96

# COSC 2336 Programming Fundamentals III (3 SCH version) COSC 2436 Programming Fundamentals III (4 SCH version)

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.

Prerequisite: COSC 1337/1437. (This course is included in the Field of Study Curriculum for Computer Science.)

• • • • • • • • • • • • • • • • • • • •	11.0201.57 07
· · · · · · · · · · · · · · · · · · ·	4
maximam contact flours per course	70
CRIJ (	Criminal Justice)
CRIJ 1301 Introduction to Crimina	l Justice
	rations of criminal justice; the nature and impact of ustice system, including law enforcement and court
Approval Number	43.0104.51 24
• • • • • • • • • • • • • • • • • • •	3
·	
maximum contact nours per course	40
CRIJ 1306 Court Systems & Practic	es
Study of the judiciary in the American coand procedures.	riminal justice system and the adjudication processes
Approval Number	22.0101.54 24
	Law
•	3
· · · · · · · · · · · · · · · · · · ·	3
maximum contact nours per course	48
CRIJ 1307 Crime in America	
	erspective, social and public policy factors affecting haracteristics of specific crimes, and prevention of
Approval Number	45.0401.52 25
	Social Sciences
	3
·	3
maximum contact nours per course	48
CRIJ 1310 Fundamentals of Crimin	al Law
	nd historical development, major definitions and f crime, penalties using Texas statutes as illustrations
Approval Number	22.0101.53 24
	Law
	3
	3
maximum contact hours per course	48

### CRIJ 1313 Juvenile Justice System

A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency.

Approval Number	43.0104.52 24
CIP Area	Protective Services
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

#### **CRIJ 2301** Community Resources in Corrections

An introductory study of the role of the community in corrections; community programs for adults and juveniles; administration of community programs; legal issues; future trends in community treatment.

Approval Number	43.0104.53 24
CIP Area	Protective Services
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

#### **CRIJ 2313** Correctional Systems & Practices

Corrections in the criminal justice system; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues.

Approval Number	43.0104.54 24
CIP Area	Protective Services
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

#### CRIJ 2314 Criminal Investigation

Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation.

Approval Number	43.0104.55 24
CIP Area	Protective Services
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	80

### **CRIJ 2323 Legal Aspects of Law Enforcement** Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; police liability. CIP Area ....... Protective Services **CRIJ 2328 Police Systems & Practices** The police profession; organization of law enforcement systems; the police role; police discretion; ethics; police-community interaction; current and future issues. CIP Area ...... Protective Services maximum SCH per student......3 **CZEC (Czech Language) CZEC 1311** Beginning Czech I (1st semester Czech, 3 SCH version) Beginning Czech I (1st semester Czech, 4 SCH version) **CZEC 1411 CZEC 1511** Beginning Czech I (1st semester Czech, 5 SCH version) **CZEC 1312** Beginning Czech II (2nd semester Czech, 3 SCH version) Beginning Czech II (2nd semester Czech, 4 SCH version) **CZEC 1412 CZEC 1512** Beginning Czech II (2nd semester Czech, 5 SCH version) Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. Approval Number......16.0406.51 13 CIP Area ...... Foreign Languages **CZEC 2311** Intermediate Czech I (3rd semester Czech) Intermediate Czech II (4th semester Czech) **CZEC 2312** Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. CIP Area ...... Foreign Languages maximum contact hours per course ......80

### DANC (Dance)

DANC 1101 DANC 1102 DANC 1103 DANC 1201 DANC 1301	Dance C Dance C Dance C	omposition I omposition II omposition III omposition ( <i>single-semeste</i> omposition ( <i>single-semeste</i>	
•		principles and theories involved group and structural forms.	d in composition. Emphasis is placed on
CIP Area maximum S maximum S	CH per stu CH per cou	dent	50.0301.55 26 Visual & Performing Arts 3 3
DANC 1110 DANC 1210	Tap I Tap I	(1 SCH version) (2 SCH version)	
DANC 1111 DANC 1211	Tap II Tap II	(1 SCH version) (2 SCH version)	
DANC 2110 DANC 2208	•	(1 SCH version) (2 SCH version)	
DANC 2111 DANC 2209	Tap IV Tap IV	(1 SCH version) (2 SCH version)	
Instruction	and partic	ipation in Tap dance technique	
CIP Area maximum S maximum S	SCH per stu SCH per co	udenturse	50.0301.52 26 Visual & Performing Arts 18 3
DANC 1112 DANC 1212		racticum I <i>(1 SCH version)</i> racticum I <i>(2 SCH version)</i>	
DANC 1113 DANC 1213		racticum II <i>(1 SCH version)</i> racticum II <i>(2 SCH version)</i>	
DANC 2112 DANC 2212		racticum III <i>(1 SCH version</i> racticum III <i>(2 SCH version</i>	
DANC 2113 DANC 2213		racticum IV <i>(1 SCH version)</i> racticum IV <i>(2 SCH version)</i>	
A practicum	in dance a	as a performing art.	
CIP Area maximum S maximum S	 CH per stu CH per cou	dent	

DANC 1122 DANC 1222	Folk I ( <i>1 SCH version</i> ) Folk I ( <i>2 SCH version</i> )	
DANC 1123 DANC 1223	Folk II (1 SCH version) Folk II (2 SCH version)	
DANC 2122 DANC 2222	Folk III (1 SCH version) Folk III (2 SCH version)	
DANC 2123 DANC 2223	Folk IV ( <i>1 SCH version</i> ) Folk IV ( <i>2 SCH version</i> )	
Instruction	n and participation in Folk dance technique.	
CIP Area maximum S maximum S	Number	orming Arts 18 3
DANC 1128 DANC 1228	Ballroom I (1 SCH version) Ballroom I (2 SCH version)	
DANC 1129	Ballroom II (1 SCH version)	
Instruction	n and participation in Ballroom dance technique.	
CIP Area maximum S0 maximum S0	lumber	orming Arts 18 3
DANC 1133 DANC 1233	Country and Western I (1 SCH version) Country and Western I (2 SCH version)	
DANC 1134 DANC 1234	Country and Western II (1 SCH version) Country and Western II (2 SCH version)	
Instruction	n and participation in Country and Western dance technique.	
CIP Area maximum S0 maximum S0	lumber	orming Arts 18 3

	Ballet I <i>(1 SCH version)</i> Ballet I <i>(2 SCH version)</i> Ballet I <i>(3 SCH version)</i>	DANC 1141 DANC 1241 DANC 1341
	Ballet II <i>(1 SCH version)</i> Ballet II <i>(2 SCH version)</i> Ballet II <i>(3 SCH version)</i>	DANC 1142 DANC 1242 DANC 1342
	Ballet III <i>(1 SCH version)</i> Ballet III <i>(2 SCH version)</i> Ballet III <i>(3 SCH version)</i>	DANC 2141 DANC 2241 DANC 2341
	Ballet IV <i>(1 SCH version)</i> Ballet IV <i>(2 SCH version)</i> Ballet IV <i>(3 SCH version)</i>	DANC 2142 DANC 2242 DANC 2342
	and participation in ballet technique.	Instruction a
Visual & Performing Arts	umber CCH per student	CIP Area
3	ontact hours per course	maximum S
	Modern Dance I (1 SCH version) Modern Dance I (2 SCH version) Modern Dance I (3 SCH version)	DANC 1145 DANC 1245 DANC 1345
	Modern Dance II (1 SCH version) Modern Dance II (2 SCH version) Modern Dance II (3 SCH version)	DANC 1146 DANC 1246 DANC 1346
	Modern Dance III (1 SCH version) Modern Dance III (2 SCH version) Modern Dance III (3 SCH version)	DANC 2145 DANC 2245 DANC 2345
	Modern Dance IV (1 SCH version) Modern Dance IV (2 SCH version) Modern Dance IV (3 SCH version)	DANC 2146 DANC 2246 DANC 2346
	and participation in modern dance technique.	Instruction a
Visual & Performing Arts18	GCH per studentGCH per course	CIP Area maximum S maximum S

DANC 1147 DANC 1247 DANC 1347	Jazz Dance I <i>(1 SCH version)</i> Jazz Dance I <i>(2 SCH version)</i> Jazz Dance I <i>(3 SCH version)</i>	
DANC 1148 DANC 1248 DANC 1348	Jazz Dance II (1 SCH version) Jazz Dance II (2 SCH version) Jazz Dance II (3 SCH version)	
DANC 2147 DANC 2247 DANC 2347	Jazz Dance III (1 SCH version) Jazz Dance III (2 SCH version) Jazz Dance III (3 SCH version)	
DANC 2148 DANC 2248 DANC 2348	Jazz Dance IV (1 SCH version) Jazz Dance IV (2 SCH version) Jazz Dance IV (3 SCH version)	
Instruction a	and participation in jazz dance technique.	
CIP Area maximum S maximum S	CH per studentCH per course contact hours per course	Visual & Performing Arts 18 3
DANC 1149 DANC 1249 DANC 1349	Ballet Folklorico I (1 SCH version) Ballet Folklorico I (2 SCH version) Ballet Folklorico I (3 SCH version)	
DANC 1150 DANC 1250 DANC 1350	Ballet Folklorico II (1 SCH version) Ballet Folklorico II (2 SCH version) Ballet Folklorico II (3 SCH version)	
DANC 2149 DANC 2249 DANC 2349	Ballet Folklorico III (1 SCH version) Ballet Folklorico III (2 SCH version) Ballet Folklorico III (3 SCH version)	
DANC 2150 DANC 2250 DANC 2350	Ballet Folklorico IV (1 SCH version) Ballet Folklorico IV (2 SCH version) Ballet Folklorico IV (3 SCH version)	
Instruction a	and participation in folk dance technique.	
CIP Area maximum S maximum S	ImberCH per studentCH per course	Visual & Performing Arts 18 3

DANC 1151 DANC 1251 DANC 1351	Dance Performance I (1 SCH version)  Dance Performance I (2 SCH version)  Dance Performance I (3 SCH version)
DANC 1152 DANC 1252 DANC 1352	Dance Performance II (1 SCH version)  Dance Performance II (2 SCH version)  Dance Performance II (3 SCH version)
DANC 2151 DANC 2251 DANC 2351	Dance Performance III (1 SCH version)  Dance Performance III (2 SCH version)  Dance Performance III (3 SCH version)
DANC 2152 DANC 2252 DANC 2352	Dance Performance IV (1 SCH version)  Dance Performance IV (2 SCH version)  Dance Performance IV (3 SCH version)
Instruction a	and participation in dance performance.
CIP Area maximum So maximum So	mber
DANC 1153 DANC 1253 DANC 1353	Spanish Ballet I (1 SCH version) Spanish Ballet I (2 SCH version) Spanish Ballet I (3 SCH version)
DANC 1154 DANC 1254 DANC 1354	Spanish Ballet II (1 SCH version) Spanish Ballet II (2 SCH version) Spanish Ballet II (3 SCH version)
DANC 2153 DANC 2253 DANC 2353	Spanish Ballet III (1 SCH version) Spanish Ballet III (2 SCH version) Spanish Ballet III (3 SCH version)
DANC 2154 DANC 2254 DANC 2354	Spanish Ballet IV (1 SCH version) Spanish Ballet IV (2 SCH version) Spanish Ballet IV (3 SCH version)
Instruction a	and participation in Spanish ballet technique.
CIP Area maximum So maximum So	mber       50.0301.52 26

#### DANC 1305 World Dance I DANC 1306 World Dance II

Instruction in dance forms from at least three major cultures from three continents, with an emphasis on rhythmic awareness and movement development. The cultural origins, significance, and motivation, as well as the use of costumes and music will be explored in lecture and research. Instruction will include experiential and written assignments, live performances, guest artists, and multimedia resources.

Approval Number	50.0301.56 26
CIP Area	Visual & Performing Arts
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	64

### DANC 2210 Dance Repertory I DANC 2211 Dance Repertory II

A practicum in dance as a performing art.

Approval Number	50.0301.53 26
CIP Area	Visual & Performing Arts
maximum SCH per student	8
maximum SCH per course	2
maximum contact hours per course	96

#### DANC 2301 Problems in Dance

Instruction and participation in ballet, jazz, or modern dance technique.

Approval Number	50.0301.52 26
CIP Area	
maximum SCH per student	18
maximum SCH per course	3
maximum contact hours per course	96

# DANC 2303 Dance Appreciation I (may also be single-semester course) DANC 2304 Dance Appreciation II

Survey of primitive, classical, and contemporary dance and its interrelationship with cultural developments and other art forms.

Approval Number	50.0301.54 26
CIP Area	
maximum SCH per student	
maximum SCH per course	3
maximum contact hours per course	96

### DANC 2325 Anatomy & Kinesiology for Dance

Instruction and participation in ballet, jazz, or modern dance technique.

Approval Number	50.0301.52 26
CIP Area	
maximum SCH per student	•
maximum SCH per course	
maximum contact hours per course	

## DANC 2289 Academic Cooperative (2 SCH version) DANC 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 dance.

Approval Number	24.0103.52 12
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

### DRAM (Drama)

#### **DRAM 1310** Introduction to Theater

Survey of all phases of theater including its history, dramatic works, stage techniques, production procedures, and relation to the fine arts. Participation in major productions may be required.

Approval Number	50.0501.51 26
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	96

DRAM 1120 DRAM 1220 DRAM 1320	Theater Practicum I (1 SCH version) Theater Practicum I (2 SCH version) Theater Practicum I (3 SCH version)
DRAM 1121 DRAM 1221 DRAM 1321	Theater Practicum II (1 SCH version) Theater Practicum II (2 SCH version) Theater Practicum II (3 SCH version)
DRAM 2120 DRAM 2220	Theater Practicum III (1 SCH version) Theater Practicum III (2 SCH version)
<b>DRAM 2121</b>	Theater Practicum IV (1 SCH version)
DRAM 1323	Basic Theater Practice (single-semester course)
Practicum in play product	theater with emphasis on technique and procedures with experience gained in ions.
	mber
maximum S0 maximum S0	Visual & Performing Arts CH per student 9 CH per course 3 ontact hours per course 96
DRAM 1330 DRAM 2331	Stagecraft I Stagecraft II
	oplication of visual aesthetics of design which may include the physical theater, struction and painting, properties, lighting, costume, makeup, and backstage.
CIP Area maximum S0 maximum S0	mber       50.0502.51 26
DRAM 1141 DRAM 1241 DRAM 1341	Makeup (1 SCH version) Makeup (2 SCH version) Makeup (3 SCH version)
0	execution of makeup for the purpose of developing believable characters. Includes f basic makeup principles and practical experience of makeup application.
CIP Area maximum S0 maximum S0	mber       50.0502.52 26

DRAM 1142 DRAM 1242 DRAM 1342	Introduction to Costume (1 Introduction to Costume (2 Introduction to Costume (3	SCH version)
Principles ar	nd techniques of costume design	and construction for theatrical productions.
CIP Area maximum S maximum S	SCH per studentSCH per course	
DRAM 1322	Stage Movement	
	oractices, and exercises in body to novement and body control.	echniques and stage movement; emphasis on
Approval Nu	umber	50.0506.54 26
	•	
		96
•	•	f acting including increased sensory awareness
	erforming, character analysis, and , emotion, and analysis as tools fo	d script analysis. Emphasis on the mechanics of or the actor.
CIP Area maximum S maximum S	SCH per studentSCH per course	
<b>DRAM 1162</b>	Musical Theater I Musical Theater II SI 1159 & 2159)	
	performance of works from the modern of the	usical theater repertoire.
		50.0903.61 26 Visual & Performing Arts

#### DRAM 2336 Voice for the Theater

Application of the performer's use of the voice as a creative instrument of effective communication. Encourages an awareness of the need for vocal proficiency and employs techniques designed to improve the performer's speaking abilities.

Approval Number	50.0506.52 26
CIP Area	
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	
•	

DRAM 2361 History of the Theater I DRAM 2362 History of the Theater II

DRAM 2363 History of Musical Theater (single-semester course)

Development of theater art from the earliest times through the 20th century.

Approval Number	50.0505.51 26
CIP AreaVisual	
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	48

# DRAM 2366 Development of the Motion Picture I (may also be single-semester course) DRAM 2367 Development of the Motion Picture II

Emphasis on the analysis of the visual and aural aspects of selected motion pictures, dramatic aspects of narrative films, and historical growth and sociological effect of film as an art. (*Cross-listed as COMM 2366*)

Approval Number	50.0602.51 26
CIP Area	
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	96

### DRAM 2289 Academic Cooperative (2 SCH version) DRAM 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 drama.

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

#### **ECON (Economics)**

### ECON 1301 Introduction to Economics ECON 1303 Consumer Economics

A study of consumer problems of the individual and of the family in the American economy. Areas of study may include: money and credit management, saving and personal investment, estate planning, wills, buying food and clothing, home ownership or rental, transportation, insurance, taxes, and consumer protection.

Approval Number	19.0402.52 09
CIP Area	Home Economics
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	48

# ECON 2289 Academic Cooperative (2 SCH version) ECON 2389 Academic Cooperative (3 SCH version)

An instructional program designed to integrate on-campus study with practical hands-on experience in economics. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.

Approval Number	45.0101.51 25
CIP Area	Social Sciences
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	144

### ECON 2301 Principles of Macroeconomics ECON 2302 Principles of Microeconomics

History, development, and application of macroeconomic and microeconomic theory underlying the production, distribution, and exchange of goods and services including the utilization of resources, analysis of value and prices, national income analysis, fiscal policies, monetary and banking theory and policy, distribution of income, labor problems, international economics, and economics systems. Attention given to the application of economic principles to economic problems.

Approval Number	45.0601.51 25
CIP Area	Social Sciences
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	48

### ECON 2311 Economic Geography (Also see GEOG 2312)

Analytical study of the historical development of particular economic distributions as they relate to social, cultural, political, and physical factors. Includes critical inquiry into the reasons for location of various types of economic activity, production, and marketing. (*Cross-listed as GEOG 2312*)

Approval Number	45.0701.52 25
CIP Area	Social Sciences
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	48

#### **EDUC (Education)**

EDUC 1100 Learning Framework (1 SCH version)
EDUC 1200 Learning Framework (2 SCH version)
EDUC 1300 Learning Framework (3 SCH version)
(Also see PSYC 1300)

A study of the: research and theory in the psychology of learning, cognition, and motivation; factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (*Cross-listed as PSYC 1300*)

(NOTE: While traditional study skills courses include some of the same learning strategies – e.g., note-taking, reading, test preparation etc. – as learning framework courses, the focus of study skills courses is solely or primarily on skill acquisition. Study skills courses, which are not under-girded by scholarly models of the learning process, are not considered college-level, and, therefore, are distinguishable from Learning Framework courses.)

Approval Number	42.2701.51 25
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

#### **EDUC 1301** Introduction to the Teaching Profession

An enriched, integrated pre-service course and content experience that:

- 1) provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields;
- 2) provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations;
- 3) provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms;
- 4) course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; and
- 5) course must include a minimum of 16 contact hours of field experience in P-12 classrooms.

Approval Number	13.0101.51 09
CIP Area	Education
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

### **EDUC 1325** Principles and Practices of Multicultural Education

An examination of cultural diversity found in society and reflected in the classroom. Topics include the study of major cultures and their influence on lifestyle, behavior, learning, intercultural communication and teaching, as well as psychosocial stressors encountered by diverse cultural groups.

Approval Number	13.0101.52 09
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

#### **EDUC 2301** Introduction to Special Populations

An enriched, integrated pre-service course and content experience that:

- 1) provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning;
- 2) provides students with opportunities to participate in early field observations of P-12 special populations;
- 3) should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards;
- 4) must include a minimum of 16 contact hours of field experience in P-12 classrooms with special populations; and
- 5) Pre-requisite for this course is EDUC 1301.

Approval Number	13.1001.51 09
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	64

### **ENGL** (English)

ENGL 1301 ENGL 1302	Composition II	
	and techniques of written, expository pository, and persuasive texts; and c	, and persuasive composition; analysis of critical thinking.
CIP Area maximum : maximum :	SCH per studentSCH per course	
	Creative Writing I	
	xperience in the techniques of imagir eenwriting, or drama.	native writing. May include fiction, nonfiction,
CIP Area maximum ! maximum !	SCH per studentSCH per course	
ENGL 2311 ENGL 2314 ENGL 2315	Technical & Business Writing ( Technical & Business Writing I Technical & Business Writing I	
Principles, writing.	techniques, and skills needed for col	lege level scientific, technical, or business
CIP Area maximum ! maximum !	SCH per studentSCH per course	
ENGL 2321 ENGL 2322 ENGL 2323	British Literature <i>(single-seme</i> British Literature I British Literature II	ester course)
Selected si periods.	gnificant works of British literature.	May include study of movements, schools, or
CIP Area maximum : maximum :	SCH per studentSCH per course	

or

ENGL 2326 ENGL 2327 ENGL 2328	American Literature (single-semester course) American Literature I American Literature II
Selected sig periods.	nificant works of American literature. May include study of movements, schools
CIP Area maximum S maximum S	mber       23.1402.51 12         Letters       CH per student         CH per course       3         ontact hours per course       48
ENGL 2331 ENGL 2332 ENGL 2333	World Literature (single-semester course) World Literature I World Literature II
Selected sig periods.	nificant works of world literature. May include study of movements, schools, or
CIP Area maximum S maximum S	mber       16.0104.52 13         Letters       CH per student         CH per course       3         ontact hours per course       48
ENGL 2341 ENGL 2342 ENGL 2343	Forms of Literature (single-semester course) Forms of Literature I Forms of Literature II
The study o and film.	f one or more literary genres including, but not limited to, poetry, fiction, drama
CIP Area maximum S maximum S	mber       16.0104.51 13         Letters       CH per student       6         CH per course       3         ontact hours per course       48
ENGL 2351	Mexican-American Literature
A survey of drama.	Mexican-American/Chicano/a literature including fiction, non-fiction, poetry, and
CIP Area maximum S maximum S	mber

# 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	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	144

## **ENGR (Engineering)**

ENGR 1101	Introduction to Engineering I
<b>ENGR 1102</b>	Introduction to Engineering II
<b>ENGR 1201</b>	Introduction to Engineering (single-semester course)

An introduction to the engineering profession with emphasis on technical communication and team-based engineering design. One hour of lecture and three hours of laboratory each week.

Prerequisite: MATH 1314—College Algebra or equivalent academic preparation

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

Note: Some mechanical engineering programs will accept the course ENGR 1201 for transfer credit and as applicable to the engineering major, while others will accept the course for transfer credit only. The student is advised to check with the school to which he or she wants to transfer for specific applicability of this course to the engineering major.

## **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Describe the engineering profession and engineering ethics, including professional practice and licensure.
- 2. Use technical communication skills to explain the analysis and results of introductory laboratory exercises in engineering and computer science.
- 3. Explain the engineering analysis and design process.
- 4. Analyze data collected during laboratory exercises designed to expose students to the different engineering disciplines.
- 5. Describe the impact engineering has had on the modern world.
- 6. As part of a team, design a simple engineering device, write a design report, and present the design.
- 7. Demonstrate computer literacy.

# ENGR 1204 Engineering Graphics I (2 SCH version) ENGR 1304 Engineering Graphics I (3 SCH version)

Introduction to computer-aided drafting using CAD software and sketching to generate twoand three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics.

Prerequisite: MATH 1314—College Algebra or equivalent academic preparation

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

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Discuss the basic steps in the design process.
- 2. Demonstrate proficiency in freehand sketching.
- 3. Demonstrated proficiency in geometric modeling and computer aided drafting and design (CADD).
- 4. Communicate design solutions through sketching and computer graphics software using standard graphical representation methods.
- 5. Solve problems using graphical geometry, projection theory, visualization methods, pictorial sketching, and geometric (solid) modeling techniques.
- 6. Demonstrate proper documentation and data reporting practices.
- 7. Complete a project involving creation of 3D rapid prototype models.
- 8. Function as part of a design team as a team leader and as a team member.

# ENGR 1205 Engineering Graphics II (*Descriptive Geometry, 2 SCH version*) ENGR 1305 Engineering Graphics II (*Descriptive Geometry, 3 SCH version*)

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

Approval Number	15.1301.52 12
CIP Area	Drafting & Design Technology/Technician, General
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	96

## ENGR 1307 Plane Surveying (3 SCH version) ENGR 1407 Plane Surveying (4 SCH version)

Use and care of instruments, note keeping, distance measurements, traverse surveying, areas, angles and elevations, legal principles, elementary map making, plane table and transit methods of topographic map production, field problems related to highway surveying, circular and vertical curves, earthwork, volumes and cost estimates, and triangulation and base lines.

Approval Number	15.1102.51 11
CIP Area	Engineering Related Technologies
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	96

# ENGR 2301 Engineering Mechanics - Statics (3 SCH version) ENGR 2401 Engineering Mechanics - Statics (4 SCH version)

Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia.

Prerequisite: PHYS 2325—University Physics I and PHYS 2125—University Physics I (Lab), or PHYS 2425—University Physics I (Lecture and Lab)

Concurrent enrollment in or previous completion of MATH 2414—Calculus II

Approval Number	14.1101.52 10
CIP Area	
maximum SCH per student	0 0
maximum SCH per course	
maximum contact hours per course	

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. State the fundamental principles used in the study of mechanics.
- 2. Define magnitude and directions of forces and moments and identify associated scalar and vector products.
- 3. Draw free body diagrams for two- and three-dimensional force systems.
- 4. Solve problems using the equations of static equilibrium.
- 5. Compute the moment of force about a specified point or line.
- 6. Replace a system of forces by an equivalent simplified system.
- 7. Analyze the forces and couples acting on a variety of objects.
- 8. Determine unknown forces and couples acting on objects in equilibrium.
- 9. Analyze simple trusses using the method of joints or the method of sections.
- 10. Determine the location of the centroid and the center of mass for a system of discrete particles and for objects of arbitrary shape.
- 11. Analyze structures with a distributed load.
- 12. Calculate moments of inertia for lines, areas, and volumes.
- 13. Apply the parallel axis theorem to compute moments of inertia for composite regions.
- 14. Solve problems involving equilibrium of rigid bodies subjected to a system of forces and moments that include friction.
- 15. Solve problems involving dry sliding friction, including problems with wedges and belts.

# ENGR 2302 Engineering Mechanics - Dynamics (3 SCH version) ENGR 2402 Engineering Mechanics - Dynamics (4 SCH version)

Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems.

Prerequisites: ENGR 2301—Engineering Mechanics: Statics

Approval Number	14.1101.53 10
CIP Area	Engineering
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	64

### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Express dynamic quantities as vectors in terms of Cartesian components, polar coordinates, and normal-tangential coordinates.
- 2. Compute mass moments of inertia for systems of particles and rigid bodies.
- 3. Solve kinematic problems involving rectilinear and curvilinear motion of particles.
- 4. Solve kinetic problems involving a system of particles using Newton's Second Law.
- 5. Apply the principles of work and energy, conservation of energy, impulse and momentum, and conservation of momentum to the solution of engineering problems involving particles and systems of particles.
- 6. Solve kinematic problems involving the translation and rotation of a rigid body.
- 7. Solve kinetic problems involving planar translation and rotation of rigid bodies.
- 8. Apply the principles of work and energy, conservation of energy, impulse and momentum, and conservation of momentum to the solution of engineering problems involving rigid bodies in planar motion.

# ENGR 2303 Engineering Mechanics – Statics & Dynamics *(3 SCH version)*ENGR 2403 Engineering Mechanics – Statics & Dynamics *(4 SCH version)*

Combined, single-semester study of statics and dynamics. Calculus-based study of dynamics of rigid bodies, force-mass-acceleration, work-energy, and impulse-momentum computation. Prerequisite: the first calculus-based physics course.

Approval Number	14.1101.54 10
CIP Area	
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	64

#### **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	

### **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	0 0
maximum SCH per course	
maximum contact hours per course	

## **ENGR 2307** Fundamentals of Circuit Analysis

Basic concepts of electrical engineering using calculus; the fundamentals of electrical and electronic components and circuits, circuit analysis, network principles, motors, and steady-state and transient responses; application of Laplace transforms; and use of computational software to solve network problems; application of the principles to the solution of electrical engineering problems; relationship between basic principles and advanced applications.

Co-requisite: ENGR 2107—Fundamentals of Circuit Analysis Laboratory

Prerequisite: PHYS 2326—University Physics II

Approval Number	14.1001.52 10
CIP Area	Mechanical Engineering
maximum SCH per student	
maximum SCH per course	3
maximum contact hours per course	48

### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Define basic electrical concepts, including electrical potential, electrical current, and electrical power.
- 2. Discuss concepts of electrical network topology, including nodes, branches, and loops.
- 3. State the characteristics of ideal independent and controlled voltage and current sources.
- 4. Define the relationship of voltage and current in resistors, capacitors, inductors, and mutual inductors.
- 5. Use Kirchhoff's laws in the analysis of electrical circuits.
- 6. Articulate the concepts of Thévenin and Norton equivalent circuits, and apply the concepts to circuit analysis.

- 7. Analyze first and second order AC and DC circuits for steady-state and transient response.
- 8. Analyze simple operational amplifier circuits using an ideal operational amplifier model.
- 9. Apply basic transformer models, including voltage and current relationships to turns ratio, circuit components, and reflected impedance calculations in engineering problems.

### **ENGR 2107** Fundamentals of Circuit Analysis Laboratory

Basic laboratory experiments supporting theoretical principles presented in ENGR 2307 involving electrical and electronic components and circuits, including circuit analysis, network principles, motors, and steady-state and transient responses, and preparation of laboratory reports.

Co-requisite: ENGR 2307—Fundamentals of Circuit Analysis

Approval Number	14.1001.53 10
CIP Area	Mechanical Engineering
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

## **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner.
- 2. Conduct basic laboratory experiments involving electrical circuits.
- 3. Relate physical observations and measurements involving electrical circuits to theoretical principles.
- 4. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements.
- 5. Design fundamental experiments involving principles of electrical circuits.
- 6. Identify appropriate sources of information for conducting laboratory experiments involving electrical circuits.

Note: Fundamentals of Circuit Analysis and Fundamentals of Circuit Analysis Laboratory can be taught as a single 4-SCH course.

### **ENGR 2407** Fundamentals of Circuit Analysis (Lecture +Lab)

Note: The lecture and lab course should combine all of the elements of 2307 Fundamentals of Circuit Analysis Lecture and 2107 Fundamentals of Circuit Analysis Lab, including the learning outcomes listed for both courses.

Approval Number	14.1001.54 10
CIP Area	
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	96

## 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

### **ENGT (Engineering Technology)**

### **ENGT 1401** Circuits I for Engineering Technology (*lecture + lab*)

Fundamental concepts of electrical science including potential, current and power in DC circuits. Fundamental laws and relationships applied to the analysis of circuits and networks: capacitance, inductance and magnetism; and single-frequency concepts; use of calculators and computer software in design and analysis of circuits. Standard instrumentation used in test and measurement of DC circuits and systems will be introduced.

Prerequisite: MATH 1314, College Algebra or the equivalent. (*This course is included in the Field of Study Curriculum for Engineering Technology*.)

Approval Number	15.0303.51 11
CIP Area	Engineering Related
maximum SCH per student	
maximum SCH per course	4
maximum contact hours per course	96

#### ENGT 1402 Circuits II for Engineering Technology (*lecture + lab*)

Complex AC circuit including transient analysis. Network theorems are applied to the solution of AC circuits. Resonance, filters, AC power and three-phase circuits are covered in detail. Continued application of calculators and computer design and analysis of circuits. Standard instrumentation used in testing AC circuits and systems and measurement of AC circuits and systems will be introduced.

Prerequisite: ENGT 1401 and MATH 2312 or 2412, Pre-Calculus, or MATH 1316, Trigonometry. (*This course is included in the Field of Study Curriculum for Engineering Technology.*)

Approval Number	15.0303.52 11
CIP Area	Engineering Related
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	

#### ENGT 1407 Digital Fundamentals (*lecture + lab*)

Analysis, design, and simulation of combinational and sequential systems using: classical Boolean algebra techniques, laboratory hardware experiments and computer simulation. Introduction to programmable logic devices (PLDs) and application-specific integrated circuits using software tool to the design and analysis of digital logic circuits and systems. Standard instrumentation used in testing digital circuits and systems will be introduced.

Prerequisite: MATH 1314, College Algebra, or the equivalent. (*This course is included in the Field of Study Curriculum for Engineering Technology*.)

Approval Number	15.0303.53 11
CIP Area	
maximum SCH per student	S S
maximum SCH per course	
maximum contact hours per course	

### **ENGT 1409** AC/DC Circuits for Engineering Technology

Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchoff's law, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. (*This course is included in the Field of Study Curriculum for Engineering Technology*.)

Approval Number	15.0303.54 11
CIP Area	Engineering Related
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	96

## **ENGT 2304** Materials and Methods for Engineering Technology

A continuation of the study of the nature, origin and properties of building materials, methods, and equipment for their integrated use in completing construction projects. A study of selecting and specifying materials with consideration for economy, quality and performance in the construction of modern buildings. (*This course is included in the Field of Study Curriculum for Engineering Technology*.)

Approval Number	15.0805.52 11
CIP Area	Engineering Related
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	64

## **ENGT 2307** Engineering Materials I for Engineering Technology (*lecture + lab*)

Instruction in the making and forming of steel and the classification of steel, cast iron, and aluminum. Topics include mechanical and physical properties, non-destructive testing principles of alloying, selection of metals, iron carbon diagrams, principles of hardening and tempering steel, and the metallurgical aspects of machining. Topics will also include an overview of properties and uses of polymers and ceramics. (*This course is included in the Field of Study Curriculum for Engineering Technology.*)

	ımber
	Engineering Related CH per student
	CH per course
maximum c	ontact hours per course
ENGT 2310	Introduction to Manufacturing Processes
processes in plating, asse	of a variety of methods used in manufacturing. Theory and application of acluding but not limited to metal forming, welding, machining, heat treating, embly procedures, process controls considerations, casting and injection molding a is included in the Field of Study Curriculum for Engineering Technology.)
CIP Area	ımber
	CH per student
	CH per course
maximum co	ontact flours per course
	ENVR (Environmental Science)
ENVR 1401 ENVR 1301 ENVR 1101	Environmental Science I ( <i>lecture + lab</i> ) Environmental Science I ( <i>lecture</i> ) Environmental Science I ( <i>lab</i> )
ENVR 1402 ENVR 1302 ENVR 1102	Environmental Science II ( <i>lecture + lab</i> ) Environmental Science II ( <i>lecture</i> ) Environmental Science II ( <i>lab</i> )
	erest course requiring a minimum of previous science background and relating owledge to problems involving energy and the environment. May or may not coratory.
CIP Area maximum S maximum S	mber
	FORS (Forensic Science)
FORS 2440	Introduction to Forensic Science (lecture + lab)
scientific ted	ne procedures of crime scene investigation in gathering evidence and applicable chnologies that follow established protocols by first responders; a preview of illists in forensic laboratories will process the gathered evidence presented.
CIP Area maximum S maximum S	rimber

## FORS 2450 Introduction to Forensic Psychology (lecture + lab)

Survey of current perspectives and technologies in the analysis of criminal mind suggested by crime scene evidence; introduction applications of forensic psychology including the history and current practice of criminal profiling in the apprehension of serial killers as sexual predators. (Psychology 2301 is required as a pre-requisite for this course.)

Approval Number	43.0106.52 24
CIP Area	Forensic Science & Related Sciences
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	96

## **FORE (Forestry)**

## FORE 1301 Introduction to Forestry (lecture + lab)

Introduction to forest plant and animal communities and the importance of forest resource management.

Approval Number	03.0506.51 01
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

## FORE 1314 Dendrology (lecture + lab)

Identification, distribution and silvicultural characteristics of angiosperms and gymnosperms. Field trips required.

Approval Number	03.0506.52 01
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	

### FORE 2309 Forest Ecology (lecture + lab)

Climate, edaphic and biotic factors and their relation to woody plant growth and development. Factors will be discussed at the individual plant and forest community levels.

Approval Number	03.0506.53 01
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

## FREN (French Language)

FREN 1100 FREN 1200 FREN 1300	Conversational French I (2) Conversational French I (2) Conversational French I (3)	? SCH version)	
FREN 1110 FREN 1210 FREN 1310	Conversational French II ( Conversational French II ( Conversational French II (	(2 SCH version)	
Basic practi	ce in comprehension and produ	ction of the spoken language.	
CIP Area maximum S maximum S	SCH per studentSCH per course	Fc	oreign Languages 6 3
FREN 1311 FREN 1411 FREN 1511	Beginning French I (1st se	emester French, 3 SCH versio emester French, 4 SCH versio emester French, 5 SCH versio	on)
FREN 1312 FREN 1412 FREN 1512	Beginning French II (2nd :	semester French, 3 SCH vers semester French, 4 SCH vers semester French, 5 SCH vers	sion)
	al skills in listening comprehens grammatical structures, and cu	ion, speaking, reading, and writi ılture.	ng. Includes basic
CIP Area maximum S maximum S	SCH per studentSCH per course	Fc	oreign Languages 10 5
FREN 2303 FREN 2304	Introduction to French Lite Introduction to French Lite		
Readings re	epresentative of this culture.		
CIP Area maximum S maximum S	SCH per studentSCH per course	FC	oreign Languages 6 3
FREN 2306	Intermediate French Conv	ersation	
Basic practi	ce in comprehension and produ	ction of the spoken language.	
CIP Area maximum S maximum S	SCH per studentSCH per course	Fc	oreign Languages 6 3

# FREN 2311 Intermediate French I (3rd semester French) FREN 2312 Intermediate French II (4th semester French)

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

Approval Number	16.0901.52 13
CIP Area	
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	80

## FREN 2289 Academic Cooperative (2 SCH version) FREN 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 French language and literature.

Approval Number	24.0103.52 12
	Interdisciplinary
maximum SCH per student	
maximum contact hours per course	144

### **GEOG (Geography)**

GEOG 1300 Principles of Geography (single-semester course, combines physical & cultural)

GEOG 1301 Physical Geography

GEOG 1301 Physical Geography
GEOG 1302 Cultural Geography

Introduction to the concepts which provide a foundation for continued study of geography. Includes the different elements of natural environment as related to human activities, modes of living, and map concepts. The first semester emphasizes physical geography and the second semester emphasizes cultural geography.

Approval Number	45.0701.51 25
CIP Area	Social Sciences
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	48

GEOG 1303 World Regional Geography
GEOG 1304 Geography of Middle America
GEOG 1305 Geography of North America

Study of major world regions with emphasis on prevailing conditions and developments, including emerging conditions and trends, and the awareness of diversity of ideas and practices to be found in those regions. Course content may include one or more regions.

		mber	
		CH per student	
		CH per course	
		ontact hours per course	
	OG 2312 Iso see ECOI	Economic Geography N 2311)	
	to social, cul	udy of the historical development of particular econon tural, political, and physical factors. Includes critical in arious types of economic activity, production, and ma	nquiry into the reasons for
		mber	
		CH per student	
		CH per course	
		ontact hours per course	
	OG 2289 OG 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)	
	experience in	nal program designed to integrate on-campus study on geography. In conjunction with class seminars, the s and objectives in the study of human social behavio	individual student will set
	• •	mber	
		2U nor student	
		CH per student CH per course	
		ontact hours per course	
		GEOL (Geology)	
GE	OL 1401 OL 1301	Earth Sciences I (lecture + lab) Earth Sciences I (lecture)	
	OL 1101	Earth Sciences Laboratory I (lab)	
GE	OL 1402 OL 1302 OL 1102	Earth Sciences II (lecture + lab) Earth Sciences II (lecture) Earth Sciences Laboratory II (lab)	
	Survey of ph sciences.	ysical and historical geology, astronomy, meteorology	,, oceanography, and related
		mber	
		TH ner student	
		CH per student CH per course	
		ontact hours per course	

GEOL 1403 GEOL 1303 GEOL 1103	Physical Geology ( <i>lecture + lab</i> )  Physical Geology ( <i>lecture</i> )  Physical Geology Laboratory ( <i>lab</i> )
	physical and historical geology. Study of the earth's composition, structure, and external processes. Includes the geologic history of the earth and the evolution of
CIP Area maximum S0 maximum S0	mber       .40.0601.54 03
GEOL 1404 GEOL 1304 GEOL 1104	Historical Geology <i>(lecture + lab)</i> Historical Geology <i>(lecture)</i> Historical Geology Laboratory <i>(lab)</i>
•	physical and historical geology. Study of the earth's composition, structure, and external processes. Includes the geologic history of the earth and the evolution of
CIP Area maximum S0 maximum S0	mber       .40.0601.54 03
GEOL 1405 GEOL 1305 GEOL 1105	Environmental Geology (lecture + lab) Environmental Geology (lecture) Environmental Geology Laboratory (lab)
	s a habitat. Interrelationships between humans and the environment. Geologic ban and regional land use planning.
CIP Area maximum S0 maximum S0	mber         .03.0103.53 01
GEOL 1445 GEOL 1345 GEOL 1145	Oceanography (lecture + lab) Oceanography (lecture) Oceanography (lab)
Survey of ph sciences.	nysical and historical geology, astronomy, meteorology, oceanography, and related
CIP Area maximum S0 maximum S0	mber       .40.0601.51 03

GEOL 1447 GEOL 1347 GEOL 1147	Meteorology (lecture + lab) Meteorology (lecture) Meteorology (lab)	
Survey of m	neteorology and related sciences.	
CIP Area maximum S maximum S	SCH per studentSCH per coursesch per course	Physical Sciences 4 4
GEOL 2405 GEOL 2305 GEOL 2105	Optical Mineralogy <i>(lecture + lab)</i> Optical Mineralogy <i>(lecture)</i> Optical Mineralogy <i>(lab)</i>	
Principles a	nd methods of optical crystallography and optical properties	of minerals.
CIP Area maximum S	SCH per studentSCH per course	Physical Sciences
	contact hours per course	
GEOL 2407 GEOL 2307 GEOL 2107	Geological Field Methods (lecture + lab) Geological Field Methods (lecture) Geological Field Methods (lab)	
	of field data, interpretation and construction of geologic and to of petrologic systems in a field setting.	opographic maps, and
CIP Area maximum S maximum S	umber SCH per student SCH per course contact hours per course	Physical Sciences 4 4
GEOL 2309 GEOL 2409	Mineralogy & Petrology I <i>(3 SCH version)</i> Mineralogy & Petrology I <i>(4 SCH version)</i>	
<b>GEOL 2310</b>	Elementary Geophysics (single-semester course)	
GEOL 2311 GEOL 2411	Mineralogy & Petrology II (3 SCH version) Mineralogy & Petrology II (4 SCH version)	
	neral crystallography, chemistry, classification, identification, e genesis, classification, and identification of igneous, sedimentic rocks.	
Prerequisite	e: three hours of Chemistry.	
CIP Area maximum S maximum S	umberSCH per studentSCH per coursescontact hours per course	Physical Sciences 8 4

# GEOL 2289 Academic Cooperative (2 SCH version) GEOL 2389 Academic Cooperative (3 SCH version)

An instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual students will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.

Approval Number	40.0101.53 03
CIP Area	
maximum SCH per student	<b>3</b>
maximum SCH per course	
maximum contact hours per course	

### **GERM (German Language)**

GERM 1100 GERM 1200 GERM 1300	Conversational German I (1 SCH version) Conversational German I (2 SCH version) Conversational German I (3 SCH version)
GERM 1110 GERM 1210 GERM 1310	Conversational German II (1 SCH version) Conversational German II (2 SCH version) Conversational German II (3 SCH version)

**GERM 1311** 

Basic practice in comprehension and production of the spoken language.

Approval Number	16.0501.54 13
CIP Area	Foreign Languages
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	

Beginning German I (1st semester German, 3 SCH version)

GERM 1411 GERM 1511	Beginning German I (1st semester German, 4 SCH version) Beginning German I (1st semester German, 5 SCH version)
GERM 1312 GERM 1412 GERM 1512	Beginning German II (2nd semester German, 3 SCH version) Beginning German II (2nd semester German, 4 SCH version) Beginning German II (2nd semester German, 5 SCH version)

Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

Approval Number	16.0501.51 13
CIP Area	Foreign Languages
maximum SCH per student	10
maximum SCH per course	5
maximum contact hours per course	112

## GERM 1313 Scientific German (3 SCH version) GERM 1413 Scientific German (4 SCH version)

The reading of specially prepared scientific texts and a review of grammar. May replace sophomore German for pre-medical and science students.

Approval Number	16.0501.53 13
CIP Area	Foreign Languages
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	64

# GERM 2311 Intermediate German I (3rd semester German) GERM 2312 Intermediate German II (4th semester German)

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

Approval Number	16.0501.52 13
CIP Area	Foreign Languages
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	

# GERM 2289 Academic Cooperative (2 SCH version) GERM 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 German language and literature.

Approval Number	24.0103.52 12
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

## **GOVT (Government)**

#### GOVT 2107 Federal and Texas Constitutions

Includes consideration of the Constitution of the United State and the constitutions of the states, with special emphasis on that of Texas. Pre-requisite: By permission only. Enrollment limited to students who have already completed a minimum of 6 SCH of GOVT courses but have not satisfied the statutory requirement for study of the federal and state constitutions. Ensures compliance with TEC §51.301.

Approval Number	45.1002.52 25
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	16

GOVT 2301 GOVT 2302	American Government I (Federal & Texas constitutions) American Government II (Federal & Texas topics)
GOVT 2305 GOVT 2306	Federal Government ( <i>Federal constitution &amp; topics</i> ) Texas Government ( <i>Texas constitution &amp; topics</i> )

Introduction to the theory and practice of politics and government in America at the national, state, and local levels, with special attention to Texas. Topics include political theory, the American and Texas constitutions, federalism, political participation and elections, the institutions of government, and domestic and foreign policies.

(NOTE: Because Texas Education Code, Subchapter F, Section 51.301 does not specify how the required course content should be distributed over the required six SCH, two instructional patterns, represented by the TCCN course sequences GOVT 2301 & 2302 or GOVT 2305 & 2306, have evolved among institutions. Because combination of a course from one sequence with a course from the other sequence may not successfully fulfill the content requirement of Section 51.301, students are urged to complete all six SCH within a single institution. Inevitably, however, students will seek to combine courses from the two sequences. The following alternative combinations will fulfill the content requirement of Section 51.301: GOVT 2301 and 2305; GOVT 2301 and 2306. The following combinations will not satisfy the content requirement of §51.301: GOVT 2302 & 2305 (omits study of the Texas constitution; GOVT 2302 & 2306 (omits study of the U.S. Constitution). Students with credit for GOVT 2302 & 2305, GOVT 2302 & 2306 (or equivalent combinations may satisfy the legislative requirement by earning credit for GOVT 2107, a 1 SCH course providing the required constitutional content missing from these two course combinations.)

45.1002.51 25	Approval Number	Approval N
Social Sciences		* *
6	maximum SCH per student	maximum
3		
	•	
tical Science	GOVT 2304 Introduction to F	<b>GOVT 2304</b>
of political science focusing on the history, scope, and antive topics in the discipline.	Introductory survey of the discipmethods of the field, and the su	
45.1001.52 25	Approval Number	Approval N
Social Sciences		
3	maximum SCH per student	maximum
3		
48	maximum contact hours per cou	maximum
Politics	GOVT 2311 Mexican-America	GOVT 2311
cano/a politics within the American political experience.	The study of Mexican-American	The study
	CIP Area	CIP Area

## **GOVT 2289** Academic Cooperative (2 SCH version) **GOVT 2389** Academic Cooperative (3 SCH version) An instructional program designed to integrate on-campus study with practical hands-on experience in government. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions. CIP Area ......Social Sciences **GREE (Greek Language) GREE 1311** Beginning Greek I (1st semester Greek, 3 SCH version) Beginning Greek I (1st semester Greek, 4 SCH version) **GREE 1411** Beginning Greek I (1st semester Greek, 5 SCH version) **GREE 1511 GREE 1312** Beginning Greek II (2nd semester Greek, 3 SCH version) Beginning Greek II (2nd semester Greek, 4 SCH version) **GREE 1412 GREE 1512** Beginning Greek II (2nd semester Greek, 5 SCH version) Essentials of grammar, reading of easy prose, Greek mythology and civilization, and building of English vocabulary derived from Greek. CIP Area ...... Foreign Languages maximum SCH per course .......5 **GREE 2311** Intermediate Greek I (3rd semester Greek) **GREE 2312** Intermediate Greek II (4th semester Greek) Greek drama and selections from the Iliad. Approval Number.......16.0601.52 13 CIP Area ...... Foreign Languages maximum contact hours per course ......80 **HECO (Home Economics) HECO 1101** Home Economics Perspectives (1 SCH version) Study of home economics and its history, philosophy, and content areas. CIP Area ...... Family and Consumer Sciences/Human Sciences maximum SCH per student......1

#### **HECO 1307** Personal Finance

Personal and family accounts, budgets and budgetary control, bank accounts, charge accounts, borrowing, investing, insurance, standards of living, renting or home ownership, and wills and trust plans. (Cross-listed as BUSI 1307)

Approval	Number19.0401.51 09
	Family and Consumer Sciences/Human Sciences
maximum	SCH per student
maximum	SCH per course
maximum	contact hours per course

### **HECO 1315** Food Preparation & Meal Management

Study of scientific principles involved in the selection and preparation of high quality foods. Management of time, money, and energy resources in the planning, preparation, and service of meals.

Approval Number	19.0501.52 09
	Family and Consumer Sciences/Human Sciences
maximum SCH per student	6
	3
maximum contact hours per course	96

#### **HECO 1320** Textiles

Analysis of fibers, yarns, fabrics, and finishes as related to end use, performance, and care of textile products.

Approval Number	19.0901.52 09
	Family and Consumer Sciences/Human Sciences
maximum SCH per student	3
maximum SCH per course	3
	96

## HECO 1322 Nutrition & Diet Therapy (Also see BIOL 1322)

Study of the chemical, physical, and sensory properties of food; nutritional quality; and food use and diet applications. (Cross-listed as BIOL 1322)

Approval Number	19.0501.51 09
	Family and Consumer Sciences/Human Sciences
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

## **HECO 1325** Housing & Interior Design I Housing & Interior Design II **HECO 1326** Study of the psychological, sociological, economic, and aesthetic factors in the selection of housing and in the planning and analysis of interior home environments. CIP Area ...... Family and Consumer Sciences/Human Sciences maximum contact hours per course .......96 Clothing Selection, Design, & Construction I **HECO 1328 HECO 1329** Clothing Selection, Design, & Construction II Selection, design, and construction of clothing apparel and accessories. CIP Area ...... Family and Consumer Sciences/Human Sciences maximum SCH per student 6 maximum contact hours per course .......96 **HECO 2311** Fashion Merchandising Principles, techniques, and practices for successful merchandising of fashion products. CIP Area ...... Fashion Merchandising maximum contact hours per course .......96 **HIST (History) United States History I** HIST 1301 **HIST 1302 United States History II** Survey of the political, social, economic, military, cultural, and intellectual history of the United States from the discovery of America to the present. Approval Number.......54.0102.51 25 CIP Area ...... American History United States **HIST 2301 Texas History** Survey of Texas from the Spanish exploration to the present. Approval Number......54.0102.52 25 CIP Area ...... American History United States

## HIST 2311 Western Civilization I HIST 2312 Western Civilization II

Survey of the political, social, economic, military, cultural, and intellectual development of Europe from prehistory to the present.

Approval Number	54.0101.54 25
CIP Area	
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	48

## HIST 2313 History of England I HIST 2314 History of England II

Survey of the political, social, economic, military, cultural, and intellectual development of England from prehistory to the present.

Approval Number	54.0101.54 25
CIP Area	
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	48

## HIST 2321 World Civilizations I HIST 2322 World Civilizations II

## HIST 2323 Eastern Civilizations (single-semester course)

Survey of ancient and medieval history with emphasis on Asian, African, and European cultures in the first course. Second course includes the modern history and culture of Asia, Africa, Europe, and the Americas.

Approval Number	54.0101.53 25
CIP Area	
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	

## HIST 2327 Mexican-American History I HIST 2328 Mexican-American History II

Historical, economic, social, and cultural development of Mexican-Americans/Chicanos/as. (May be applied to U.S. History requirement.)

Approval Number	05.0203.52 25
CIP Area	Ethnic, Cultural Minority, & Gender Studies
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	48

### HIST 2381 African-American History

Historical, economic, social, and cultural development of minority groups. May include African-American, Mexican American, Asian American, and Native American issues.

Approval Number	45.1101.53 25
CIP Area	Social Sciences
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	48

# HIST 2289 Academic Cooperative (2 SCH version) HIST 2389 Academic Cooperative (3 SCH version)

An instructional program designed to integrate on-campus study with practical hands-on experience in history. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.

Approval Number	45.0101.51 25
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

#### **HORT (Horticulture)**

HORT 1301 Horticulture (3 SCH version) HORT 1401 Horticulture (4 SCH version) (Also see AGRI 1315 & 1415)

Structure, growth, and development of horticultural plants from a practical and scientific approach. Environmental effects, basic principles of propagation, greenhouse and outdoor production, nutrition, pruning, chemical control of growth, pest control, and landscaping. (*Cross-listed as AGRI 1315 & 1415*)

Approval Number	01.0601.51 01
CIP Area	.Agribusiness & Agriculture Production
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	96

## **HUMA (Humanities)**

### HUMA 1301 Introduction to the Humanities I HUMA 1302 Introduction to the Humanities II

An interdisciplinary, multi-perspective assessment of cultural, political, philosophical, and aesthetic factors critical to the formulation of values and the historical development of the individual and of society.

Approval Number	24.0103.51 12
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	48

#### **HUMA 1305** Introduction to Mexican-American Studies

Introduction to the field of Mexican-American/Chicano/a Studies from its inception to the present. Interdisciplinary survey designed to introduce students to the salient cultural, economic, educational, historical, political, and social aspects of the Mexican-American/Chicano/a experience.

ш	Approval Number	Gender Studies33
по	• •	
	An examination of Mexican-American/Chicano/a artistic expressions in the viperforming arts.	sual and
	Approval Number	50.0703.54 26
	CIP AreaVisual &	Performing Arts
	maximum SCH per student	
	maximum SCH per course	
	maximum contact hours per course	48
HU	IMA 1315 Fine Arts Appreciation	
	Understanding purposes and processes in the visual and musical arts includi selected works.	ng evaluation of
	Approval Number	Performing Arts3
	maximum contact hours per course	
HU	IMA 2319 American Minority Studies	
	Historical, economic, social, and cultural development of minority groups. Ma American, Mexican American, Asian American, and Native American issues.	ay include African-
	Approval Number	45.1101.53 25
	CIP Area	
	maximum SCH per student	
	maximum SCH per course	
нп	IMA 2323 World Cultures (Also see ANTH 2346)	
	•	ultural babayiar and
	Study of human beings, their antecedents and related primates, and their cuinstitutions. Introduces the major sub-fields: physical and cultural anthropole linguistics, and ethnology. ( <i>Cross-listed as ANTH 2346</i> )	

### ITAL (Italian Language)

ITAL 1311 ITAL 1411 ITAL 1511	Beginning Italian I (1st semester Italian Beginning Italian I (1st semester Italian Beginning Italian I (1st semester Italian I)	lian, 4 SCH version)
ITAL 1312 ITAL 1412 ITAL 1512	Beginning Italian II (2nd semester It Beginning Italian II (2nd semester It Beginning Italian II (2nd semester It	alian, 4 SCH version)
	tal skills in listening comprehension, speaking, grammatical structures, and culture.	g, reading, and writing. Includes basic
CIP Area maximum S maximum S	umberSCH per studentSCH per coursecontact hours per course	Foreign Languages

# ITAL 2311 Intermediate Italian I (3rd semester Italian) ITAL 2312 Intermediate Italian II (4th semester Italian)

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

Approval Number	16.0902.52 13
CIP Area	Foreign Languages
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	

### JAPN (Japanese Language)

## JAPN 1300 Conversational Japanese I JAPN 1310 Conversational Japanese II

Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

Approval Number	16.0302.51 13
CIP Area	
maximum SCH per student	10
maximum SCH per course	
maximum contact hours per course	112

JAPN 1311 JAPN 1411 JAPN 1511	Beginning Japanese I (1st semester Japanese, 3 SCH version) Beginning Japanese I (1st semester Japanese, 4 SCH version) Beginning Japanese I (1st semester Japanese, 5 SCH version)
JAPN 1312 JAPN 1412 JAPN 1512	Beginning Japanese II (2nd semester Japanese, 3 SCH version) Beginning Japanese II (2nd semester Japanese, 4 SCH version) Beginning Japanese II (2nd semester Japanese, 5 SCH version)
	al skills in listening comprehension, speaking, reading, and writing. Includes basic grammatical structures, and culture.
CIP Area maximum S maximum S	imber
JAPN 2311 JAPN 2312	Intermediate Japanese I (3rd semester Japanese) Intermediate Japanese II (4th semester Japanese)
	application of skills in listening comprehension, speaking, reading, and writing. conversation, vocabulary acquisition, reading, composition, and culture.
CIP Area maximum S maximum S	imber
	KINE (Kinesiology): See PHED Listings
	KORE (Korean Language)
KORE 1311 KORE 1411 KORE 1511	Beginning Korean I (1st semester Korean, 3 SCH version) Beginning Korean I (1st semester Korean, 4 SCH version) Beginning Korean I (1st semester Korean, 5 SCH version)
KORE 1312 KORE 1412 KORE 1512	Beginning Korean II (2nd semester Korean, 3 SCH version) Beginning Korean II (2nd semester Korean, 4 SCH version) Beginning Korean II (2nd semester Korean, 5 SCH version)
	al skills in listening comprehension, speaking, reading, and writing. Includes basic grammatical structures, and culture.
CIP Area maximum S maximum S	umber

# KORE 2311 Intermediate Korean I (3rd semester Korean) KORE 2312 Intermediate Korean II (4th semester Korean)

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

Approval Number	16.0303.5213
CIP Area	Foreign Languages
maximum SCH per student	8
maximum SCH per course	4
maximum contact hours per course	96

### LANG (Foreign Languages)

LANG 1311	Foreign Language I (1st semester, 3 SCH version)
LANG 1411	Foreign Language I (1st semester, 4 SCH version)
LANG 1511	Foreign Language I (1st semester, 5 SCH version)
LANG 1312	Foreign Language II (2nd semester, 3 SCH version)
LANG 1412	Foreign Language II (2nd semester, 4 SCH version)
LANG 1512	Foreign Language II (2nd semester, 5 SCH version)

These courses are intended to serve as generic foreign language credits for students in the International Baccalaureate Diploma program. They are for transcripting purposes only, and may not be submitted for state reimbursement.

Approval Number	not applicable
CIP Area	Foreign Languages
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

### LATI (Latin Language)

LATI 1311 LATI 1411 LATI 1511	Elementary Latin I (1st semester Latin, 3 SCH version) Elementary Latin I (1st semester Latin, 4 SCH version) Elementary Latin I (1st semester Latin, 5 SCH version)
LATI 1312 LATI 1412 LATI 1512	Elementary Latin II (2nd semester Latin, 3 SCH version) Elementary Latin II (2nd semester Latin, 4 SCH version) Elementary Latin II (2nd semester Latin, 5 SCH version)

Grammar and vocabulary. Emphasis on the value of Latin as a background for the study of English and modern foreign languages.

Approval Number	16.1203.51 13
CIP Area	
maximum SCH per student	10
maximum SCH per course	5
maximum contact hours per course	112

# LATI 2311 Intermediate Latin I (3rd semester Latin) LATI 2312 Intermediate Latin II (4th semester Latin)

Review of grammar and readings in Roman literary works.

Approval Number	16.1203.52 13
CIP Area	Foreign Languages
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	

### **MATH (Mathematics)**

## MATH 1314 College Algebra (3 SCH version) MATH 1414 College Algebra (4 SCH version)

Study of quadratics; polynomial, rational, logarithmic, and exponential functions; systems of equations; progressions; sequences and series; and matrices and determinants.

Approval Number	27.0101.54 19
CIP Area	Mathematics
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	64

## MATH 1316 Plane Trigonometry

Trigonometric functions, identities, equations, and applications.

Approval Number	27.0101.53 19
CIP Area	Mathematics
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	48

### MATH 1324 Mathematics for Business & Social Sciences I (Finite Mathematics)

Topics from college algebra (linear equations, quadratic equations, functions and graphs, inequalities), mathematics of finance (simple and compound interest, annuities), linear programming, matrices, systems of linear equations, applications to management, economics, and business. (The content level of MATH 1324 is expected to be at or above the level of college algebra, MATH 1314)

Approval Number	27.0301.52 19
CIP Area	Mathematics
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	64

**Mathematics for Business & Social Sciences II MATH 1325** (Business Calculus, 3 SCH version) Mathematics for Business & Social Sciences II **MATH 1425** (Business Calculus, 4 SCH version) Limits and continuity, derivatives, graphing and optimization, exponential and logarithmic functions, antiderivatives, integration, applications to management, economics, and business. Prerequisite: MATH 1324 or equivalent. (The content level of MATH 1325 is expected to be below the content level of Calculus I, MATH 2413) maximum SCH per course .......4 Contemporary Mathematics I (Math for Liberal Arts Majors I) **MATH 1332 MATH 1333** Contemporary Mathematics II (Math for Liberal Arts Majors II) Topics may include introductory treatments of sets, logic, number systems, number theory, relations, functions, probability and statistics. Appropriate applications are included. **MATH 1350 Fundamentals of Mathematics I** Concepts of sets, functions, numeration systems, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. Prerequisite: College Algebra or the equivalent. maximum contact hours per course .......48 **MATH 1351 Fundamentals of Mathematics II** Concepts of geometry, probability, and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4 though 8) teacher certification. Prerequisite: MATH 1350, College Algebra or the equivalent. Approval Number......27.0101.60 19 maximum contact hours per course .......48

MATH 1342 MATH 1442 MATH 2342 MATH 2442	<b>Elementary Statistical Me Elementary Statistical Me</b>	thods (3 SCH version, freshman level) thods (4 SCH version, freshman level) thods (3 SCH version, sophomore level) thods (4 SCH version, sophomore level)	
	and interpretation of data, pragrammer, and the use of statist	robability, sampling, correlation and regressic cical software.	on,
CIP Area maximum S maximum S	CH per student CH per course		natics 4 4
MATH 1348	Analytic Geometry		
Lines, circle: parametric		ansformation of coordinates; polar coordinate	es; and
CIP Area maximum S maximum S	CH per student CH per course		natics 3 3
MATH 2312 MATH 2412	Pre-Calculus Math (3 SCH Pre-Calculus Math (4 SCH	· · · · · · · · · · · · · · · · · · ·	
including po		to the study of elementary functions and thei I, logarithmic, and trigonometric functions. Ma	• .
CIP Area maximum S maximum S	CH per student CH per course		natics 4 4
MATH 2313 MATH 2413 MATH 2513	Calculus I (3 SCH version) Calculus I (4 SCH version) Calculus I (5 SCH version)	)	
function and minimizing a curve sketch	I techniques of differentiation; a function; the chain rule, mea	neorem of Calculus; definition of the derivative applications of the derivative to maximizing an value theorem, and rate of change problem regration of algebraic, trigonometric, and ion to calculation of areas.	or
Prerequisite	: MATH 2412—Pre-Calculus Ma	ath or equivalent preparation	
CIP Area maximum S maximum S	CH per studentCH per course		natics 12 5

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.
- 2. Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point.
- 3. Determine whether a function is continuous and/or differentiable at a point using limits.
- 4. Use differentiation rules to differentiate algebraic and transcendental functions.
- 5. Identify appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.
- 6. Evaluate definite integrals using the Fundamental Theorem of Calculus.
- 7. Articulate the relationship between derivatives and integrals using the Fundamental Theorem of Calculus.

# MATH 2314 Calculus II (3 SCH version) MATH 2414 Calculus II (4 SCH version)

Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

Prerequisite: MATH 2413 - Calculus I

Approval Number	27.0101.62 19
CIP Area	Mathematics
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

## **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Use the concepts of definite integrals to solve problems involving area, volume, work, and other physical applications.
- 2. Use substitution, integration by parts, trigonometric substitution, partial fractions, and tables of anti-derivatives to evaluate definite and indefinite integrals.
- 3. Define an improper integral.
- 4. Apply the concepts of limits, convergence, and divergence to evaluate some classes of improper integrals.
- 5. Determine convergence or divergence of sequences and series.
- 6. Use Taylor and MacLaurin series to represent functions.
- 7. Use Taylor or MacLaurin series to integrate functions not integrable by conventional methods.
- 8. Use the concept of polar coordinates to find areas, lengths of curves, and representations of conic sections.

## MATH 2315 Calculus III (3 SCH version) MATH 2415 Calculus III (4 SCH version)

Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem.

Prerequisite: MATH 2414—Calculus II

Approval Number	27.0101.63 19
CIP Area	Mathematics
maximum SCH per student	12
maximum SCH per course	5
maximum contact hours per course	96

### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Perform calculus operations on vector-valued functions, including derivatives, integrals, curvature, displacement, velocity, acceleration, and torsion.
- 2. Perform calculus operations on functions of several variables, including partial derivatives, directional derivatives, and multiple integrals.
- 3. Find *extrema* and tangent planes.
- 4. Solve problems using the Fundamental Theorem of Line Integrals, Green's Theorem, the Divergence Theorem, and Stokes' Theorem.
- 5. Apply the computational and conceptual principles of calculus to the solutions of real-world problems.

#### MATH 2316 Calculus IV

## MATH 2417 Accelerated Calculus I (4 SCH version) MATH 2419 Accelerated Calculus II (4 SCH version)

Functions, limits, continuity, differentiation, integration, applications, sequences and series, vector analysis, partial differentiation, and multiple integration. This course may include topics in analytic geometry.

(NOTE: a standard calculus sequence may consist of three or four courses; courses within a sequence may carry three, four, or five semester hours of credit; courses within the same sequence may carry different semester hour values, e.g. five SCH for Calculus I, four SCH for Calculus II, and three SCH for Calculus III. The Accelerated Calculus sequence, MATH 2417 & 2419, covers the same content as three- or four-semester sequences in a shortened format.)

Approval Number	27.0101.59 19
CIP Area	Mathematics
maximum SCH per student	
maximum SCH per course	5
maximum contact hours per course	96

# MATH 2318 Linear Algebra (3 SCH version) MATH 2418 Linear Algebra (4 SCH version)

Finite dimensional vector spaces, linear transformations and matrices, quadratic forms, and eigenvalues and eigenvectors.

Approval Number	27.0101.61 19
CIP Area	Mathematics
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	

# MATH 2320 Differential Equations (3 SCH version) MATH 2420 Differential Equations (4 SCH version)

Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems.

Prerequisite: MATH 2414—Calculus II

Approval Number	27.0301.51 19
CIP Area	Mathematics
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Identify homogeneous equations, homogeneous equations with constant coefficients, and exact and linear differential equations.
- 2. Solve ordinary differential equations and systems of equations using:
  - a) Direct integration
  - b) Separation of variables
  - c) Reduction of order
  - d) Methods of undetermined coefficients and variation of parameters
  - e) Series solutions
  - f) Operator methods for finding particular solutions
  - g) Laplace transform methods
- 3. Determine particular solutions to differential equations with given boundary conditions or initial conditions.
- 4. Analyze real-world problems in fields such as Biology, Chemistry, Economics, Engineering, and Physics, including problems related to population dynamics, mixtures, growth and decay, heating and cooling, electronic circuits, and Newtonian mechanics.

# MATH 2321 Differential Equations and Linear Algebra (*3 SCH version*) MATH 2421 Differential Equations and Linear Algebra (*4 SCH version*)

This course emphasizes solution techniques. Ordinary differential equations, vector spaces, linear transformations, matrix/vector algebra, eigenvectors, Laplace Transform, and systems of equations.

Prerequisite: up to 12 SCH of calculus. (*This course is included in the Field of Study Curriculum for Engineering.*)

Approval Number	27.0101.57 19
CIP Area	Mathematics
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	

# MATH 2305 Discrete Mathematics (3 SCH version) MATH 2405 Discrete Mathematics (4 SCH version)

Introductory mathematical logic, mathematical induction, relations and functions, basic counting techniques, graphs and trees, and applications to computing devices.

Prerequisites: Pre-calculus or Calculus I.

Approval Number	27.0501.51 19
CIP Area	
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	96

### **MUAP (Applied Music)**

#### **Individual Instruction**

Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments.

Approval Number	50.0903.54 26
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

The common number format for MUAP courses is a 4-digit number. The 1st digit denotes the level of the course (1 for freshman, 2 for sophomore) and the 2nd digit represents the SCH value. A range of possible 3rd & 4th digits identifies the subject and course sequence.

### **MUEN (Music Ensemble)**

The common number format for MUEN courses is a 4-digit number. The 1st digit denotes the level of the course (1 for freshman, 2 for sophomore) and the 2nd digit represents the SCH value. A range of possible 3rd & 4th digits identifies the subject and course sequence.

Approval Number	<u>Course</u>	3rd & 4th digits
50.0903.55 26	Major (Large) Instrumental Ensembles	21 through 30
50.0903.56 26	Chamber (Small) Instrumental Ensembles	31 through 40
50.0903.57 26	Major (Large) Vocal Ensembles	41 through 50
50.0903.58 26	Chamber (Small) Vocal Ensembles	51 through 60

This arrangement allows institutions to assign up to 20 distinct numbers under each of the 4 CIP codes, for a total of 80 possible courses; no attempt has been made in the TCCN system to standardize individual numbers within these ranges.

### Major (Large) Instrumental Ensembles

Concert band, marching band, campus band, laboratory band (jazz/stage), symphony or orchestral group.

Approval Number	50.0903.55 26
CIP Area	
maximum SCH per student	9
maximum SCH per course	
maximum contact hours per course	

### Chamber (Small) Instrumental Ensembles

Smaller instrumental ensembles: wind, string, percussion, piano, or laboratory (jazz, rock, fusion, or contemporary).

Approval Number	50.0903.56 26
CIP Area	Visual & Performing Arts
maximum SCH per student	8
maximum SCH per course	2
maximum contact hours per course	

### Major (Large) Vocal Ensembles

Any major choral group, campus choir, chorus, or swing choir.

Approval Number	50.0903.57 26
CIP Area	
maximum SCH per student	•
maximum SCH per course	
maximum contact hours per course	

## Chamber (Small) Vocal Ensembles

Vocal ensemble, glee club, madrigals, or small swing choir.

Approval Number	50.0903.58 26
CIP Area	Visual & Performing Arts
maximum SCH per student	8
maximum SCH per course	
maximum contact hours per course	64

## MUSI (Music)

MUSI 1300 MUSI 1104	Foundations of Music [This course is scheduled for deletion in fall 2011]  Teaching Music in the Elementary School (1 SCH version) [This course is scheduled for deletion in fall 2011]
MUSI 1304	Foundations of Music
,	e fundamentals of music for prospective classroom teachers with an introduction to ythmic, and harmonic elements. Emphasis on participation in singing and reading
CIP Area	umber       50.0904.54 26          Visual & Performing Arts         CH per student       3
maximum S	CH per course
MUSI 1301 MUSI 1101	Fundamentals of Music I Fundamentals of Music I (1 SCH version, keyboard-based) [This course is scheduled for deletion in fall 2011]
MUSI 1302 MUSI 1102	Fundamentals of Music II Fundamentals of Music II (1 SCH version, keyboard-based) [This course is scheduled for deletion in fall 2011]
MUSI 1303	Fundamentals of Music (single-semester course)
keys, triads	n to the basic elements of music theory for non-music majors: scales, intervals, elementary ear training, keyboard harmony, notation, meter, and rhythm. (Does of a music major degree.)
CIP Area maximum S maximum S	umber       50.0904.55 26
MUSI 1306	Music Appreciation
	ing music through the study of cultural periods, major composers, and musical lustrated with audio recordings and live performances. (Does not apply to a music ee.)
CIP Area maximum S	umber
	CH per course

MUSI 1307 MUSI 1308 MUSI 1309	Music Literature (single-semester co Music Literature I Music Literature II	ourse)
Survey of th major comp	ne principal musical forms and cultural perionsers.	ods as illustrated in the literature of
CIP Area maximum S maximum S	CH per studentCH per course	Visual & Performing Arts 6 3
MUSI 1310	American Music	
	vey of various styles of music in America. ontemporary art music.	Topics may include jazz, ragtime, folk,
CIP Area maximum S maximum S	CH per studentCH per course	Visual & Performing Arts 3 3
MUSI 1114 MUSI 1115	Piano Class for Music Majors I Piano Class for Music Majors II	
MUSI 2114 MUSI 2115	Piano Class for Music Majors III Piano Class for Music Majors IV	
•	instruction for music majors with an emphoring harmonization, transposition, and rela	• • • • • • • • • • • • • • • • • • • •
CIP Area maximum S maximum S	CH per studentCH per course	Visual & Performing Arts 4 1
MUSI 1211 MUSI 1311	Music Theory I (2 SCH version) Music Theory I (3 SCH version)	
MUSI 1212 MUSI 1312	Music Theory II (2 SCH version) Music Theory II (3 SCH version)	
•	d writing of tonal melody and diatonic harm d writing of small compositional forms. Corr	, · · · · · · · · · · · · · · · · · · ·
CIP Area maximum S maximum S	CH per student	Visual & Performing Arts 6 3

MUSI 12 MUSI 13	216 S 316 E	Sight Singing & Ear		-
MUSI 11 MUSI 12 MUSI 13	217 S 317 E	Sight Singing & Ear		
-	•	music in treble, bass, dy, and diatonic harm	alto, and tenor clefs. Aural s ony.	tudy, including dictation, of
CİP A maxir maxir	irea mum SCI mum SCI	H per student		Visual & Performing Arts 4 2
institution of 4 SCH	n offering for the o	g Theory I at 3 SCH monopole at the second second second to the second s		3
MUSI 11 MUSI 12 MUSI 11 MUSI 12 MUSI 21 MUSI 21	257 ( 158 ( 258 ( 157 (	Opera Workshop I Opera Workshop I Opera Workshop II Opera Workshop II Opera Workshop III Opera Workshop IV	(2 SCH version) (1 SCH version) (2 SCH version)	
		of portions of or comp aging of an opera.	lete operas and the study of	the integration of music,
CİP A maxir maxir	irea num SCI num SCI	H per student H per course		Visual & Performing Arts 4 2
MUSI 11 MUSI 21 (Also se	159 N	Musical Theater I Musical Theater II I 1161 & 1162)		
-	and per <i>&amp; 1162)</i>		om the musical theater reper	toire. (Cross-listed as DRAM
CİP A maxir maxir	irea num SCI num SCI	H per student H per course		Visual & Performing Arts 2 1
		•		

MUSI 1160 MUSI 1161 MUSI 2160 MUSI 2161	Italian Diction English Diction German Diction French Diction
,	onetic sounds of the English, French, German, or Italian languages to promote the g in those languages. (Cross-listed as MUSI 1162, 1165, 1262 & 2262)
CIP Area maximum S maximum S	mber       50.0908.53 26
MUSI 1162 MUSI 1262	Vocal Diction I (1 SCH version, multiple languages) Vocal Diction I (2 SCH version, multiple languages)
MUSI 1165 MUSI 2262 (These cou	Vocal Diction II (1 SCH version, multiple languages) Vocal Diction II (2 SCH version, multiple languages) Irses are scheduled for deletion in fall 2011)
,	onetic sounds of the English, French, German or Italian languages to promote the g in those languages (Cross-listed as MUSI 1160, 1161, 2160 & 2161)
Approval Number	
MUSI 1163 MUSI 1263	Jazz Improvisation I (1 SCH version)  Jazz Improvisation I (2 SCH version)
MUSI 1164 MUSI 1264	Jazz Improvisation II (1 SCH version) Jazz Improvisation II (2 SCH version)
MUSI 2163 MUSI 2164	Jazz Improvisation III Jazz Improvisation IV
Materials an	d practices for improvisation or extemporaneous performance in the jazz idiom.
CIP Area maximum S maximum S	mber       50.0903.65 26

MUSI 1166 MUSI 1167 MUSI 2166 MUSI 2167	Woodwind Class I Woodwind Class II Woodwind Class III Woodwind Class IV	
Approval Nu CIP Area maximum S maximum S	CH per student	iques of playing and teaching woodwind instruments
MUSI 1178 MUSI 1179 MUSI 2178 MUSI 2179	Brass Class I Brass Class II Brass Class III (New Cour Brass Class IV (New Cour	·
Approval Nu CIP Area maximum S maximum S	CH per student	iques of playing and teaching brass instruments
MUSI 1181 MUSI 1182 MUSI 2181 MUSI 2182	Piano Class I Piano Class II Piano Class III Piano Class IV	
Approval Nu CIP Area maximum S maximum S	CH per studentCH per course	yboard technique for beginning piano students. 50.0907.51 26 Visual & Performing Arts 4 1
MUSI 1183 MUSI 1184 MUSI 2183 MUSI 2184	Voice Class I Voice Class II Voice Class III Voice Class IV	
	ction in the fundamentals of sir igned for students with little or	nging including breathing, tone production, and no previous voice training.
CIP Area maximum S maximum S	CH per student	

MUSI 1186 MUSI 1286 MUSI 1386	Composition I (1 SCH version) Composition I (2 SCH version) Composition I (3 SCH version, freshman level)
MUSI 1187 MUSI 1287 MUSI 2386	Composition II (1 SCH version) Composition II (2 SCH version) Composition II (3 SCH version, sophomore-level)
MUSI 2186 MUSI 2286	Composition III (1 SCH version) Composition III (2 SCH version)
MUSI 2187	Composition IV
	r class instruction in music composition. Composing in small forms for simple media itional styles and styles of the student's choice.
CIP Area maximum S maximum S	Imber       50.0904.53 26
MUSI 1188 MUSI 1189 MUSI 2188 MUSI 2189	Percussion Class I Percussion Class III Percussion Class III (New Course) Percussion Class IV (New Course)
Class instruction	ction in the fundamental techniques of playing and teaching percussion .
CIP Area maximum S maximum S	Imber       50.0903.51 26
MUSI 1195 MUSI 1196 MUSI 2195 MUSI 2196	Strings Class I Strings Class II Strings Class III (New Course) Strings Class IV (New Course)
Class instruc	ction in the fundamental techniques of playing and teaching stringed instruments.
CIP Area maximum S maximum S	Imber       50.0903.51 26

MUSI 1290 MUSI 1390	Electronic Music I <i>(2 SCH version)</i> Electronic Music I <i>(3 SCH version)</i>
MUSI 1291 MUSI 1391	Electronic Music II (2 SCH version) Electronic Music II (3 SCH version)
multi-track r notation, ar	to the use of synthesizers, computers, sequencing and music printing software, recorders and other MIDI (Music Instrument Digital Interface) devices in the rangement, composition and performance of music. Prerequisite should be either ion of a Music Fundamentals, Music Theory, Private Piano, or Class Piano Course.
CIP Area maximum S maximum S	Imber       50.0904.58 26
MUSI 1192 MUSI 1193 MUSI 2192 MUSI 2193	Guitar Class I Guitar Class II Guitar Class III Guitar Class IV
Class instruc	ction in the fundamental techniques of playing guitar.
CIP Area maximum S maximum S	Imber       50.0911.51 26
MUSI 2211 MUSI 2311	Music Theory III (2 SCH version) Music Theory III (3 SCH version)
MUSI 2212 MUSI 2312	Music Theory IV (2 SCH version) Music Theory IV (3 SCH version)
harmony ind	armony part writing and keyboard analysis and writing of more advanced tonal cluding chromaticism and extended tertian structures. Introduction to 20th century all procedures and survey of the traditional large forms of composition. Correlated keyboard.
CIP Area maximum S	Imber       50.0904.52 26

maximum contact hours per course .......96

MUSI 2116	Sight Singing & Ear Training III (1 SCH version)
MUSI 2216	Sight Singing & Ear Training III (2 SCH version)
MUSI 2117	Sight Singing & Ear Training IV (1 SCH version)
<b>MUSI 2217</b>	Sight Singing & Ear Training IV (2 SCH version)

Singing more difficult tonal music including modal, ethnic, and 20th century materials. Aural study, including dictation of more complex rhythm, melody, chromatic harmony, and extended tertian structures.

Approval Number	50.0904.57 26
CIP Area	Visual & Performing Arts
maximum SCH per student	4
maximum SCH per course	2
maximum contact hours per course	96

**NOTE:** The maximum SCH combination of Theory and Sight Singing and Ear Training is 4 SCH. An institution offering Theory III at 3 SCH must offer Sight Singing and Ear Training at 1 SCH for a total of 4 SCH for the combination. Likewise, an institution may select Theory III at 2 SCH and may select Sight Singing and Ear Training III at 2 SCH for a maximum of 4 SCH for the combination.

# MUSI 2289 Academic Cooperative (2 SCH version) MUSI 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 music.

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

#### PHED (Physical Education)

(NOTE: "KINE" (Kinesiology) may be used as an alternate Common Numbering rubric for PHED courses.)

#### **Physical Activities**

Instruction and participation in physical and recreational activities. (Physical Fitness and Sport majors may have the option of eight credits.)

(NOTE: Any number in the ranges 1100-1150 and 2100-2150 may be used for Physical Education activity, as opposed to theory/classroom, courses. Because such courses are so numerous and their specific course equivalency typically is not a significant transfer credit issue, no attempt has been made in the ACGM and the TCCN Matrix to standardize individual numbers within these ranges.)

	CIP Area maximum S0	mber	es or)
		ontact hours per course	
Re	creational [	Dance	
	Instruction a	and participation in folk, social, tap, or other dance forms.	
•		courses are recreational in nature and should bear the KINE/PHED of the DANC prefix.)	
	CIP Area maximum S0 maximum S0	mber	es or) . 2
	IED 1151 IED 1251	Scuba Diving I (1 SCH version) Scuba Diving I (2 SCH version)	
	IED 1152 IED 1252	Scuba Diving II (1 SCH version) Scuba Diving II (2 SCH version)	
	Participation swimming sk	and instruction in advanced aquatic activities. Prerequisite: demonstrated kills.	
	CIP Area maximum S0 maximum S0	mber	es . 4 . 2
	IED 1153 IED 1253	Lifeguard Training (1 SCH version) Lifeguard Training (2 SCH version)	
	IED 2155 IED 2255	Water Safety (1 SCH version) Water Safety (2 SCH version)	
	Participation swimming sk	and instruction in advanced aquatic activities. Prerequisite: demonstrated kills.	
	CIP Area maximum S0 maximum S0	mber	es . 4 . 2

# PHED 1164 Introduction to Physical Fitness & Sport (Also see PHED 1238 & 1301)

Orientation to the field of physical fitness and sport.	Includes the study and practice of
activities and principles that promote physical fitnes	s. (Cross-listed as PHED 1238 & 1301)

Approval Number	31.0501.52 23
CIP Area	Recreation & Physical Fitness
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	48

# PHED 1238 Introduction to Physical Fitness & Sport (Also see PHED 1164 & 1301)

Orientation to the field of physical fitness and sport. Includes the study and practice of activities and principles that promote physical fitness. (*Cross-listed as PHED 1164 & 1301*)

Approval Number	31.0501.52 23
CIP Area	Recreation & Physical Fitness
maximum SCH per student	2
maximum SCH per course	2
maximum contact hours per course	48

# PHED 1301 Introduction to Physical Fitness & Sport (Also see PHED 1164 & 1238)

Orientation to the field of physical fitness and sport. Includes the study and practice of activities and principles that promote physical fitness.

(Cross-listed as PHED 1164 & 1238)

Approval Number	31.0501.52 23
CIP Area	Recreation & Physical Fitness
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

## PHED 1165 Drug Use & Abuse *(1 SCH version)* PHED 1346 Drug Use & Abuse *(3 SCH version)* (Also see SOCI 2340)

Study of the use and abuse of drugs in today's society. Emphasizes the physiological, sociological, and psychological factors. (*Cross-listed as SOCI 2340*)

Approval Number	51.1504.52 16
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

Instruction in and practice of first aid techniques. (Cross-listed as PHED 1206 & 1306)  Approval Number	2 1/
PHED 1306 First Aid (3 SCH version) (Also see PHED 1166)	nces 3 3
Instruction in and practice of first aid techniques. (Cross-listed as PHED 1166) Approval Number	nces 3 3
PHED 1304 Personal/Community Health I (may also be single-semester cour PHED 1305 Personal/Community Health II	se)
Investigation of the principles and practices in relation to personal and community heal	th.
Approval Number	nces 6 3
PHED 1308 Sports Officiating I PHED 1309 Sports Officiating II	48
Instruction in rules, interpretation, and mechanics of officiating selected sports.	
Approval Number	udies 6 3
PHED 1321 Coaching/Sports/Athletics I PHED 1322 Coaching/Sports/Athletics II	
Study of the history, theories, philosophies, rules, and terminology of competitive sport Includes coaching techniques.	S.
Approval Number	ness 6 3

### PHED 1331 Physical Education for Elementary Education Majors

An overview of the program of activities in elementary school physical education. Includes The study and practice of activities and principles that promote physical fitness with an emphasis on historical development, philosophical implications, physical fitness, and kinesiology.

Approval Number	31.0501.52 23
CIP Area	Recreation & Physical Fitness
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

PHED 1332	Game Skills
PHED 1333	Rhythm Skills
PHED 1336	Introduction to Recreation I
PHED 1337	Introduction to Recreation I

Fundamental theory and concepts of recreational activities with emphasis on programs, planning, and leadership.

Approval Number	31.0101.51 23
CIP Area	
maximum SCH per student	<u> </u>
maximum SCH per course	
maximum contact hours per course	

## PHED 1338 Concepts of Physical Fitness

Concepts and use of selected physiological variables of fitness, individual testing and consultation, and the organization of sports and fitness programs.

Approval Number	31.0501.51 23
CIP Area	Recreation & Physical Fitness
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	96

#### PHED 2156 Taping and Bandaging

This course provides the fundamental taping and bandaging techniques used in the prevention and care of athletic related injuries.

Approval Number	51.0913.51 16
CIP Area	
maximum SCH per student	1
maximum SCH per course	1
maximum contact hours per course	

### PHED 2356 Care and Prevention of Athletic Injuries

Prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, immediate and long-term care of injuries, and administration procedures in athletic training.

Approval Number	51.0913.52 16
CIP Area	Recreation & Physical Fitness
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	48

### PHIL (Philosophy)

### PHIL 1301 Introduction to Philosophy

Introduction to the study of ideas and their logical structure, including arguments and investigations about abstract and real phenomena. Includes introduction to the history, theories, and methods of reasoning.

Approval Number	38.0101.51 12
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

## PHIL 1304 Introduction to World Religions

A comparative study of various world religions.

Approval Number	38.0201.52 12
CIP Area	
maximum SCH per student	
maximum SCH per course	3
maximum contact hours per course	

### PHIL 1316 History of Religions I PHIL 1317 History of Religions II

An historical survey of major religions.

Approval Number	38.0201.51 12
CIP Area	Philosophy & Religion
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	48

## **PHIL 2303 Introduction to Logic** Nature and methods of clear and critical thinking and methods of reasoning such as deduction, induction, scientific reasoning, and fallacies. CIP Area ...... Philosophy & Religion **PHIL 2306** Introduction to Ethics Classical and contemporary theories concerning the good life, human conduct in society, and moral and ethical standards. CIP Area ...... Philosophy & Religion **PHIL 2307 Introduction to Social & Political Philosophy** Critical examination of the major theories concerning the organization of societies and government. CIP Area ...... Philosophy & Religion maximum contact hours per course .......48 **PHIL 2316** History of Classical & Modern Philosophy I **PHIL 2317** History of Classical & Modern Philosophy II Contemporary Philosophy (single-semester course) **PHIL 2318** Study of major philosophers and philosophical systems from ancient, through medieval, to modern times. CIP Area ...... Philosophy & Religion maximum contact hours per course .......48 **PHIL 2321** Philosophy of Religion A critical investigation of major religious ideas and experiences. CIP Area ...... Philosophy & Religion

**PHIL 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 philosophy. CIP Area ...... Interdisciplinary PHYS (Physics) **PHYS 1401** College Physics I (lecture + lab) **PHYS 1301** College Physics I (lecture) College Physics Laboratory I (lab) **PHYS 1101 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. maximum SCH per student......8 maximum SCH per course .......4 **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) Elementary Physics II (lecture) **PHYS 1307** Elementary Physics Laboratory II (lab) **PHYS 1107** Elementary Physics (single-semester course, lecture + lab) **PHYS 1410 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. CIP Area .......Physical Sciences maximum SCH per course .......4 maximum contact hours per course .......96

Academic Cooperative (2 SCH version)

PHIL 2289

PHYS 1403 PHYS 1303 PHYS 1103	Stars and Galaxies <i>(lecture + lab)</i> Stars and Galaxies <i>(lecture)</i> Stars and Galaxies Laboratory <i>(lab)</i>
	ars, galaxies, and the universe outside our solar system. May or may not include a ( <i>Cross-listed as ASTR 1403, 1303, &amp; 1103</i> )
CIP Area maximum S maximum S	umber
PHYS 1404 PHYS 1304 PHYS 1104	Solar System <i>(lecture + lab)</i> Solar System <i>(lecture)</i> Solar System Laboratory <i>(lab)</i>
	e sun and its solar system, including its origin. May or may not include a laboratory. ed as ASTR 1404, 1304, & 1104)
CIP Area maximum S maximum S	umber
PHYS 1415 PHYS 1315 PHYS 1115	Physical Science I (lecture + lab) Physical Science I (lecture) Physical Science Laboratory I (lab)
PHYS 1417 PHYS 1317 PHYS 1117	Physical Science II <i>(lecture + lab)</i> Physical Science II <i>(lecture)</i> Physical Science Laboratory II <i>(lab)</i>
	signed for non-science majors, that surveys topics from physics, chemistry, geology, and meteorology. May or may not include a laboratory.
CIP Area maximum S	umber

## PHYS 2325 University Physics I (lecture)

Fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion and physical systems; emphasis on problem solving.

maximum contact hours per course .......96

Co-requisite: PHYS 2125—University Physics I Laboratory

Prerequisite: MATH 2413—Calculus I

Approval Number	40.0101.52 03
CIP Area	Physical Sciences
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration.
- 2. Solve problems involving forces and work.
- 3. Apply Newton's laws to physical problems.
- 4. Identify the different types of energy.
- 5. Solve problems using principles of conservation of energy.
- 6. Define the principles of impulse, momentum, and collisions.
- 7. Use principles of impulse and momentum to solve problems.
- 8. Determine the location of the center of mass and center of rotation for rigid bodies in motion.
- Discuss rotational kinematics and dynamics and the relationship between linear and rotational motion.
- 10. Solve problems involving rotational and linear motion.
- 11. Define equilibrium, including the different types of equilibrium.
- 12. Discuss simple harmonic motion and its application to real-world problems.

#### PHYS 2125 University Physics Laboratory I (lab)

Basic laboratory experiments supporting theoretical principles presented in PHYS 2325 involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports.

Co-requisite: PHYS 2325—University Physics I

Approval Number	40.0101.53 03
CIP Area	Physical Sciences
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner.
- 2. Conduct basic laboratory experiments involving classical mechanics.
- 3. Relate physical observations and measurements involving classical mechanics to theoretical principles.
- 4. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements.
- 5. Design fundamental experiments involving principles of classical mechanics.
- 6. Identify appropriate sources of information for conducting laboratory experiments involving classical mechanics.

#### PHYS 2425 University Physics I (lecture + lab)

**Note:** This lecture and lab course should combine all of the elements of 2325 University Physics I Lecture and 2125 University Physics I Lab, including the learning outcomes listed for both courses.

Approval Number	40.0101.54 03
CIP Area	Physical Sciences
maximum SCH per student	4
maximum SCH per course	
maximum contact hours per course	

#### PHYS 2326 University Physics II (lecture)

Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics.

Co-requisite: PHYS 2126—University Physics II Laboratory

Prerequisites: PHYS 2325—University Physics I, MATH 2414—Calculus II

Approval Number	40.0101.55 03
CIP Area	Physical Sciences
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Articulate the fundamental concepts of electricity and electromagnetism, including electrostatic potential energy, electrostatic potential, potential difference, magnetic field, induction, and Maxwell's Laws.
- 2. State the general nature of electrical forces and electrical charges, and their relationship to electrical current.
- 3. Solve problems involving the inter-relationship of electrical charges, electrical forces, and electrical fields.
- 4. Apply Kirchhoff's Laws to analysis of circuits with potential sources, capacitance, and resistance, including parallel and series capacitance and resistance.
- 5. Calculate the force on a charged particle between the plates of a parallel-plate capacitor.
- 6. Apply Ohm's law to the solution of problems.
- 7. Describe the effects of static charge on nearby materials in terms of Coulomb's Law.
- 8. Use Faraday's and Lenz's laws to find the electromotive forces.
- 9. Describe the components of a wave and relate those components to mechanical vibrations, sound, and decibel level.
- 10. Articulate the principles of reflection, refraction, diffraction, interference and superposition of waves.
- 11. Solve real-world problems involving optics, lenses, and mirrors.

#### PHYS 2126 University Physics Laboratory II (lab)

Laboratory experiments supporting theoretical principles presented in PHYS 2326 involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports.

Co-requisite: PHYS 2326—University Physics II

Approval Number	40.0101.56 03
CIP Area	
maximum SCH per student	1
maximum SCH per course	1
maximum contact hours per course	48

#### **Learning Outcomes**

Upon successful completion of this course, students will:

- 1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner.
- 2. Conduct basic laboratory experiments involving electricity and magnetism.
- 3. Relate physical observations and measurements involving electricity and magnetism to theoretical principles.
- 4. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements.
- 5. Design fundamental experiments involving principles of electricity and magnetism.
- 6. Identify appropriate sources of information for conducting laboratory experiments involving electricity and magnetism.

### PHYS 2426 University Physics II (lecture + lab)

**Note:** This lecture and lab course should combine all of the elements of 2326 University Physics II Lecture and 2126 University Physics II Lab, including the learning outcomes listed for both courses.

Approval Number	40.0101.57 03
CIP Area	Physical Sciences
maximum SCH per student	4
maximum SCH per course	4
maximum contact hours per course	96

#### PHYS 2427 University Physics III (3rd semester course, lecture + lab)

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

Approval Number	40.0801.54 03
CIP Area	Physical Sciences
maximum SCH per student	<del>_</del>
maximum SCH per course	4
maximum contact hours per course	112

# PHYS 2289 Academic Cooperative (2 SCH version) PHYS 2389 Academic Cooperative (3 SCH version)

An instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual students will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.

Approval Number	40.0101.58 03
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

### **PORT (Portuguese Language)**

PORT 1311	Beginning Portuguese I (1st semester Portuguese, 3 SCH version)
PORT 1411	Beginning Portuguese I (1st semester Portuguese, 4 SCH version)
PORT 1511	Beginning Portuguese I (1st semester Portuguese, 5 SCH version)
PORT 1312	Beginning Portuguese II (2nd semester Portuguese, 3 SCH version)
PORT 1412	Beginning Portuguese II (2nd semester Portuguese, 4 SCH version)
PORT 1512	Beginning Portuguese II (2nd semester Portuguese, 5 SCH version)

Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

Approval Number	16.0904.51 13
CIP Area	Foreign Languages
maximum SCH per student	10
maximum SCH per course	5
maximum contact hours per course	112

# PORT 2311 Intermediate Portuguese I (3rd semester Portuguese) PORT 2312 Intermediate Portuguese II (4th semester Portuguese)

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

Approval Number	16.0904.52 13
CIP Area	Foreign Languages
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	80

#### **PSYC (Psychology)**

PSYC 1100 Learning Framework (1 SCH version)
PSYC 1200 Learning Framework (2 SCH version)
PSYC 1300 Learning Framework (3 SCH version)
(Also see EDUC 1300)

A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (*Cross-listed as EDUC 1300*)

(NOTE: While traditional study skills courses include some of the same learning strategies – e.g., note-taking, reading, test preparation etc. – as learning framework courses, the focus of study skills courses is solely or primarily on skill acquisition. Study skills courses, which are not under-girded by scholarly models of the learning process, are not considered college-level and therefore are distinguishable from Learning Framework courses.)

Approval Number	42.2701.51 25
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

### PSYC 2301 General Psychology

Survey of major topics in psychology. Introduces the study of behavior and the factors that determine and affect behavior.

Approval Number	42.0101.51 25
CIP Area	
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	48

### PSYC 2302 Applied Psychology

Survey of the applications of psychological knowledge and methods in such fields as business, industry, education, medicine, law enforcement, social work, and government work.

Approval Number	42.0101.52 25
CIP Area	Psychology
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	

# PSYC 2306 Human Sexuality (Also see SOCI 2306)

Study of the psychological, sociological, and physiological aspects of human sexuality.

(Cross-listed as SOCI 2306)

Approval Number	42.0101.53 25
CIP Area	Psychology
maximum SCH per student	3 03
maximum SCH per course	
maximum contact hours per course	48

PSYC 2307 Adolescent Psychology I

PSYC 2308 Child Psychology PSYC 2311 Adult Development

PSYC 2314 Lifespan Growth & Development

Study of the relationship of the physical, emotional, social and mental factors of growth and development of children and throughout the lifespan.

Approval Number	42.2703.51 25
CIP Area	Psychology
maximum SCH per student	6
maximum SCH per course	
maximum contact hours per course	48

## **PSYC 2315** Psychology of Adjustment

Study of the processes involved in adjustment of individuals to their personal and social environments.

Approval Number	42.0101.56 25
CIP Area	
maximum SCH per student	
maximum SCH per course	3
maximum contact hours per course	

## PSYC 2316 Psychology of Personality

CIP AreaP	sychology
maximum SCH per student	, ,,
maximum SCH per course	
maximum contact hours per course	

### PSYC 2317 Statistical Methods in Psychology

Study of statistical methods used in psychological research, assessment, and testing. Includes the study of measures of central tendency and variability, statistical inference, correlation and regression as these apply to psychology.

Approval Number	42.0101.52 25
CIP Area	Psychology
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	48

## PSYC 2319 Social Psychology (Also see SOCI 2326)

Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. (*Cross-listed as SOCI 2326*)

Approval Number	42.1601.51 25
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

# PSYC 2289 Academic Cooperative (2 SCH version) PSYC 2389 Academic Cooperative (3 SCH version)

An instructional program designed to integrate on-campus study with practical hands-on experience in psychology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.

Approval Number	45.0101.51 25
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	144

#### **RNSG (Nursing)**

### RNSG 1413 Foundations for Nursing Practice RNSG 1513 Foundations for Nursing Practice

Introduction to the role of the professional nurse as a provider of care, coordinator of care, and member of a profession. Topics include but are not limited to the fundamental concepts of nursing practice, history of professional nursing, a systematic framework for decision-making, mechanisms of disease, the needs and problems that nurses help patients manage, and basic psychomotor skills. Emphasis on knowledge, judgment, skills and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (*This course is included in the Field of Study Curriculum for Nursing.*)

Approval Number	51.3801.51 14
CIP Area	Nursing, General
Maximum SCH per student	5
Maximum SCH per course	5
Maximum contact hours per course	144

### RNSG 1105 Nursing Skills I RNSG 1205 Nursing Skills I

Study of the concepts and principles essential for demonstrating competence in the performance of nursing procedures. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.)

Approval Number	51.3801.52 14
CIP Area	Nursing, General
Maximum SCH per student	2
Maximum SCH per course	
Maximum contact hours per course	

### RNSG 1144 Nursing Skills II RNSG 1244 Nursing Skills II

Study of the concepts and principles necessary to perform intermediate or advanced nursing skills; and demonstrate competence in the performance of nursing procedures. Topics include knowledge, judgment, skills and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.)

Approval Number	51.3801.53 14
CIP Area	
Maximum SCH per student	2
Maximum SCH per course	2
Maximum contact hours per course	

## RNSG 1209 Introduction to Nursing RNSG 1309 Introduction to Nursing

Overview of nursing and the role of the professional nurse as a provider of care, coordinator of care, and member of a profession. Topics include knowledge, judgment, skills and professional values with a legal/ethical framework. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.)

Approval Number	51.3801.54 14
CIP Area	Nursing, General
Maximum SCH per student	3
Maximum SCH per course	3
Maximum contact hours per course	

RNSG 2213 Mental Health Nursing (single-semester course)
RNSG 2313 Mental Health Nursing (single-semester course)
RNSG 2113 Mental Health Nursing I

RNSG 2113 Mental Health Nursing I

Principles and concepts of mental health, psychopathology, and treatment modalities related to the nursing care of clients and their families. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.) (Note: 2113 & 2114 each represent half the required course content and must be offered as a 2-course sequence. A student may not obtain credit for both of the single-semester offering and the 2-course sequence.)

Approval Number	51.3801.55 14
CIP Area	Nursing, General
Maximum SCH per student	3
Maximum SCH per course	
Maximum contact hours per course	64

# RNSG 1412 Nursing Care of the Childbearing and Childrearing Family RNSG 1512 Nursing Care of the Childbearing and Childrearing Family

Study of the concepts related to the provision of nursing care for childbearing and childrearing families; application of systematic problem-solving processes and critical thinking skills, including a focus on the childbearing family during preconception, prenatal, antepartum, neonatal, and postpartum periods and the childrearing family from birth to adolescence; and competency in knowledge, judgment, skill, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. *(This course is included in the Field of Study Curriculum for Nursing.)* 

Approval Number	51.3801.5614
CIP Area	
Maximum SCH per student	5
Maximum SCH per course	
Maximum contact hours per course	176

# RNSG 1151 Care of the Childbearing Family RNSG 1251 Care of the Childbearing Family

Study of concepts related to the provision of nursing care for childbearing families. Topics may include selected complications. Topics include knowledge judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.)

Approval Number	51.3801.57 14
CIP Area	Nursing, General
Maximum SCH per student	2
Maximum SCH per course	
Maximum contact hours per course	

<b>RNSG 2101</b>	Care of Children and Families (single-semester course)
RNSG 2201	Care of Children and Families (single-semester course)
RNSG 2102	Care of Children and Families I
<b>RNSG 2103</b>	Care of Children and Families II

Study of concepts related to the provision of nursing care for children and their families, emphasizing judgment, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.) (Note: 2102 & 2103 each represent half the required course content and must be offered as a 2-course sequence. A student may not obtain credit for both the single-semester offering and the 2-course sequence.)

Approval Number	51.3801.58 14
CIP Area	Nursing, General
Maximum SCH per student	· ·
Maximum SCH per course	
Maximum contact hours per course	

# RNSG 2208 Maternal/Newborn Nursing and Women's Health RNSG 2308 Maternal/Newborn Nursing and Women's Health

Study of concepts related to the provision of nursing care for normal childbearing families and those at risk, as well as women's health issues; competency in knowledge, judgment, skill, and professional values within a legal/ethical framework, including a focus on normal and high-risk needs for the childbearing family during the preconception, prenatal, intrapartum, neonatal, and postpartum periods; and consideration of selected issues in women's health. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.)

Approval Number	51.3801.59 14
CIP Area	Nursing, General
Maximum SCH per student	3
Maximum SCH per course	3
Maximum contact hours per course	96

<b>RNSG 1331</b>	Principles of Clinical Decision-making (single-semester course)
<b>RNSG 1431</b>	Principles of Clinical Decision-making (single-semester course)
<b>RNSG 1231</b>	Principles of Clinical Decision-making I
<b>RNSG 1232</b>	Principles of Clinical Decision-making II

Examination of selected principles related to the continued development of the professional nurse as a provider of care, coordinator of care, and member of a profession. Emphasis on clinical decision making for clients in medical-surgical settings experiencing health problems involving fluid and electrolytes; perioperative care; pain; respiratory disorders; peripheral vascular disorders; immunologic disorders; and infectious disorders. Discussions of knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (*This course is included in the Field of Study Curriculum for Nursing.*) (*Note: 1231 & 1232 each represent half the required course content and must be offered as a 2-course sequence.*)

Approval Number	51.3801.61 14
CIP Area	
Maximum SCH per student	4
Maximum SCH per course	
Maximum contact hours per course	128

RNSG 1347	Concepts of Clinical Decision-making (single-semester course)
RNSG 1447	Concepts of Clinical Decision-making (single-semester course)
RNSG 1247	Concepts of Clinical Decision-making I
RNSG 1248	Concepts of Clinical Decision-making II

Integration of previous knowledge and skills into the continued development of the professional nurse as a provider of care, coordinator of care, and member of a profession. Emphasis on clinical decision-making for clients in medical-surgical settings experiencing health problems involving gastrointestinal disorders, endocrine and metabolic disorders, reproductive and sexual disorders, musculoskeletal disorders, eye-ear-nose-throat disorders and integumentary disorders. Discussion of knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.) (Note: 1247 & 1248 each represent half the required course content and must be offered as a 2-course sequence. A student may not obtain credit for both the single-semester offering and the 2-course sequence.)

Approval Number	51.3801.62 14
CIP Area	Nursing, General
Maximum SCH per student	4
Maximum SCH per course	4
Maximum contact hours per course	128

## RNSG 1341 Common Concepts of Adult Health RNSG 1441 Common Concepts of Adult Health

Study of the General principles of caring for selected adult clients and families in structured settings with common medical-surgical health care needs related to each body system. Emphasis on knowledge judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.)

Approval Number	51.3801.63 14
CIP Area	Nursing, General
Maximum SCH per student	4
Maximum SCH per course	
Maximum contact hours per course	128

# RNSG 1343 Complex Concepts of Adult Health RNSG 1443 Complex Concepts of Adult Health

Integration of previous knowledge and skills related to common adult health needs into the continued development of the professional nurse as a provider of care, coordinator of care, and member of a profession in the care of adult clients/families in structured health care settings with complex medical-surgical health care needs associated with each body system. Emphasis on knowledge, judgments, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. (This course is included in the Field of Study Curriculum for Nursing.)

Approval Number	51.3801.64 14
CIP Area	
Maximum SCH per student	4
Maximum SCH per course	4
Maximum contact hours per course	

Introduction to Professional Nursing for Integrated Programs
Introduction to Professional Nursing for Integrated Programs
(* single-semester courses)
<b>Introduction to Professional Nursing for Integrated Programs I</b>
<b>Introduction to Professional Nursing for Integrated Programs II</b>

Introduction to the profession of nursing including the roles of the registered nurse with emphasis on health promotion and primary disease prevention across the life span; essential components of the nursing health assessment; identification of deviations from expected health patterns; the application of a systematic, problem-solving process to provide basic nursing care to diverse clients across the life span; and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to an integrated approach. (This course is included in the Field of Study Curriculum for Nursing.) (Note: 1222 & 1223 each represent half the required course content and must be offered as a 2-course sequence. A student may not obtain credit for both the single-semester offering and the 2-course sequence.)

Approval Number	51.3801.65 14
CIP Area	Nursing, General
Maximum SCH per student	5
Maximum SCH per course	
Maximum contact hours per course	144
RNSG 1119 Integrated Nursing Skills I RNSG 1219 Integrated Nursing Skills I	
Study of the concepts and principles essential for performance of basic nursing skills for care of divinclude knowledge, judgment, skills, and profess This course lends itself to an integrated approach <i>Curriculum for Nursing.</i> )	verse clients across the life span. Topics ional values within a legal/ethical framework.
Approval Number	
RNSG 1129 Integrated Nursing Skills II RNSG 1229 Integrated Nursing Skills II	
Study of the concepts and principles necessary to skills for care of diverse clients across the life spanned professional values within a legal/ethical framintegrated approach. (This course is included in a	n. Topics include knowledge, judgment, skills mework. This course lends itself to an
Approval Number CIP Area Maximum SCH per student	Nursing, General
Maximum SCH per student	

RNSG 2404\* **Integrated Care of the Client with Common Health Care Needs Integrated Care of the Client with Common Health Care Needs** RNSG 2504\* (\* single-semester courses) Integrated Care of the Client with Common Health Care Needs I **RNSG 2203** Integrated Care of the Client with Common Health Care Needs II

**RNSG 2204** 

Application of a systematic problem-solving process and critical thinking skills to provide nursing care to diverse clients/families across the life span with common health care needs including, but not limited to, common childhood/adolescent diseases, uncomplicated perinatal care, mental health concepts, perioperative care, frequently occurring adult health problems and health issues related to aging. Emphasis on secondary disease prevention and collaboration with members of the multidisciplinary health care team. Content includes applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to an integrated approach. (This course is included in the Field of Study Curriculum for Nursing.)

Maximum contact hours per course .......80

(Note: 2203 & 2204 each represent half the required course content and must be offered as a 2-course sequence. A student may not obtain credit for both the single-semester offering and the 2-course sequence.)

#### **Lower-Division Academic Course Guide Manual**

Approval Number	51.3801.68 14
CIP Area	Nursing, General
Maximum SCH per student	5
Maximum SCH per course	
Maximum contact hours per course	

#### CLINICAL

The clinical courses do not have common course numbers. Institutions should number these courses according to the following procedure: The common number format for RNSG clinical courses is a four digit number. The 1st digit denotes the level of the course (1 for freshman, 2 for sophomore) and the 2nd digit represents the SCH value. Clinical courses may be offered for 1 to 6 semester credit hours. The 3rd and 4th digits range from 60 to 63 and identify the course sequence.

RNSG XX60 Clinical RNSG XX61 Clinical RNSG XX62 Clinical RNSG XX63 Clinical

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (This course is included in the Field of Study Curriculum for Nursing.)

Approval Number	51.3801.69 14
CIP Area	
Maximum SCH per student	
Maximum SCH per course	6
Maximum contact hours per course	576

#### **RUSS (Russian Language)**

<b>RUSS 1311</b>	Beginning Russian I (1st semester Russian, 3 SCH version)
<b>RUSS 1411</b>	Beginning Russian I (1st semester Russian, 4 SCH version)
<b>RUSS 1511</b>	Beginning Russian I (1st semester Russian, 5 SCH version)
<b>RUSS 1312</b>	Beginning Russian II (2nd semester Russian, 3 SCH version)
<b>RUSS 1412</b>	Beginning Russian II (2nd semester Russian, 4 SCH version)
<b>RUSS 1512</b>	Beginning Russian II (2nd semester Russian, 5 SCH version)

Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

Approval Number	16.0402.51 13
CIP Area	
maximum SCH per student	10
maximum SCH per course	5
maximum contact hours per course	112

# RUSS 2311 Intermediate Russian I (3rd semester Russian) RUSS 2312 Intermediate Russian II (4th semester Russian)

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

Approval Number	16.0402.52 13
CIP Area	
maximum SCH per student	6
maximum SCH per course	3
maximum contact hours per course	80

#### **SGNL** (American Sign Language)

(NOTE: According to the Texas Education Code, section 51.303(c), "American Sign Language is recognized as a language, and any state institute of higher education may offer an elective course in American Sign Language. A student is entitled to count credit received for a course in American Sign Language toward satisfaction of a foreign language requirement of the institution of higher education where it is offered." The 1990 Classification of Instructional Programs Manual defines American Sign Language as a health science.)

<b>SGNL 1201</b>	Beginning American Sign Language I (1st semester ASL, 2 SCH version)
<b>SGNL 1301</b>	Beginning American Sign Language I (1st semester ASL, 3 SCH version)
<b>SGNL 1401</b>	Beginning American Sign Language I (1st semester ASL, 4 SCH version)
<b>SGNL 1501</b>	Beginning American Sign Language I (1st semester ASL, 5 SCH version)
SGNL 1202	Beginning American Sign Language II (2nd semester ASL, 2 SCH version)
	Beginning American Sign Language II (2nd semester ASL, 2 SCH version) Beginning American Sign Language II (2nd semester ASL, 3 SCH version)
	Beginning American Sign Language II (2nd semester ASL, 3 SCH version)

Introduction to American Sign Language covering finger spelling, vocabulary, and basic sentence structure in preparing individuals to interpret oral speech for the hearing impaired.

Approval Number	16.1603.51 13
CIP Area	
maximum SCH per student	10
maximum SCH per course	5
maximum contact hours per course	

### SGNL 2301 Intermediate American Sign Language I (3rd semester ASL) SGNL 2302 Intermediate American Sign Language II (4th semester ASL)

Review and application of conversational skills in American Sign Language; interpreting from signing to voice as well as from voice to signing. Introduction to American Sign Language literature and folklore.

Approval Number	16.1603.52 13
CIP Area	. Sign Language Interpretation & Translation
maximum SCH per student	
maximum SCH per course	3
maximum contact hours per course	80

## SOCI (Sociology)

			0001 (00010109))	
so	CI 1301	Introductory S	ociology	
	Introduction and social p	•	and principles used in the study of group life, soc	ial institutions,
	maximum S	CH per course	course	3
so	CI 1306	Social Problem	ns	
		· .	nciples to the major problems of contemporary so e, substance abuse, deviance, or family problems.	•
	CIP Area maximum Se maximum Se	CH per student CH per course		ocial Sciences 3
so	CI 2301	Marriage & the	e Family	
	_		narriage and family life. Problems of courtship, ma nodern American society.	ate selection,
	CIP Area maximum Se maximum Se	CH per student CH per course	course	ocial Sciences 3
so	CI 2306	Human Sexuali (Also see PSYC		
	Study of the	e psychological, so	ociological, and physiological aspects of human se	xuality.
	(Cross-listed	d as PSYC 2306)		
	CIP Area maximum Somaximum Somaximum So	CH per student	course	Psychology 3
	CI 2319	Minority Studie	es I	
<b>3</b> U			nd cultural development of minority groups. May Asian American, and Native American issues.	include African
	Approval Nu CIP Area maximum S	ımber CH per student	Asian American, and Native American issues	ocial Sciences

maximum contact hours per course .......48

# SOCI 2326 Social Psychology (Also see PSYC 2319)

Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. (*Cross-listed as PSYC 2319*)

Approval Number	42.1601.51 25
CIP Area	Psychology
maximum SCH per student	3 03
maximum SCH per course	
maximum contact hours per course	

### SOCI 2336 Criminology

Current theories and empirical research pertaining to crime and criminal behavior and its causes, methods of prevention, systems of punishment, and rehabilitation.

Approval Number	45.0401.51 25
CIP Area	Social Sciences
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

### SOCI 2339 Juvenile Delinquency

Nature, extent, and causes of juvenile delinquency; youthful offenders and their career patterns; institutional controls and correctional programs.

Approval Number	45.0401.51 25
CIP Area	Social Sciences
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	

# SOCI 2340 Drug Use & Abuse (Also see PHED 1165 & PHED 1346)

Study of the use and abuse of drugs in today's society. Emphasizes the physiological, sociological, and psychological factors. (*Cross-listed as PHED 1165 & PHED 1346*)

Approval Number	51.1504.52 16
CIP Area	
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	48

# SOCI 2289 Academic Cooperative (2 SCH version) SOCI 2389 Academic Cooperative (3 SCH version)

An instructional program designed to integrate on-campus study with practical hands-on experience in sociology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.

Approval Number	45.0101.51 25
CIP Area	Social Sciences
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	144

### **SOCW (Social Work)**

#### **SOCW 2361** Introduction to Social Work

Development of the philosophy and practice of social work in the United States, survey of the fields and techniques of social work.

Approval Number	44.0701.51 24
CIP Area	Public Affairs
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	48

#### SOCW 2362 Social Welfare as a Social Institution

Introduction to the study of modern social work, the underlying philosophy and ethics of social work, and the major divisions and types of social work together with their methods and objectives.

Approval Number	44.0701.52 24
CIP Area	Public Affairs
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

## SPAN (Spanish Language)

SPAN 1100 SPAN 1110	Beginning Spanish Conversation I (1 SCH version) Beginning Spanish Conversation II (1 SCH version)
SPAN 1200 SPAN 1210	Beginning Spanish Conversation I (2 SCH version) Beginning Spanish Conversation II (2 SCH version)
SPAN 1300 SPAN 1310	Beginning Spanish Conversation I (3 SCH version) Beginning Spanish Conversation II (3 SCH version)
SPAN 2106 SPAN 2206 SPAN 2306	Intermediate Spanish Conversation (1 SCH version) Intermediate Spanish Conversation (2 SCH version) Intermediate Spanish Conversation (3 SCH version)
Basic practic	ce in comprehension and production of the spoken language.
CIP Area maximum So maximum So	Imber
SPAN 1305	Intensive Beginning Spanish
vocabulary,	al skills in listening comprehension, speaking, reading, and writing. Includes bas grammatical structures, and culture. Covers material comparable to separate 1 mester Spanish courses.
CIP Area maximum So maximum So	mber
SPAN 1311 SPAN 1411 SPAN 1511	Beginning Spanish I (1st semester Spanish, 3 SCH version) Beginning Spanish I (1st semester Spanish, 4 SCH version) Beginning Spanish I (1st semester Spanish, 5 SCH version)
SPAN 1312 SPAN 1412 SPAN 1512	Beginning Spanish II (2nd semester Spanish, 3 SCH version) Beginning Spanish II (2nd semester Spanish, 4 SCH version) Beginning Spanish II (2nd semester Spanish, 5 SCH version)
	al skills in listening comprehension, speaking, reading, and writing. Includes bas grammatical structures, and culture.
CIP Area maximum S0 maximum S0	Imber

### Intermediate Spanish I (3rd semester Spanish) **SPAN 2311 SPAN 2312** Intermediate Spanish II (4th semester Spanish) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. CIP Area ...... Foreign Languages maximum contact hours per course ......80 **SPAN 2313** Spanish for Native/Heritage Speakers I **SPAN 2315** Spanish for Native/Heritage Speakers II Review and application of skills in reading and writing. Emphasizes vocabulary acquisition, reading, composition, and culture. Designed for individuals with oral proficiency in Spanish, these courses are considered equivalent to SPAN 2311 & 2312. CIP Area ...... Foreign Languages maximum contact hours per course .......80 **SPAN 2316** Career Spanish I **SPAN 2317** Career Spanish II Basic practice in comprehension and production of the spoken language. Approval Number......16.0905.54 13 CIP Area ...... Foreign Languages maximum contact hours per course .......48 **SPAN 2321** Introduction to Spanish Literature I (Iberian) **SPAN 2322** Introduction to Spanish Literature II (Iberian) **SPAN 2323** Introduction to Latin American Literature **SPAN 2324** Spanish Culture Representative readings of the culture. CIP Area ...... Foreign Languages

## **SPAN 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 Spanish language and literature. CIP Area ...... Interdisciplinary SPCH (Speech) **SPCH 1144** Forensic Activities I **SPCH 1145** Forensic Activities II **SPCH 1146 Parliamentary Procedure SPCH 2144** Forensic Activities III **SPCH 2145 Forensic Activities IV** Laboratory experience for students who participate in forensic activities. CIP Area ......Letters **SPCH 1311 Introduction to Speech Communication** Theories and practice of communication in interpersonal, small group, and public speech. CIP Area ......Letters **SPCH 1315 Public Speaking** Research, composition, organization, delivery, and analysis of speeches for various purposes and occasions. CIP Area .....Letters

Academic Cooperative (2 SCH version)

**SPAN 2289** 

## **Interpersonal Communication SPCH 1318** Theories and exercises in verbal and nonverbal communication with focus on interpersonal relationships. Approval Number......23.1001.54 12 CIP Area ......Letters **SPCH 1321 Business & Professional Communication** The application of theories and practice of speech communication as applied to business and professional situations. CIP Area ......Letters **SPCH 1342 Voice & Diction** Physiology and mechanics of effective voice production with practice in articulation, pronunciation, and enunciation. Approval Number......23.1001.58 12 CIP Area .....Letters maximum contact hours per course .......96 **SPCH 2301 Introduction to Technology and Human Communication** A survey of emerging interactive communication technologies and how they influence human communication, including interpersonal, group decision-making, and public and private communication contexts. (Cross-listed as COMM 2301) CIP Area ....... Communication Studies **SPCH 2316** Interviewing Application of communication concepts in selected interview settings with emphasis on dyadic communication, questioning techniques, interview structure, and persuasion. (Cross-listed as COMM 2316) CIP Area ...... Communication Studies

## SPCH 2333 Discussion & Small Group Communication

Discussion and small group theories and techniques as they relate to group process and interaction.

Approval Number	23.1001.56 12
CIP Area	Letters
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

## SPCH 2335 Argumentation & Debate

Theories and practice in argumentation and debate including analysis, reasoning, organization, evidence, and refutation.

Approval Number	23.1001.59 12
CIP Area	Letters
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

## **SPCH 2341 Oral Interpretation**

Theories and techniques in analyzing and interpreting literature. Preparation and presentation of various literary forms.

Approval Number	23.1001.57 12
CIP Area	Letters
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	

## SPCH 2289 Academic Cooperative (2 SCH version) SPCH 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 speech.

Approval Number	24.0103.52 12
CIP Area	
maximum SCH per student	
maximum SCH per course	3
maximum contact hours per course	144

## **TECA (Early Childhood Education)**

### TECA 1303 Families, School, & Community

- 1) A study of the child, family, community, and schools, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues;
- 2) course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards;
- 3) requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations; and
- 4) course includes a minimum of 16 hours of field experiences.

Approval Number	13.0101 52 09
CIP Area	Education
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	80

## **TECA 1311 Educating Young Children**

- 1) An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities, and current issues;
- 2) course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards;
- 3) requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations;
- 4) course includes a minimum of 16 hours of field experiences.

Approval Number	13.1202 51 09
CIP Area	Education
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	

## TECA 1318 Wellness of the Young Child

- 1) A study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness, and safety practices. Focus on local and national standards and legal implications of relevant policies and regulations;
- 2) course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards;
- 3) requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations;
- 4) course includes a minimum of 16 hours of field experiences.

Approval Number	13.0101 53 09
CIP Area	Education
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	80

## **TECA 1354** Child Growth & Development

A study of the physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence.

Approval Number	13.1202 52 09
CIP Area	Education
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	48

## **VIET (Vietnamese Language)**

VIET 1311	Beginning Vietnamese I (1st semester Vietnamese, 3 SCH version)
<b>VIET 1411</b>	Beginning Vietnamese I (1st semester Vietnamese, 4 SCH version)
VIET 1511	Beginning Vietnamese I (1st semester Vietnamese, 5 SCH version)
<b>VIET 1312</b>	Beginning Vietnamese II (2nd semester Vietnamese, 3 SCH version)
<b>VIET 1412</b>	Beginning Vietnamese II (2nd semester Vietnamese, 4 SCH version)
<b>VIET 1512</b>	Beginning Vietnamese II (2nd semester Vietnamese, 5 SCH version)

Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

Approval Number	16.1408.5113
CIP Area	Foreign Languages
maximum SCH per student	10
maximum SCH per course	5
maximum contact hours per course	112

## VIET 2311 Intermediate Vietnamese I (3rd semester Vietnamese) VIET 2312 Intermediate Vietnamese II (4th semester Vietnamese)

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

Approval Number	16.1408.5213
CIP Area	Foreign Languages
maximum SCH per student	8
maximum SCH per course	
maximum contact hours per course	

#### **New Courses**

## <u> 2009:</u>

MUSI 2178	Brass Class III
MUSI 2179	Brass Class IV
MUSI 2188 MUSI 2189	Percussion Class III Percussion Class IV
MUSI 2195	Strings Class III
MUSI 2196	Strings Class IV
<u> 2010:</u>	

BIOL	1415	Introduction to Biotechnology II
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**ENGR 2107 Fundamentals of Circuit Analysis Laboratory** 

**ENGR 2307 Fundamentals of Circuit Analysis** 

**ENGR 2407** Fundamentals of Circuit Analysis (Lecture and Lab)

## **Deleted Courses**

The following courses will be deleted as of fall 2010. They may not be submitted for formula funding after the start of the fall 2010 semester.

BUSI 1311 BUSI 2302	Salesmanship Legal Environment of Business (2nd semester Business Law)
COSC 1300 COSC 1400	Introduction to Computing (3 SCH version) Introduction to Computing (4 SCH version)
GEOL 1446 GEOL 1346 GEOL 1146	Astronomy (lecture + lab) Astronomy (lecture) Astronomy (lab)
HIST 2380	Mexican-American History
PSYC 1301 PSYC 2303 PSYC 2309 PSYC 2318 PSYC 2310 PSYC 2312 PSYC 2313	Human Relations Business Psychology Child Guidance and Self Juvenile Delinquency Early Childhood Human Development Adolescent Psychology II
<b>REAL 1301</b>	Principles of Real Estate

The following courses will be deleted as of fall 2011. They may not be submitted for formula funding after the start of the fall 2011 semester.

MUSI 1300	Foundations of Music
MUSI 1104	Teaching Music in the Elementary School (1 SCH version)
MUSI 1316	Elementary Sight Singing & Ear Training I (3 SCH version)
MUSI 1317	Elementary Sight Singing & Ear Training II (3 SCH version)

MUSI 1162	Vocal Diction I (1 SCH version, multiple languages)
MUSI 1262	Vocal Diction I (2 SCH version, multiple languages)
MUSI 1165	Vocal Diction II (1 SCH version, multiple languages)
MUSI 2262	Vocal Diction II (2 SCH version, multiple languages)

#### **Revised Courses**

#### 2009

### **BUSI 1307** Personal Finance (3 SCH version)

(Revised to cross-list with HECO 1307) **NOTE**: BUSI 1307 is not part of the business field of study and may not transfer toward a degree in business.

**BCIS 1301/1401** Microcomputer Applications BCIS 1301/1401 are no longer cross-listed as COSC 1301/1401.

## COSC 1301/1401 Computer Science

Course description was revised. COSC 1301/1401 are no longer cross-listed as BCIS 1301/1401.

```
MUSI 1300 Foundations of Music
MUSI 1104 Teaching Music in the Elementary School (1 SCH version)
```

MUSI 1304 Foundations of Music (3 SCH version)

Course description was revised. MUSI 1304 was revised by deleting the 3 SCH designation.

```
MUSI 1114 Keyboard Harmony Piano Class for Music Majors I
MUSI 1115 Keyboard Harmony Piano Class for Music Majors II
MUSI 2114 Keyboard Harmony Piano Class for Music Majors III
MUSI 2115 Keyboard Harmony Piano Class for Music Majors IV
```

Course name changed; course description changed; maximum SCH per student and course and maximum contact hours per course changed.

```
MUSI 1116 Sight Singing & Ear Training I (1 SCH version)
MUSI 1216 Sight Singing & Ear Training I (2 SCH version)
MUSI 1117 Sight Singing & Ear Training II (1 SCH version)
MUSI 1217 Sight Singing & Ear Training II (2 SCH version)
```

Course name changed by deleting "Elementary"; maximum SCH per student and course and maximum contact hours per course changed.

```
MUSI 1157 Opera Workshop I (1 SCH version)
MUSI 1257 Opera Workshop I (2 SCH version)
MUSI 1158 Opera Workshop II (1 SCH version)
MUSI 1258 Opera Workshop II (2 SCH version)
SCHs added

MUSI 1163 Jazz Improvisation I (1 SCH version)
MUSI 1263 Jazz Improvisation I (2 SCH version)
MUSI 1164 Jazz Improvisation II (1 SCH version)
```

MUSI 2163 Jazz Improvisation III

MUSI 1264

MUSI 2164 Jazz Improvisation IV

Course name changed from Improvisation to Jazz Improvisation and description revised

Jazz Improvisation II (2 SCH version)

```
MUSI 2116 Sight Singing & Ear Training III (1 SCH version)
MUSI 2216 Sight Singing & Ear Training III (2 SCH version)
MUSI 2117 Sight Singing & Ear Training IV (1 SCH version)
MUSI 2217 Sight Singing & Ear Training IV (2 SCH version)
```

Course name changed from "Advanced Sight Singing I and II"; maximum SCH per student and course and maximum contact hours per course changed.

```
MUSI 1178 Brass Class I
MUSI 1179 Brass Class II
MUSI 2178 Brass Class III (New Course)
MUSI 2179 Brass Class IV (New Course)
```

TCCNs changed for all four courses

```
MUSI 1195 Strings Class I
MUSI 1196 Strings Class II
MUSI 2195 Strings Class III (New Course)
MUSI 2196 Strings Class IV (New Course)
```

TCCNS numbers changed for all four courses

#### 2010

The maximum number of contact hours for **Academic Cooperative** courses was reduced to 144 from 336.

ANTH 2289 ANTH 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)
BIOL 2289 BIOL 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)
CHEM 2289 CHEM 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)
COMM 2289 COMM 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)
DANC 2289 DANC 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)
DRAM 2289 DRAM 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)
ECON 2289 ECON 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)
FREN 2289 FREN 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)
GEOG 2289 GEOG 2389	Academic Cooperative (2 SCH version) Academic Cooperative (3 SCH version)

<b>GERM 2289</b>	Academic Cooperative (2 SCH version)
GERM 2389	Academic Cooperative (3 SCH version)
<b>GOVT 2289</b>	Academic Cooperative (2 SCH version)
GOVT 2389	Academic Cooperative (3 SCH version)
HIST 2289	Academic Cooperative (2 SCH version)
HIST 2389	Academic Cooperative (3 SCH version)
MUSI 2289	Academic Cooperative (2 SCH version)
MUSI 2389	Academic Cooperative (3 SCH version)
PHIL 2289	Academic Cooperative (2 SCH version)
PHIL 2389	Academic Cooperative (3 SCH version)
PHYS 2289	Academic Cooperative (2 SCH version)
PHYS 2389	Academic Cooperative (3 SCH version)
SOCI 2289	Academic Cooperative (2 SCH version)
SOCI 2389	Academic Cooperative (3 SCH version)
<b>SPAN 2289</b>	Academic Cooperative (2 SCH version)
SPAN 2389	Academic Cooperative (3 SCH version)
SPCH 2289	Academic Cooperative (2 SCH version)
SPCH 2389	Academic Cooperative (3 SCH version)

The following courses were reviewed as part of the Voluntary Mechanical Engineering Transfer Compact. Course descriptions were revised and learning outcomes were added.

```
CHEM 1311
             Chemistry I
             Chemistry I Laboratory
CHEM 1111
             Chemistry II
CHEM 1312
             Chemistry II Laboratory
CHEM 1112
            Introduction to Engineering
ENGR 1201
ENGR 1204/1304 Engineering Graphics I
ENGR 2301/2401 Engineering Mechanics: Statics
ENGR 2302/2402 Engineering Mechanics: Dynamics
MATH 2413
             Calculus I
             Calculus II
MATH 2414
MATH 2415
             Calculus III
MATH 2320
             Differential Equations
             University Physics I
PHYS 2325
             University Physics I Laboratory
PHYS 2125
             University Physics II
PHYS 2326
             University Physics II Laboratory
PHYS 2126
```

## **Developmental Courses**

The following courses are developmental and do not result in degree or transferable credit. These courses may be offered for funding reimbursement.

#### **Student Success Course**

Psychology of learning and success. Examines factors that underlie learning, success, and personal development in higher education. Topics covered include information processing, memory, strategic learning, self-regulation, goal setting, motivation, educational and career planning, and learning styles. Techniques of study such as time management, listening and note taking, text marking, library and research skills, preparing for examinations, and utilizing learning resources are covered. Includes courses in college orientation and developments of students' academic skills that apply to all disciplines.

Approval Number	32.0101.52 12
CIP Area	Basic Skills, General
maximum SCH per student	9
maximum SCH per course	
maximum contact hours per course	96

## **Developmental Mathematics**

Topics in mathematics such as arithmetic operations, basic algebraic concepts and notation, geometry, and real and complex number systems.

This course may be taught in a 3 SCH or 4 SCH format.

Approval Number	32.0104.51 19
CIP Area	
maximum SCH per student	
maximum SCH per course	
maximum contact hours per course	96

#### **Intermediate Algebra**

A study of relations and functions, inequalities, factoring, polynomials, rational expressions, and quadratics with an introduction to complex numbers, exponential and logarithmic functions, determinants and matrices, and sequences and series.

Approval Number	32.0104.52 19
CIP Area	
maximum SCH per student	3
maximum SCH per course	
maximum contact hours per course	64

## **Developmental Reading**

Fundamental reading skills to develop comprehension, vocabulary, and rate.

Approval Number	32.0108.52 12
CIP Area	Reading, Literacy, and Communication
maximum SCH per student	•
maximum SCH per course	
maximum contact hours per course	

## **Developmental Writing**

Development of fundamental writing skills such as idea generation, organization, style, utilization of standard English, and revision.

Approval Number	32.0108.53 12
CIP Area	
maximum SCH per student	9
maximum SCH per course	3
maximum contact hours per course	

## **Developmental Composition for Non-Native Speakers**

Principles and techniques of composition and reading. Open only to non-native speakers.

Approval Number	32.0108.54 12
CIP Area	Reading, Literacy, and Communication
maximum SCH per student	9
maximum SCH per course	
maximum contact hours per course	

## **Developmental ESOL Oral Communication**

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in an English-speaking society.

Approval Number	32.0108.55 12
CIP Area	Reading, Literacy, and Communication
maximum SCH per student	9
maximum SCH per course	3
maximum contact hours per course	96

## **Developmental ESOL Reading and Vocabulary**

Develops reading fluency and vocabulary in speakers of languages other than English and prepares them to function in an English-speaking society.

Approval Number	32.0108.56 12
CIP Area	
maximum SCH per student	3
maximum SCH per course	3
maximum contact hours per course	

## **Developmental ESOL Writing and Grammar**

Develops writing skills, including standard English usage, organization of ideas, and application of grammar, in speakers of languages other than English and prepares them to function in an English-speaking society.

Approval Number	32.0108.57 12
CIP Area	. Reading, Literacy, and Communication
maximum SCH per student	9
maximum SCH per course	3
maximum contact hours per course	96

## Non-Semester-Length Developmental Education Interventions

Note: Approved non-semester-length developmental education interventions shall be eligible for formula funding beginning in fall 2010 and subject to limitations prescribed by law. In order to receive funding, institutions must ensure that for each intervention student hours are logged and there is an instructor of record who can assist students upon request. Institutions may request reimbursement for non-semester-length interventions within the contact hour parameters identified below for each type of developmental education intervention.

#### **Student Success Course**

Psychology of learning and success. Examines factors that underlie learning, success, and personal development in higher education. Topics covered include information processing, memory, strategic learning, self-regulation, goal setting, motivation, educational and career planning, and learning styles. Techniques of study such as time management, listening and note taking, text marking, library and research skills, preparing for examinations, and utilizing learning resources are covered. Includes courses in college orientation and developments of students' academic skills that apply to all disciplines.

Approval Number	32.0101.53 12
CIP Area	
minimum contact hours per student	4
maximum contact hours per student	96
minimum contact hours per course	4
maximum contact hours per course	96

#### **Developmental Mathematics**

Topics in mathematics such as arithmetic operations, basic algebraic concepts and notation, geometry, and real and complex number systems.

Approval Number	32.0104.53 19
CIP Area	
minimum contact hours per student	4
maximum contact hours per student	288
minimum contact hours per course	4
maximum contact hours per course	

#### **Intermediate Algebra**

A study of relations and functions, inequalities, factoring, polynomials, rational expressions, and quadratics with an introduction to complex numbers, exponential and logarithmic functions, determinants and matrices, and sequences and series.

Approval Number	32.0104.54 19
CIP Area	
minimum contact hours per student	•
maximum contact hours per student	
minimum contact hours per course	
maximum contact hours per course	

## **Developmental Reading**

Fundamental reading skills to develop comprehension, vocabulary, and rate.

Approval Number	32.0108.61 12
CIP Area	Reading, Literacy, and Communication
minimum contact hours per student	4
maximum contact hours per student	
minimum contact hours per course	4
maximum contact hours per course	

## **Developmental Writing**

Development of fundamental writing skills such as idea generation, organization, style, utilization of standard English, and revision.

Approval Number	32.0108.62 12
CIP Area	
minimum contact hours per student	4
maximum contact hours per student	
minimum contact hours per course	4
maximum contact hours per course	

## **Developmental Composition for Non-Native Speakers**

Principles and techniques of composition and reading. Open only to non-native speakers.

Approval Number	32.0108.63 12
CIP Area	Reading, Literacy, and Communication
minimum contact hours per student	4
maximum contact hours per student	
minimum contact hours per course	4
maximum contact hours per course	96

## **Developmental ESOL Oral Communication**

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in an English-speaking society.

Approval Number	32.0108.64 12
CIP Area	
minimum contact hours per student	4
maximum contact hours per student	
minimum contact hours per course	4
maximum contact hours per course	

## **Developmental ESOL Reading and Vocabulary**

Develops reading fluency and vocabulary in speakers of languages other than English and prepares them to function in an English-speaking society.

Approval Number	32.0108.65 12
CIP Area	Reading, Literacy, and Communication
minimum contact hours per student	4
maximum contact hours per student	
	4
maximum contact hours per course	96

## **Developmental ESOL Writing and Grammar**

Develops writing skills, including standard English usage, organization of ideas, and application of grammar, in speakers of languages other than English and prepares them to function in an English-speaking society.

Approval Number	32.0108.66 12
CIP Area	Reading, Literacy, and Communication
minimum contact hours per student	4
	4
	96

## **Courses Not Eligible For Funding**

New Testament Greek Biblical Hebrew Old Testament Survey New Testament Survey

## **Appendix A: Lecture/Lab Table**

Please note that this table shows the many allowable lecture/lab combinations for academic courses, but not all possible combinations will fit with each academic course. For any particular course, be sure to follow the parameters given in the ACGM course entry for the number of credit hours and contact hours.

Table 1. Lecture-Lab Credit/Contact Hour Combinations for Academic Courses

SEMESTER CREDIT HOURS	Contact Hour Range per Semester	COMBINATIONS  Lecture/week Lab/week Contact/sem		
1 SCH	16-64	Lecture/week  0 0 0 1 1	2 3 4 0 1	32 48 64 16 32
2 SCH	32-128	0 0 0 0 1 1 1 2 2	5 6 7 8 2 3 4 0	80 96 112 128 48 64 80 32 48
3 SCH	48-144	1 1 1 1 2 2 2 2 3 3	5 6 7 8 2 3 4 0	96 112 128 144 64 80 96 48 64
4 SCH	64-160	1 2 2 2 2 2 3 3 3 4 4	9 5 6 7 8 2 3 4 0	160 112 128 144 160 80 96 112 64
5 SCH	80-176	2 3 3 3 4 4 4 5 5	9 5 6 7 8 2 3 4 0	176 128 144 160 176 96 112 128 80 96

Lower-Division Academic Course Guide Manua
APPENDIX B: VOLUNTARY MECHANICAL ENGINEERING TRANSFER COMPACT

The Voluntary Mechanical Engineering Transfer Compact is a voluntary agreement among institutions of higher education within the State of Texas. Its purpose is to foster enhanced transfer processes for students pursuing a bachelor's degree in mechanical engineering, and to increase the number and preparedness of students matriculating from a two-year mechanical engineering pre-engineering program (PMENG) at community colleges into a baccalaureate mechanical engineering program (BSMENG) at four-year universities. The intention of this transfer compact is not to change the curriculum of a four-year institution. The intention of this agreement is to provide guidance to students with respect to what courses offer the best mechanism for obtaining a BSMENG degree.

The courses in the articulated transfer curriculum are: Calculus I (MATH 2413); Calculus II (MATH 2414); Calculus III (MATH 2415); Differential Equations (MATH 2320); General Chemistry I (CHEM 1311); General Chemistry I Laboratory (CHEM 1111); General Chemistry II (CHEM 1312); General Chemistry II Laboratory (CHEM 1112); University Physics I (PHYS 2325); University Physics I Laboratory (PHYS 2125); University Physics II (PHYS 2326); University Physics II Laboratory (PHYS 2126); Engineering Mechanics: Statics (ENGR 2301); Engineering Mechanics: Dynamics (ENGR 2302); Fundamentals of Circuit Analysis (ENGR 2307); Fundamentals of Circuit Analysis Laboratory (ENGR 2107); Engineering Graphics I (ENGR 1204/1304); and Introduction to Engineering (ENGR 1201).

For more information on the Mechanical Engineering Transfer Compact go to this website: <a href="https://www.thecb.state.tx.us/transfercompacts">www.thecb.state.tx.us/transfercompacts</a>

## **Voluntary Mechanical Engineering Transfer Compact**

# Memorandum of Understanding and Course Transfer Agreement Pertaining to the Bachelor of Science Degree in Mechanical Engineering

This voluntary agreement is among the signatory institutions of higher education within the State of Texas. Its purpose is to foster enhanced transfer processes for students pursuing a bachelor's degree in mechanical engineering, and to increase the number and preparedness of students matriculating from a two-year mechanical engineering pre-engineering program (PMENG) at community colleges into a baccalaureate mechanical engineering program (BSMENG) at four-year universities. The intention of this transfer compact is not to change the curriculum of a four-year institution. The intention of this agreement is to provide guidance to students with respect to what courses offer the best mechanism for obtaining a BSMENG degree.

This agreement recognizes the following terms and conditions:

- 1. **Course Offerings** When offering any or all of the mathematics, engineering, and science courses shown in Annex A, signatory institutions will offer the course(s) consistent with the indicated course description(s) and student learning outcomes.
- 2. **Transfer of Courses** Students who successfully complete courses shown in Annex A will be able to transfer the course credit hours into the BSMENG program at a signatory four-year institution. The four-year institutions will accept up to the number of semester credit hours for the course at the four-year institution, provided that credit for a given course is a curricular requirement at the four-year institution. However, no course with a grade of less than "C" will be transferred or applied to the BSMENG degree program.
- 3. **Admission** Students who successfully complete the recommended PMENG courses shown in Annex B and who maintain a cumulative GPA of at least 2.5, with no grade lower than C in transferable hours, will be assured admission into the BSMENG program at any of the signatory institutions. Students not satisfying these criteria will need to be admitted through the normal process.
- 4. **Assessment** The signatory institutions will assess the effectiveness of this transfer compact on a periodic basis of at least once every three years, including student performance in upper-division courses and the number of students transferring.
- 5. **Retention of Agreement** Each signatory institution and the Texas Higher Education Coordinating Board will maintain a copy of this transfer compact.
- 6. **Advertising** All signatory institutions will make the broad statewide opportunities afforded under this transfer compact known to the students.

Institution Name		
President Signature		
. rootaont orginataro	Date	

## **Appendix C: Approved Field Of Study Curricula**

The current list of approved field of study curricula may be viewed on the Internet at: http://www.thecb.state.tx.us/AAR/UndergraduateEd/fos.cfm Field of study curricula are being developed continuously. Please check this web site regularly.

#### 2009 Revision

## Associate of Arts in Teaching Leading to Initial Texas Teacher Certification

#### EC-6

## AAT Components - Total: 60 SCHs

- Completed core curriculum (42-48 SCHs) PLUS:
- MATH 1350, MATH 1351, or equivalent (3-6 SCHs)
- Additional science beyond the core curriculum (3-6 SCHs)
- EDUC 1301, EDUC 2301 (3-6 SCHs)

#### **EC-Grade 6 Certification (areas)**

- EC-6 Generalist
- EC-6Bilingual Generalist
- EC-6 ESL Generalist
- EC-6 other content area teaching fields/academic disciplines/interdisciplinary TBA

## 4-8, EC-12 Special Education

## AAT Components - Total: 60 SCHs

- Completed core curriculum (42-48 SCHs) PLUS:
- MATH 1350, MATH 1351 or equivalent (3-6 SCHs)
- Additional science beyond the core curriculum (3-6 SCHs)
- EDUC 1301, EDUC 2301 (3-6 SCHs)

#### **Grades 4-8 Certification (areas)**

- 4-8 Generalist
- 4-8 Bilingual Generalist
- 4-8 ESL Generalist
- 4-8 English Language Arts & Reading
- 4-8 English Language Arts & Reading and Social Studies
- 4-8 Mathematics
- 4-8 Science
- 4-8 Mathematics and Science
- 4-8 Social Studies
- 4-8 other content area teaching fields/academic disciplines/interdisciplinary TBA

### **EC-Grade 12 Special Education Certification**

- EC-12 Special Education
- EC-12 other Special Education certificates TBA (i.e. Teacher of the Deaf and Hard of Hearing)

#### 8-12, EC-12 Other Than Special Education

#### AAT Components - Total: 60 SCHs

- Completed core curriculum (42-48 SCHs) PLUS:
- EDUC 1301, EDUC 2301 (up to 6 SCHs)
- content area teaching fields/academic disciplines (up to 12 SCHs)

### **Grades 8-12 Certification (areas)**

- 8-12 History
- 8-12 Social Studies
- 8-12 Mathematics
- 8-12 Life Sciences
- 8-12 Physical Sciences
- 8-12 Science
- 8-12 English Language Arts & Reading
- 8-12 Computer Science
- 8-12 Technology Applications
- 8-12 Health Science Technology Education
- 8-12 Speech
- 8-12 Journalism
- 6-12 Business Education
- 8-12 Marketing Education
- 8-12 Mathematics & Physics
- 8-12 Agricultural Sciences and Technology
- 6-12 Technology Education
- 6-12 Languages other than English
- 6-12 Family and Consumer Sciences
- 8-12 Dance
- 8-12 Mathematics & Physical Science & Engineering
- 8-12 Human Development and Family Studies
- 8-12 Hospitality, Nutrition and Food Sciences
- 8-12 Other content area teaching fields/academic disciplines TBA (i.e., Chemistry)

#### **EC-Grade 12 Certification other than Special Education**

- EC-12 Music
- EC-12 Physical Education
- EC-12 Art
- EC-12 Health
- EC-12 Theatre Arts
- EC-12 Technology Applications
- EC-12 Languages other than English
- EC-12 Other non-special education fields

## **Field of Study Curriculum for Business**

The Business Field of Study Curriculum Advisory Committee reviewed the lower-division (freshman and sophomore) requirements of all public four-year colleges and universities in the state of Texas for students seeking a Bachelor of Business Administration (BBA) degree, including all specializations, concentrations, etc. The Committee compiled and compared the findings in an attempt to develop a set of courses that could constitute a Field of Study Curriculum for students seeking the BBA degree; the curriculum would also apply to institutions that award the Bachelor of Arts (BA) or Bachelor of Science (BS) degree with a major in business, including all business specializations. Although some institutions might require a particular course indicative of its mission or region, the committee found that there was substantial commonality among the requirements at different colleges and universities.

Based on that information, the Committee proposes the following <u>annotated set of courses</u> (totaling between 21 and 24 semester credit hours of fully transferable and applicable lower-division courses) to be considered as a Field of Study Curriculum for Business:

#### Courses

Content Area	Number and type of courses	Texas Common Course Numbering System (TCCNS) Equivalents
Economics	2 courses: Microeconomics & Macroeconomics	ECON 2301 & 2302 only
Mathematics	1 course: Minimum content must be at the level of Calculus or above	MATH 1325 <sup>1</sup>
Computer Literacy	1 course: Business Computer Applications	BCIS 1305 or 1405 only
Speech	1 course: Public speaking with an emphasis (50% or more of course content) on the preparation and presentation of professional speeches, using computer technology when appropriate	SPCH 1311 (with appropriate content only), or SPCH 1315, or SPCH 1321 (preferred) only
Accounting	2 courses: Financial & Managerial Accounting	ACCT 2301 or 2401 & 2302 or 2402 only

The following Notes are also part of the field of study curriculum. They address special circumstances.

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<sup>&</sup>lt;sup>1</sup>Individual institutions should determine any prerequisite requirements for MATH 1325.

#### **NOTES:**

**First**, wherever possible, courses applied to fulfill the field of study curriculum requirement should also be used to satisfy requirements in the general academic core curriculum. Generally, the math course, the speech course and the first economics course *may* be able to fulfill requirements in both curricula.

**Second**, up to a total of six additional semester credit hours of business-related lower-division course work may be transferred by local agreement between institutions, OR required by the receiving institution as long as the additional credit does not duplicate any other requirement within the field of study curriculum.

**Third**, special circumstances dictate the following supplements to the field of study curriculum:

- Degree programs in Information Systems, Computer Information Systems, and Management Information Systems may require additional courses and/or demonstrated proficiency in computer programming;
- International Business and other business programs with a specific international focus may require additional courses and/or demonstrated proficiency in foreign language; and
- Joint degree programs in which the degree awarded is a business degree, but the program
  is jointly offered by a business and a non-business discipline (such as a BBA in Actuarial
  Science offered jointly by a College of Business and a Department of Mathematics and
  Statistics) may include some or all of any field of study curricular components of the nonbusiness discipline. If no field of study exists for the non-business discipline, the lowerdivision courses that are normally required of majors in the non-business discipline should
  be completed as part of lower-division preparation for upper-division work.

## Field of Study Curricula for Communication Framework

Communication degrees must be flexible and adaptable due to rapidly changing and emerging communication technologies. Therefore, the Advisory Committee to Develop a Field of Study Curriculum for Communication (Committee) intends that the Field of Study Curricula for Communication (FOSC for Communication) will serve as a *framework* within which: (1) current students may transfer more easily between state-supported institutions, and (2) new communication media degrees may be developed or adapted as the communication technology evolves.

To accomplish those dual goals, the Committee has chosen to list broad competencies under which 12 to 15 semester credit hours (SCH) of lower-division coursework in each degree plan constitute the FOSC for Communication for Bachelor of Arts (BA) and Bachelor of Science (BS) degree programs in all communication areas (listed as Communications, general). Each of four sub-areas in Communication would constitute a discrete Field of Study Curriculum: (1) Advertising/Public Relations, (2) Journalism/Mass Communication, (3) Radio & Television Broadcasting/Broadcast Journalism, and (4) General Communication/Communication Studies/Speech Communication/Speech & Rhetorical Studies/Organizational Communication.

A student who transfers from one institution of higher education to another without completing the applicable sub-area Field of Study Curriculum for Communication of the sending institution shall receive academic credit in the sub-area Field of Study Curriculum for each of the courses that the student has successfully completed in the sub-area Field of Study Curriculum of the sending institution. Following receipt of credit for these courses, the student may be required to satisfy further course requirements in the sub-area Field of Study Curriculum of the receiving institution. Practicum and internship hours are subject to the approval of the receiving institution.

The Committee has designated a "menu" of specific courses that would fulfill the applicable competency area in the Field of Study Curriculum for that sub-area. The Committee further has given institutions latitude in selecting the number of SCH within each competency area that they will set as their degree requirements for their native students. However, each institution will accept the complete sub-area Field of Study Curriculum and apply the credit toward the appropriate communication degree program for the block of courses transferred.

Institutions that choose to offer a Field of Study Curriculum for one or more sub-areas in Communication are not required to offer all courses included in the applicable sub-area menu(s). Rather, such institutions are required to offer a 12-to-15-SCH block of courses for the applicable sub-area, which includes at least 6 to 9 SCH of courses listed under Competency Area 1 and 3 to 9 SCH of courses listed under Competency Area 2. The communication faculty at each institution that offers FOSC for Communication may designate from among the courses included in each menu specific courses in their programs that will fulfill the FOSC for Communication competencies. These courses will comprise the 12-to-15-SCH FOSC for Communication that will transfer between Texas higher education institutions as the lower-division requirements for a baccalaureate degree in the various communication areas.

Colleges and universities will accept at least a 12-SCH block, with an institutional prerogative to accept 15 SCH. Colleges and universities may deny the transfer of credit for courses with a grade of "D" as applicable to the student's field of study courses. Transfer students may be required to complete between 3 and 6 additional lower-division SCH in their majors, if the receiving institution has additional lower-division courses that are: (1) specific to any communication degree, (2) required of their native students, (3) needed for the successful completion of advanced coursework at that institution, and (4) not duplicative in content of any course in the applicable sub-area Field of Study Curriculum for Communication that the student already has completed.

The Field of Study Curricula for Communication may serve as the foundation for teacher preparation and must be included in teacher certification requirements, but the Field of Study Curricula do not constitute the complete body of knowledge or competencies needed by and expected of certified teachers of communication. Therefore it is recommended that certification of K-12 teachers in any area of communication be limited exclusively to those with an earned four-year degree in that area of communication. (Note: Certification of K-12 teachers in Texas is under the authority of the State Board for Educator Certification.)

Implementing these Field of Study Curricula for Communication or any other field of study depends upon trained academic advisers at each institution. The Committee urges the Coordinating Board to require that institutions adopt policies and procedures for the training of academic counselors to implement the FOSC for Communication frameworks.

## Field of Study Curricula for Communication -- Competencies

Competency descriptions: The total semester credit hours (SCH) for the Field of Study Curricula for Communication must be between 12 to 15 SCH taken from the competencies below:

## **Competency Area 1**

• 6 to 9 SCH through which students gain historical, theoretical, and/or analytical competency of the communication field and/or sub-area (Advertising/Public Relations, Journalism/Mass Communication, Radio & Television Broadcasting/Broadcast Journalism, or General Communication/Communication Studies/Speech Communication/Speech & Rhetorical Studies/Organizational Communication).

## **Competency Area 2**

• 3 to 9 SCH in which students demonstrate competency in writing/performance/production courses relevant to the sub-area.

For each of the current sub-areas in Communication (Advertising/Public Relations, Journalism/Mass Communication, Radio & Television Broadcasting/Broadcast Journalism, or General Communication/Communication Studies/Speech Communication/Speech & Rhetorical Studies/ Organizational Communication), the courses listed in the following table would fulfill the applicable competency area in the FOSC for Communication. *However, institutions that choose to offer a Field of Study Curriculum for one or more sub-areas in Communication are not required to offer all courses included in the applicable sub-area menu(s)*.

## Field of Study Curricula for Communication - Courses\*

<u>Note for students and counselors:</u> For each of the current sub-areas in Communication, the courses listed would fulfill the applicable competency area in the Field of Study Curriculum for that sub-area. Existing and proposed courses are listed in alphabetical order, based on their generic *Lower-Division Academic Course Guide Manual* (ACGM) course names. Because institutions may have different course titles for the same ACGM course, Texas Common Course Numbers (TCCN) are included in parentheses. Courses with a grade of "D" or lower will not transfer.

Note for institutions: Each institution will accept the complete sub-area Field of Study Curriculum and apply the credit toward the appropriate communication degree program for the block of courses transferred. Institutions will accept at least a 12-SCH block, with an institutional prerogative to accept 15 SCH. Institutions that choose to offer a Field of Study Curriculum for one or more sub-areas in Communication are not required to offer all courses included in the applicable sub-area menu(s). Rather, such institutions are required to offer a 12-to-15-SCH block of courses for the applicable sub-area, which includes at least 6-9 SCH of courses listed under Competency Area 1 and 3-9 SCH of courses listed under Competency Area 2.

Total	Block of 12 SCH	Sub-Areas**			
(15-SCH block		Advertising/Public	Journalism/Mass	Radio & Television	General
	accepted at	Relations	Communication	Broadcasting/	Communication/
	rerogative of			Broadcast	Communication
acce	pting institution)			Journalism	Studies/Speech
					Communication/ Speech
					& Rhetorical Studies/
					Organizational
					Communication
		Intro to Mass Comm.	Intro to Mass	Intro to Film	Discussion & Small
	Historical/	(COMM 1307)	Comm. (COMM	(DRAM	Group Communication
	Theoretical/	Intro to Public	1307)	2366/COMM	(SPCH 2333)
	Analytical	Relations (COMM	Intro to Public	2366)	Interpersonal
		2330)	Relations (COMM	Intro to Mass	Communication (SPCH
	6-9 SCH	Intro to Technology	2330)	Comm. (COMM	1318)
	selected from:	& Human	Intro to Technology	•	Intro to Speech
7		Communication	& Human	Intro to	Communication (SPCH
res		(SPCH/COMM 2301)	Communication	Technology &	1311)
\ \ \		Media Literacy	(SPCH/COMM 2301)		Intro to Technology &
jug.		(COMM 2300)	Media Literacy	Communication	Human Communication
Competency Area		Intro to Advertising	(COMM 2300)	(SPCH/COMM	(SPCH/COMM 2301)
dμ		(COMM 2327)	News Gathering &	2301)	
Ō			Writing I (COMM 2311)*	Media Literacy (COMM 2300)	
			Intro to Advertising	,	
			(COMM 2327)	Radio/TV (COMM	
			Principles of	1335)	
			Journalism (COMM	1333)	
			2302)		
			Survey of Radio/TV		
			(COMM 1335)		

	I		ı	1	
		Advertising Art I	Editing & Layout	Audio/Radio	Interviewing
	Writing/	(COMM 2328)	(COMM 2305)	Production	(SPCH/COMM 2316)
	Performance/	Advertising Art II	Interviewing	(COMM 2303)	Argumentation &
	Production	(COMM 2329)	(SPCH/COMM 2316)	Interviewing	Debate (SPCH 2335)
		Editing & Layout	News Gathering &	(SPCH/COMM	Business & Professional
	3-9 SCH	(COMM 2305)	Writing I (COMM	2316)	Communication (SPCH
	selected from:	News Gathering &	2311)*	Intro to Cinematic	1321)
		Writing I (COMM	News Gathering &	Production	Oral Interpretation
		2311)	Writing II (COMM	(COMM 2304)	(SPCH 2341)
		News Gathering &	2315)	News Gathering &	Public Speaking (SPCH
a 2		Writing II (COMM	News Photography I	Writing I (COMM	1315)
Competency Area		2315)	(COMM 1316)	2311)	Voice & Diction (SPCH
λ.		Photography I	News Photography	News Gathering &	1342)
Suc		(COMM 1318)	II (COMM 1317)	Writing II (COMM	
ete		Photography II	Photography I	2315)	
ш		(COMM 1319)	(COMM 1318)	Radio/TV	
CO		Radio/TV News	Photography II	Announcing	
		(COMM 2332)	(COMM 1319)	(COMM 2331)	
		TV Production I	Radio/TV News	Radio/TV News	
		(COMM 1336)	(COMM 2332)	(COMM 2332)	
		TV Production II	Writing for Radio,	TV Production I	
		(COMM 1337)	TV, & Film (COMM	(COMM 1336)	
		Writing for Radio,	2339)	TV Production II	
		TV, & Film (COMM		(COMM 1337)	
		2339)		Writing for Radio,	
				TV, & Film (COMM	
				2339)	

<sup>\*</sup> A course may count toward only one competency area, as designated by the sending institution.

Note: Transfer students may be required to complete between 3 to 6 additional lower-division SCH in their major, if the receiving institution has additional lower-division courses that are: 1) specific to any communication degree, 2) required of their native students, 3) needed for the successful completion of advanced coursework at that institution, and 4) not duplicative in content of any course in the applicable sub-area Field of Study Curriculum for Communication that the student already has completed.

<sup>\*\*</sup> Each sub-area constitutes a discrete Field of Study Curriculum. Students who change emphasis from one sub-area to another should expect a change of sub-area Field of Study Curriculum.

## Field of Study Curriculum for Computer Science

Course Content	Prefix & Number	Course Name	Course Type	Semester Credit Hour (SCH)
Computer Science	COSC 1336 or 1436	Programming Fundamentals I	ACGM	3 or 4
Computer Science	COSC 1337 or 1437	Programming Fundamentals II	ACGM	3 or 4
Computer Science	COSC 2336 or 2436	Programming Fundamentals III		
Computer Science	COSC 2325 or 2425	Computer Organization and Machine Language	ACGM	3 or 4
Math	MATH 2313 or 2413	Calculus I	ACGM	3 or 4
Math	MATH 2314 or 2414	Calculus II	ACGM	3 or 4
Physics	PHYS 2425	Physics I	ACGM	4
Physics	PHYS 2426	Physics II	ACGM	4
		•	•	26-32 SCH Total

#### Notes:

- 1. COSC 1336/1436 and 1337/1437 are preparatory and sequential in nature; however, not all courses are required for the Computer Science major at all universities, but may apply to general degree requirements.
  - a) COSC 1336/1436 is not part of the Computer Science major requirements at The University of Texas at Austin, University of Texas at Arlington, University of Texas at Dallas, and Texas A & M University.
  - b) COSC 1337/1437 is not part of the Computer Science major requirements at The University of Texas at Austin. Preparatory courses such as COSC 1336/1436 and COSC 1337/1437 will assist students that need additional background but do not apply toward the computer science major requirements.
- 2. COSC 2325/2425 is not part of the Computer Science major requirements at the University of Texas at Austin or Texas A&M University, but may be applied to general degree requirements.
- 3. It is recommended that students complete the math sequence, physics sequence, and computer science sequence at the same institution to reduce the likelihood of potential gaps in the curriculum.

### Field of Study Curriculum for Criminal Justice

The Criminal Justice Field of Study Curriculum Advisory Committee reviewed the lower-division (freshman and sophomore) requirements of all public four-year colleges and universities in the state of Texas for students seeking a Bachelor of Arts (BA) or Bachelor of Science (BS) degree with a major in criminal justice, including all specializations, concentrations, etc. The Committee compiled and compared the findings in an attempt to develop a set of courses that could constitute a Field of Study Curriculum for Criminal Justice; the curriculum would apply to institutions that award the BA or BS degree with a major in criminal justice, including all criminal justice specializations.

Based on that information, the Committee recommends the following <u>set of courses</u> (totaling 15 semester credit hours (SCH) of fully transferable and applicable lower-division courses) and up to an additional 6 "discretionary" SCH to be considered as a Field of Study Curriculum for Criminal Justice. Staff concurs with that recommendation.

#### Courses

TCCNS*	SCH	COURSE TITLE
CRIJ 1301	3	Introduction to Criminal Justice
CRIJ 1306	3	Court Systems & Practices
CRIJ 1310	3	Fundamentals of Criminal Law
CRIJ 2313	3	Correctional Systems & Practices
CRIJ 2328	3	Police Systems & Practices

<sup>\*</sup>Texas Common Course Numbering System

NOTE: Up to a total of 6 additional semester credit hours of <u>criminal justice-related lower-division</u> <u>course work</u> may be transferred by local agreement **OR** required by the receiving institution, as long as the additional credit does not duplicate any other requirement within the field of study curriculum. Standards of instruction accepted for courses in the *Lower-Division Academic Course Guide Manual (ACGM)* will apply unless course-equivalent status has been developed by local agreement.

## Field of Study Curriculum for Engineering

Engineering is a very broad field that covers many disciplines; consequently, there is significant variance in engineering curricula among our state institutions. Even within an engineering specialty like chemical or electrical engineering there are differences that reflect varied areas of focus or innovations from one institution to the next. Nevertheless, the field of study curriculum for engineering is designed to promote maximum transferability for students while still preserving appropriate curricular diversity for institutions. As indicated in the following table, some field of study courses apply to any undergraduate engineering program, while other courses apply when the engineering program at the receiving institution requires such courses.

Therefore, there are no discrete field of study courses for specific specialties of engineering (chemical, civil, electrical, mechanical, etc.) Rather, a course is considered part of the field of study curriculum for an engineering program if:

1) it is listed in the table as applying to "all programs;"

<u>or</u>

2) it is listed as applying to "only those programs requiring the course" **and** is required by the program at the receiving institution.\*

If a course is not listed as a field of study course, then (as is the usual practice), a student can still transfer the course if there is a local agreement between the sending and receiving institutions.

The content areas of the field of study courses are from two areas of mathematics, two areas of science, and two areas of engineering. For a number of students, credits in some of these math and science courses would also satisfy components of the core curriculum. Note that additional matrices that follow the field of study table specify in more detail how certain configurations of coursework transfer.

Courses contained in the field of study curriculum for engineering (as defined by this document) will transfer freely among Texas public institutions of higher education. Receiving institutions may, however, require transfer students to successfully complete courses that are not part of this field of study curriculum if completion of those courses is required of all students in order to receive a baccalaureate degree in engineering. In addition, the receiving institution can specify minimum acceptable grades for courses accepted in transfer.

\*For example, a student at Community College X completed a General Chemistry II (Chem II) course and wishes to transfer to a mechanical engineering program at a university. General Chemistry II is designated in the Field of Study as "only those programs requiring Chem II." Therefore, if the mechanical engineering program at University A requires Chem II, then this institution would have to accept the course in transfer. But if the mechanical engineering program at University B does not require Chem II, then this institution would not be obligated to accept the course in transfer as part of the major.

Further, if the mechanical engineering program at University A at some point eliminates the General Chemistry II requirement, then the institution must accept Chem II in transfer as part of the major only if the student completed the course when the Chem II requirement (indicated in the university's catalog for that year) was still in effect. If the mechanical engineering program at University B at some point adds General Chemistry II as a requirement, the institution must then start accepting Chem II in transfer to be applied to the major.

## FIELD OF STUDY CURRICULUM FOR ENGINEERING

Content Area	Academic Course Guide Manual (ACGM) Title	ACGM Course No.	SCH	Applicable Engineering Programs
Calculus	Any combination of: Calculus I (3 or 4 SCH versions); Calculus II (3 or 4 SCH versions); Calculus III (3 or 4 SCH versions) that total a minimum of 8 SCH	MATH 2313 MATH 2413 MATH 2314 MATH 2414 MATH 2315 MATH 2415	8 – 12 <sup>1</sup>	All
Differential Equations/ Linear Algebra  (3 or 4 SCH version)  Linear Algebra (3 or 4 SCH version)  N  Differential Equations and Linear		MATH 2320 MATH 2420 MATH 2318 MATH 2418 MATH 2321 MATH 2421	3 – 8	Only those programs requiring these course(s) – See matrix #1
Chemistry	General Chemistry II (lecture & lab) OR General Chemistry II (lecture) AND General Chemistry Laboratory II	CHEM 1412 CHEM 1312 CHEM 1112	4	Only those programs requiring CHEM II
Physics (Calculus-based)	University Physics I (lecture) OR University Physics I (lecture and lab) AND University Physics II (lecture) OR University Physics II (lecture and lab)  University Physics Laboratory I AND University Physics Laboratory II	PHYS 2325 PHYS 2425 PHYS 2326 PHYS 2426 PHYS 2125 PHYS 2126	6 – 8 <sup>1</sup>	Lecture component required by all – See matrix # 2
Circuits	Circuits I for Electrical Engineering	ENGR 2305	3	Only those programs requiring Circ I (major and non majors)
Engineering Mechanics	Engineering Mechanics I – Statics (3 or 4 SCH version)  Engineering Mechanics II – Dynamics (3 or 4 SCH version)  Statics and Dynamics (3 or 4 SCH version)	ENGR 2301 ENGR 2401 ENGR 2302 ENGR 2402 ENGR 2303 ENGR 2403	3 - 8	Only those programs requiring these course(s) – See matrix #3

#### **TOTAL SCH** 27 – 43

<sup>1</sup>A student completing coursework totaling less than the minimum SCH requirements for calculus and physics lecture will obtain transfer credit at the receiving institution for each course successfully completed at the sending institution.

The following three matrices show how specified courses and combination of these courses would transfer from the sending to the receiving institution for field of study engineering courses.

 $\checkmark$  = transfers; x = does not transfer; other is explained by text.

#### Matrix 1. Differential Equations and Linear Algebra

## Receiving Institution

	Course	Differential Equations	Linear Algebra	Differential Equations and Linear Algebra (combined)
Sending Institution	Differential Equations	✓	Х	The Differential Equations course and the Linear
	Linear Algebra	Х	<b>√</b>	Algebra course <u>together</u> transfer as the combined course
	Diff. Eq. and Linear Alg. (combined)	Decided by receiving institution	Decided by receiving institution	<b>✓</b>

Note: The transferable courses in this table are considered part of the field of study curriculum <u>if</u> the program of the receiving institution requires them.

The interpretation of this matrix is as follows:

- A student who has taken <u>only</u> Differential Equations (DE) would receive credit for DE (if it
  was required by the receiving institution) but would not receive credit for Linear Algebra
  (LA) or the combined DE/LA course.
- Similarly, a student who has taken <u>only</u> LA would receive credit for LA (if it was required by the receiving institution) but would not receive credit for DE or the combined DE/LA course.
- A student who has taken <u>both</u> DE and LA would get credit for both DE and LA (if both courses were required by the receiving institution) <u>or</u> the student would receive credit for the combined DE/LA course (if it was required). In the latter case, a student would receive the number of credits in the <u>combined</u> course. For example, if a student has taken a 3 SCH DE course and a 3 SCH LA course and transfers to a university that offers and requires only a 3 SCH DE/LA course, then that student would receive transfer credit of 3 SCH for the combined DE/LA course.

 A student who has taken the combined DE/LA course would get credit for the combined course (if it were required by the receiving institution). However, if the receiving institution required either the separate DE course or the LA course or both, then the receiving institution could decide whether to award any credit for the student's combined DE/LA course.

## Matrix 2. University Physics

## Receiving Institution

Course Physics – Physics -Physics – lecture only lab only lecture and lab combined (3 SCH) (1 SCH) (4 SCH) **Physics** lecture Χ The lecture course and the lab course together transfer as the combined **Physics** lecture and lab course lab Х Physics Transfers as the lecture lect. and lab only or as both the lecture (combined) course and the lab course

Note: The lecture component is a required field of study course. The lab component is a field of study course if the program of the receiving institution requires it.

## Matrix 3. Engineering Mechanics—Statics and Dynamics

## Receiving Institution

Sending Institution

Sending

Institution

Course	Statics	Dynamics	Statics and Dynamics (combined)
Statics	✓	Х	The Statics course and the Dynamics course
Dynamics	х	✓	together transfer as the combined course
Statics and Dynamics (combined)	Decided by receiving institution	Decided by receiving institution	✓

Note: The transferable courses in this table are considered part of the field of study curriculum <u>if</u> the program of the receiving institution requires them.

### Field of Study Curricula for Engineering Technology

Bachelor of Science degree with a major in:

Civil Engineering Technology
Computer Engineering Technology
Construction Engineering Technology
Electrical Engineering Technology
Electronics Engineering Technology
Manufacturing Engineering Technology
Mechanical Engineering Technology

## **Civil Engineering Technology Track**

There are three universities in Texas that offer Civil Engineering Technology degrees. All institutions have the same Math requirements, but Physics requirements vary across these three institutions. Review of the Physics requirements in these programs suggest two sub-tracks: (1) Calculus and Algebra-based Physics and (2) Calculus and Calculus-based Physics. Therefore, this field of study curriculum will offer two sub-tracks to accommodate all institutional requirements.

## **Computer Engineering Technology Track**

There are three universities in Texas that offer Computer Engineering Technology degrees; Math and Physics requirements are the same across these three institutions. Reviews of the Math and Physics requirements in these programs suggest one track: Calculus and Algebra-based Physics. Therefore, this field of study curriculum offers a single track to accommodate all institutional requirements.

## **Construction Engineering Technology Track**

There are seven universities in Texas that offer Construction Engineering Technology degrees; Math and Physics requirements vary across these seven institutions. Review of the Math and Physics requirements in these programs suggest three sub-tracks: (1) Algebra and Algebra-based Physics, (2) Calculus and Algebra-based Physics, and (3) Calculus and Calculus-based Physics. Therefore, this field of study curriculum offers three sub-tracks to accommodate all institutional requirements.

## **Electrical Engineering Technology Track**

There are two universities in Texas that offer Electrical Engineering Technology degrees. Review of the Math and Physics requirements in these programs suggest one sub-track: Calculus and Algebra-based Physics. Therefore, this field of study curriculum offers a single sub-track to accommodate all institutional requirements.

#### **Electronics Engineering Technology Track**

There are seven universities in Texas that offer Electronics Engineering Technology degrees. Math and Physics requirements vary across these seven institutions. Review of the Math and Physics requirements in these programs suggest three sub-tracks: (1) Algebra and Algebra-based Physics, (2) Calculus and Algebra-based Physics, and (3) Calculus and Calculus-based Physics. Therefore, this field of study curriculum offers three sub-tracks to accommodate all institutional requirements.

## **Manufacturing Engineering Technology Track**

Thirteen universities in Texas offer Manufacturing Engineering Technology degrees. The Math and Physics requirements vary across these thirteen institutions. A review of the Math and Physics requirements in these programs suggest three sub-tracks: (1) Algebra and Algebra-based Physics, (2) Calculus and Algebra-based Physics, and (3) Calculus and Calculus-based Physics. Therefore, this field of study curriculum offers three sub-tracks to accommodate all institutional requirements.

## **Mechanical Engineering Technology Track**

There are seven universities in Texas that offer Mechanical Engineering Technology degrees; Math and Physics requirements vary across these institutions. Review of the Math and Physics requirements in these programs suggest two sub-tracks: (1) Calculus and Algebra-based Physics, and (2) Calculus and Calculus-based Physics. Therefore, this field of study curriculum offers two sub-tracks to accommodate all institutional requirements.

## Notes:

1. The following abbreviations were used for Texas public four-year universities:

Lamar University
Midwestern State University
Prairie View A&M University
Sam Houston State University
Sul Ross State University
Texas A&M University
Texas A&M University-Commerce
Texas A&M University-Corpus Christi
Tarleton State University
Texas State University – San Marcos
Texas Southern University
Texas Tech University
University of Houston
University of Houston-Downtown
University of North Texas
The University of Texas at Brownsville
The University of Texas at Tyler
West Texas A&M University

- 2. Mathematics Requirement As mentioned above, there is considerable variation across all of the institutions of higher education in Texas and across the seven Engineering Technology majors about which level of mathematics is required (i.e., algebra and trigonometry or pre-calculus, or calculus). Because of this variation, the Committee and the staff recommend that students be advised that the specific major and institution they select for transfer will determine the appropriate mathematics requirement.
- 3. Physics Requirement Although all tracks and institutions require a lab-based physics course, some require a calculus-based physics course while others require an algebra-based physics course. The reference to algebra-based physics refers to a course that includes knowledge of trigonometry and/or pre-calculus. Students are advised to determine the requirements of the particular institution and Engineering Technology major they will pursue to determine the appropriate physics requirement.

- 4. For students wanting to obtain bachelor's degrees in a particular major from a particular institution, advisors and students should be fully informed about differences among subtracks.
- 5. If an institution has decided that course(s) taken by a student at another institution from a particular field of study curriculum are not required to obtain a degree in Engineering Technology, those course(s) may nevertheless transfer as electives. Further, all course(s) listed on the field of study curriculum do not have to be offered by all institutions, but the institutions must honor courses which are part of the field of study curriculum. Appropriate Southern Association of Colleges and Schools (SACS) criteria must be met before any course(s) can be offered.
- 6. If a student pursues a non-calculus-based course of study and transfers to a calculus-based baccalaureate program, that program may require the student to take additional work in calculus as needed.
- 7. Receiving institutions may require transfer students to successfully complete courses that are not a part of this field of study curriculum if completion of those courses is required of all students in order to receive a baccalaureate degree in Engineering Technology. An institution may require additional lower-division courses when the field of study curricula does not specify content required for a degree program. However, the additional courses must not duplicate content already addressed within the field of study curricula.

**Civil Engineering Technology** 

Content Area	*Sub-Track 1	**Sub-Track 2	Semester Credit Hours (SCH)
Mathematics	Calculus I (MATH 2413)		4
	Calculus II (MATH 2414)		4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401)	Physics I (Calculus-based) (PHYS 2425)	4
	Physics II (Algebra-based) (PHYS 1402)	Physics II (Calculus-based) (PHYS 2426)	4
Physical Sciences	Chemistry I (CHEM 1411)		4
Engineering	, ,		3
Engineering	Engineering Design Graphics (ENGR 1304)		4
	Surveying (ENGR 1407)		
Technology	<sup>1</sup> AC/DC Circuits (ENGT 1409)		4
Technology	<sup>2</sup> Materials and Methods (ENGT 2304)		3
English	<sup>3</sup> Technical and Business Writing (ENGL 2311)		3
			37 Total SCH

<sup>\*</sup>Sub-Track 1 allows transfer to the following institutions: UH-D and TSU.

<sup>\*\*</sup>Sub-Track 2 allows transfer to UNT and all of the institutions listed in sub-track 1.

**Computer Engineering Technology** 

	Computer Engineering Technology Semester			
Content Area	*Sub-Track 1	Credit Hours (SCH)		
	Calculus I (MATH 2413)	4		
Mathematics	Calculus II (MATH 2414)	4		
Physical Sciences	Physics I (Algebra-based) (PHYS 1401)	4		
Solerises	Physics II (Algebra-based) (PHYS 1402)	4		
Physical Sciences	Chemistry I (CHEM 1411)	4		
Technology	Circuits I (ENGT 1401)	4		
Technology	Circuits II (ENGT 1402)	4		
Technology	Digital Fundamentals (ENGT 1407)	4		
English	<sup>1</sup> Technical and Business Writing (ENGL 2311)	3		
		35 Total SCH		

<sup>\*</sup>Sub-Track 1 allows transfer to all institutions offering a degree in this area including: UH, PVAMU, and UH-D.

<sup>&</sup>lt;sup>1</sup>All institutions accept ENGT 1409. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course CETT 1409 but are not required to do so.

<sup>&</sup>lt;sup>2</sup> All institutions accept ENGT 2304. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course CNBT 2304 but are not required to do so.

<sup>&</sup>lt;sup>3</sup> All institutions accept ENGL 2311. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course ETWR 2301 but are not required to do so.

<sup>&</sup>lt;sup>1</sup> All institutions accept ENGL 2311. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course ETWR 2301 but are not required to do so.

**Construction Engineering Technology** 

Content Area	*Sub-Track 1	**Sub-Track 2	***Sub-Track 3	Semester Credit Hours (SCH)
	College Algebra (MATH 1314)	Calculus I (MATH 2413)	Calculus I (MATH 2413)	3-4
Mathematics	Plane Trigonometry (MATH 1316) OR Pre-Calculus) (MATH 2412)	Calculus II (MATH 2414)	Calculus II (MATH 2414)	3-4
Physical Sciences	Physics I (Algebra- based) (PHYS 1401)	Physics I (Algebra- based) (PHYS 1401)	Physics I (Calculus- based) (PHYS 2425)	4
	Physics II (Algebra-based) (PHYS 1402)	Physics II (Algebra- based) (PHYS 1402)	Physics II (Calculus-based) (PHYS 2426)	·
Physical Sciences		Chemistry I (CHEM 1411)		4
Engineering	Eng	ineering Design Graph (ENGR 1304)	ics	3
Engineering		Surveying (ENGR 1407)		4
Technology		<sup>1</sup> AC/DC Circuits (ENGT 1409)		4
Technology	2	Materials and Methods (ENGT 2304)		3
English	<sup>3</sup> Tech	nnical and Business Wr (ENGL 2311)	iting	3
		•		35-37 Total SCH

<sup>\*</sup>Sub-Track 1 allows transfer to the following institutions: SHSU, SWTSU, and TAMUC.

<sup>\*\*</sup>Sub-Track 2 allows transfers to TAMU, TTU, UH and all of the institutions listed in sub-track 1.

<sup>\*\*\*</sup>Sub-Track 3 allows transfer to UNT and all of the institutions listed in sub-tracks 1 and 2.

<sup>&</sup>lt;sup>1</sup>All institutions accept ENGT 1409. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course CETT 1409 but are not required to do so.

<sup>&</sup>lt;sup>2</sup> All institutions accept ENGT 2304. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course CNBT 2304 but are not required to do so.

<sup>&</sup>lt;sup>3</sup> All institutions accept ENGL 2311. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course ETWR 2301 but are not required to do so.

Electrical Engineering Technology

Content Area	*Sub-Track 1	Semester Credit Hours (SCH)
Mathematics	Calculus I (MATH 2413)	4
Wathernaties	Calculus II (MATH 2414)	4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401)	4
Sciences	Physics II (Algebra-based) (PHYS 1402)	4
Physical Sciences	Chemistry I (CHEM 1411)	4
Technology	Circuits I (ENGT 1401)	4
Technology	Circuits II (ENGT 1402)	4
Technology	Digital Fundamentals (ENGT 1407)	4
English	<sup>1</sup> Technical and Business Writing (ENGL 2311)	3
		35 Total SCH

<sup>\*</sup>Sub-Track 1 allows transfer to the following institutions: UH and PVAMU.

<sup>&</sup>lt;sup>1</sup> All institutions accept ENGL 2311. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course ETWR 2301 but are not required to do so.

**Electronics Engineering Technology** 

Content Area	*Sub-Track 1	**Sub-Track 2	***Sub-Track 3	Semester Credit Hours (SCH)
	College Algebra (MATH 1314)	Calculus I (MATH 2413)	Calculus I (MATH 2413)	3-4
Mathematics	Plane Trigonometry (MATH 1316) OR Pre-Calculus) (MATH 2412)	Calculus II (MATH 2414)	Calculus II (MATH 2414)	3-4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401)	Physics I (Algebra-based) (PHYS 1401)	Physics I (Calculus-based) (PHYS 2425)	4
	Physics II (Algebra-based) (PHYS 1402)	Physics II (Algebra-based) (PHYS 1402)	Physics II (Calculus-based) (PHYS 2426)	4
Physical Sciences		Chemistry I (CHEM 1411)		
Technology	Circuits I (ENGT 1401)			4
Technology	Circuits II (ENGT 1402)			4
Technology	Digital Fundamentals (ENGT 1407)			4
English	<sup>1</sup> Technical and Business Writing (ENGL 2311)		3	
				33-35 Total SCH

<sup>\*</sup>Sub-Track 1 allows transfer to the following institution: SHSU.

<sup>\*\*</sup>Sub-Track 2 allows transfer to the following institutions: TTU, TSU, UT-B and the institution listed in sub-track 1.

<sup>\*\*\*</sup>Sub-Track 3 allows transfer to all institutions in sub-tracks 1 and 2 and to TAMU, UNT, and TAMU-CC.

<sup>&</sup>lt;sup>1</sup> All institutions accept ENGL 2311. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course ETWR 2301 but are not required to do so.

**Manufacturing Engineering Technology** 

Content Area	*Sub-Track 1	**Sub-Track2	***Sub-Track 3	Semester Credit Hours (SCH)
	College Algebra (MATH 1314)	Calculus I (MATH 2413)	Calculus I (MATH 2413)	3-4
Mathematics	Plane Trigonometry (MATH 1316) OR Pre-Calculus) (MATH 2412)	Calculus II (MATH 2414)	Calculus II (MATH 2414)	3-4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401)	Physics I (Algebra-based) (PHYS 1401)	Physics I (Calculus-based) (PHYS 2425)	4
Guionioso	Physics II (Algebra-based) (PHYS 1402)	Physics II (Algebra-based) (PHYS 1402)	Physics II (Calculus-based) (PHYS 2426)	4
Physical Sciences		Chemistry I (CHEM 1411)		4
Engineering	Engineering Design Graphics (ENGR 1304)			3
Technology	Engineering Materials I (ENGT 2307)			3
Technology	Introduction to Manufacturing Processes (ENGT 2310)			3
English	<sup>1</sup> Technic	cal and Business W (ENGL 2311)	riting	3
				Total 30-32 SCH

<sup>\*</sup>Sub-Track 1 allows transfer to the following institutions: UT-T, WTAMU, SRSU, TSU, and SHSU.

<sup>\*\*</sup>Sub-Track 2 allows transfer to the following institutions: UH, MSU, SWTSU, and UT-B and all institutions listed in sub-track 1.

<sup>\*\*\*</sup>Sub-Track 3 allows transfer to all of the programs in the state including those in sub-tracks 1 and 2 and also to TAMU, TAMUC, TASU and UNT.

<sup>&</sup>lt;sup>1</sup> All institutions accept ENGL 2311. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course ETWR 2301 but are not required to do so.

Content Area	*Sub-Track 1	**Sub-Track 2	Semester Credit Hours (SCH)
		ulus I 1 2413)	4
Mathematics		ulus II 1 2414)	4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401)	Physics I (Calculus-based) (PHYS 2425)	4
	Physics II (Algebra-based) (PHYS 1402)	Physics II (Calculus-based) (PHYS 2426)	4
Physical Sciences	Chemistry I (CHEM 1411)		4
Engineering	Engineering Design Graphics (ENGR 1304)		3
Technology	Engineering   (ENGT 2	3	
Technology	Introduction to Manu (ENGT	3	
English	<sup>1</sup> Technical and Business Writing (ENGL 2311)		3
			Total 32 SCH

<sup>\*</sup>Sub-Track 1 allows transfer to the following institutions: UH, UH-D, TTU, and UT-B.

<sup>\*\*</sup>Sub-Track 2 allows transfer to all of the programs in the state including those in sub-track 1 and also to TAMU, TAMU-CC, and UNT.

<sup>1</sup> All institutions accept ENGL 2311. Institutions are encouraged to accept the Workforce Education Course Manual (WECM) equivalent course ETWR 2301 but are not required to do so.

# Field of Study Curriculum for Mexican-American Studies

The Mexican-American Studies Field of Study Advisory Committee reviewed the lower- division (freshman and sophomore) requirements of all public four-year colleges and universities in the state of Texas for students seeking a baccalaureate degree with a major in Mexican-American Studies. Based on that information, the Committee and the Board staff recommends that the following set of courses, totaling 18 semester credit hours (SCH) of fully transferable and applicable lower-division courses, be considered as a Field of Study Curriculum for Mexican-American Studies.

#### **Courses**

One course is to be selected from each of the six categories below:

Category	SCH	Course Number	Course Title
Introduction	3	HUMA 1305	Introduction to Mexican-American Studies
History	3	HIST 2327	Mexican-American History I
History	3	HIST 2328	Mexican-American History II
Government	3	GOVT 2311	Mexican-American Politics
English/Literature	3	ENGL 2351	Mexican-American Literature
Cnanish	3	SPAN 2312	Intermediate Spanish II
Spanish	3	SPAN 2315	Spanish for Native Speakers II
Fine Arts	3	HUMA 1311	Mexican-American Fine Arts Appreciation

# **Field of Study Curriculum for Music**

The field of study curriculum for music is designed to apply to the Bachelor of Music degree but may also be applied to the Bachelor of Arts or other baccalaureate-level music degrees as deemed appropriate by the awarding institution. The field of study curriculum is furthermore intended to serve as a guide for community and technical colleges in structuring a transfer curriculum in music.

#### **Field of Study Courses**

The field of study curriculum shall consist of 27 to 35 lower division semester credit hours that are fully transferable. Transfer of credit in ensemble, applied study, and theory/aural skills shall be on a course-for-course basis.

Course	Number Of Semesters	Semester Credit Hours
Ensemble	4	4
Applied Study	4	8
Theory/Aural Skills	4	12-16
Music Literature	1	3

# Keyboard (piano) Competency

Because keyboard (piano) competency is a requirement for most baccalaureate degrees in music, up to four additional semester credit hours of coursework pertaining to keyboard (piano) *may* transfer by agreement between institutions. Keyboard competency courses approved for transfer are courses in group piano or applied lessons that concentrate specifically on skills development for passing keyboard proficiency examinations. Keyboard courses that concentrate primarily on performance literature are not considered to be keyboard competency courses for the purposes of this field of study. *Completion of courses leading to keyboard proficiency does not necessarily satisfy the established proficiency requirement at a receiving institution.* 

# Competency, Proficiency, and Diagnostic Assessment

Transferring students who have completed the field of study curriculum must satisfy the competency and proficiency requirements of the receiving institution. Transferring students shall not be required to repeat courses transferred as part of the field of study curriculum. However, diagnostic assessment of transfer students is permissible if the receiving institution routinely conducts diagnostic assessment of native students at the same point in the program of study.

#### **Vocal Diction and Instrumental Methods**

Course work in vocal diction and instrumental methods is not included in the field of-study curriculum but may nonetheless transfer by agreement between institutions.

# **Courses for Specific Degree Programs**

Completion of the field of study curriculum shall not prevent a receiving institution from requiring additional lower division courses that may be necessary for specific degree programs. Courses selected for inclusion in the field of study curriculum are those considered to be common to lower division study for most music degrees. Receiving institutions may require transfer students in specialized programs (e.g., jazz studies, performance, composition, music therapy, etc.) to take additional degree-specific lower-division courses that are *not* included in the field of study curriculum.

#### Music Literature Course(s)

The music field of study curriculum contains one semester of music literature that will automatically transfer into the student's degree program at a receiving institution. Since some senior colleges and universities require students to successfully complete two semesters of music literature, sending institutions should, to the extent possible, work with receiving institutions to develop transfer options that best serve student needs while maintaining program integrity at the sending and receiving institutions. A second semester of music literature is automatically transferable when it is part of a sending institution's approved general education component. Two-year colleges that offer a single course in music literature may elect to strengthen that course by increasing the weekly contact hours to five as permitted in the *ACGM*.

# **Full Academic Credit**

Academic credit shall be granted on a course-for-course basis in the transfer of theory/aural skills, applied music, and ensemble courses and will be accepted at the credit-hour level of the receiving institution. Full academic credit shall be granted on the basis of comparable courses completed, not on specific numbers of credit hours accrued.

#### **General Education Courses**

In addition to the course work listed above, the maximum recommended transfer credit from the general education core curriculum is 31-39 semester credit hours. Students shall complete the general education core curriculum in effect at the institution that will grant the baccalaureate degree.

# The Associate's Degree in Music

The field of study curriculum should serve as the basis for structuring the associate's degree in music. Each two-year college should determine which courses from its approved general education core curriculum to include with the music field of study curriculum in order to constitute a 66-semester credit hour transfer block. In order to receive the baccalaureate degree, a transferring student shall complete the general education core at the receiving institution.

# **Field of Study Curriculum for Nursing**

The following annotated set of courses, totaling 28 semester credit hours (SCH) of fully transferable and applicable lower-division academic courses, and an additional set of Workforce Education (WECM) nursing courses, make up the Field of Study Curriculum for Nursing:

#### **Academic Courses**

Content Area	Number and type of courses   Texas Common Course Numbering	
Anatomy &	2 courses:	
Physiology	A&P I with lab and	BIOL 2401 and BIOL 2402 <sup>1</sup> only
	A&P II with lab	
Microbiology	1 course:	
	Microbiology with lab	BIOL 2420 OR BIOL 2421
Chemistry	1 course:	
	chemistry with lab	Any 4 SCH ACGM course including lab
Nutrition	1 course:	
	Nutrition & Diet Therapy I	HECO 1322 OR BIOL 1322
Psychology	2 courses:	
	General Psychology and	PSYC 2301 AND PSYC 2314
	Lifespan Growth &	
	Development	
Mathematics	1 course:	
	Elementary Statistical Methods	MATH 1342

Prerequisite courses to BIOL 2401/2402 or the equivalent are not required for the Field of Study Curriculum for Nursing

# **Nursing Content Courses**

NOTE: Lower-division nursing content is offered at community colleges through one of two general types of programs: Blocked or Integrated. Because of the distribution of content, it is extremely difficult to align curricula from one type of program to another. Students who desire to transfer from a program utilizing one type of program into the other type of program should be prepared to make up some content through a "bridge" course or through the repetition of some content within courses. It is recommended that a student make every effort to avoid transferring from one type of program to the other before completing the associate degree in nursing in order not to lose credit.

Lower-division nursing content courses being transferred from a blocked-curriculum program to another blocked-curriculum program should be applied to the degree on a **course-for-course** substitution basis, in which the course transferred is applied IN LIEU OF the course at the receiving institution, even if the number of semester credit hours awarded upon the completion of the course varies between the sending and receiving institutions. The same procedure should be used when a student transfers from an integrated-curriculum program into another integrated-curriculum program for Nursing Content Courses, CHOOSE EITHER Blocked Curriculum OR Integrated Curriculum BUT NOT BOTH:

#### **BLOCKED CURRICULUM**

Content Area	ontent Area WECM Course Rubric & Number	
Fundamentals	RNSG 1413/RNSG 1513	2 to 6 SCH
(including Basic Skills)	(basic skills incorporated)	
	OR	
	RNSG 1413/1513 <b>PLUS</b> RNSG 1105/1205	
	OR	
	RNSG 1209/1309 <b>PLUS</b> RNSG 1105/1205	
	OR	
	Any equivalent theory/lab combination	
Mental Health	RNSG 2113/2213	1 <b>OR</b> 2 SCH
Obstetrics/Pediatrics	RNSG 1412/1512	4 <b>OR</b> 5 SCH
	OR	
	RNSG 1251 <b>PLUS</b> RNSG 2201	
	OR	
	RNSG 2208/2308 <b>PLUS</b> RNSG 2201	
Medical/Surgical Nursing	RNSG 1331/1431 or 1231 <b>PLUS</b> 1232	2 to 6 SCH
	<u>PLUS</u>	
	RNSG 1347/1447 or 1247 <b>PLUS</b> 1248	
	OR	
	RNSG 1341/1441 <b>PLUS</b> RNSG 1343/1443	
	OR	
	<b>EQUIVALENT with OR</b> without RNSG 1144/	
	RNSG 1244	

#### OR

#### INTEGRATED CURRICULUM

Content Area	WECM Course Rubric & Number	SCH Range (Required Clinical Co-requisite)
Introduction to	RNSG 1423/RNSG 1523	2 to 6 SCH
Professional	(basic skills incorporated)	
Nursing for Integrated	OR	
Programs	RNSG 1423/1523 <b>PLUS</b> RNSG 1119/1219	
	OR	
	RNSG 1222 PLUS RNSG 1223 PLUS RNSG 1119/1219	
Integrated Care of the	RNSG 2404/2504	2 to 6 SCH
Client with Common	(basic skills incorporated)	
Health Care Needs	OR	
	RNSG 2404/2504 <b>PLUS</b> RNSG 11XX/12XX	
	<u>OR</u>	
	RNSG 2203 PLUS RNSG 2204 PLUS RNSG 11XX/12XX	

The following notes address special circumstances and are part of the field of study curriculum:

- (1) Wherever possible, courses applied to fulfill field of study curriculum requirements should also be used to satisfy requirements in the general academic core curriculum. Generally, the math course, the biology or chemistry course(s), and one psychology course should be able to fulfill requirements in both curricula.
- (2) Courses selected for inclusion in the field of study curriculum are those that are common to most baccalaureate nursing programs.
- (3) Completion of the field of study curriculum shall not prevent a receiving institution from requiring additional courses/content for specific degree programs.
- (4) Students should not be required to repeat courses that they have completed successfully.
- (5) The academic courses and the unmodified WECM courses that are included in the Field of Study Curriculum for Nursing should transfer immediately upon approval of the field of study curriculum by the Coordinating Board. New WECM courses and courses that need modification should be accepted in transfer as soon as those modifications have been approved by the WECM Leadership Committee and added to the WECM inventory. Implementation of the complete field of study curriculum should not take more than one calendar year following addition of the new and modified courses to the WECM inventory. New or modified WECM courses will be initiated with entering students. Programs may allow sophomore students to continue with the previous curricula to prevent changing courses in the middle of their programs. Full implementation of new and modified WECM courses must be complete within two years after their addition to the WECM inventory.

Appendix D: Forms

# Academic Course Inventory Update Unique Need Course: Request for Approval Form NOTE: THIS FORM MUST BE SUBMITTED NO LATER THAN TWO MONTHS PRIOR TO THE DATE OF STUDENT ENROLLMENT

1.			2.	;	3.
Institution			College Officia	ıl	Effective Date
4. Complete	Course Title:				
5. Course De	scription:				
6. Unique Cours §9.74 of CB rules.	se Criteria: Un	ique courses mu	st meet the criteria as	identified by Chapte	r 9, Subchapter D,
(Check appro	priate criteria	)			
degre docur  b. This c  c A coul attach d. This is e. This is f. This is	e program recementing transitions by labus in the distribution of	quirements for a of ferability or two of ege level rigor. Including course do not senior level counity service, leist anical transfer context will transfer and experiments and experiments and experiments.	ure, or a career or tech	universities. At least recommendation forms are outline, and cours nical course.  In requirements at a record faculty credentials.	two letters s are attached. se objectives is egional
Date Submitted		Chief A	Academic Officer		
Phone number		Fax number	E-Mail	Address	
7. Data:	1				
a. Update Code	b. FICE Code	c. Approval Number	d. Subject Prefix	e. Course Number	f. SCH
g. Course Short Ti	tle:			ct Hours	i. Total Contact
			Lecture	Lab	Hours

Submit this form via the online portal found here: https://www1.thecb.state.tx.us/apps/proposals/

# Instructions for Requesting A Unique Need Course General Academic Course Inventory Update

A proposed course may be considered as a Unique Need course if it does not conform closely enough to one of the courses described in the List of Approved Courses for Public Community and Junior Colleges. The college may request Unique Need approval from the Academic Affairs and Research Division.

- Item #1 Name the institution (and campus, if applicable)
- Item #2 Name the official completing this form
- Item #3 Indicate the academic year and semester the course(s) would first be offered.
- Item #4 Indicate the complete Course Title as it would appear in the institution's catalog.
- Item #5 Indicate the complete Course Description as it would appear in the institution's catalog. Indicate the catalog date and page number where this course will appear.
- Item #6 Unique Need courses must meet the criteria identified in Chapter 9, § 9.74 of CB Rules. Appropriate items should be checked and documentation attached. Justification of need should include information about special student and/or community needs, degree or field to which course would apply, purpose of course, special qualifications of faculty, etc. If the unique course is approved, it will be assigned an approval number for three academic years and for the requesting college only.

#### Item #7 Course Data

- a. Update Code: Enter A if the course is a new course to be added, D if the course is to be deleted, or C if this is a change in an existing course.
- b. FICE Code: Enter the FICE Code for the institution
- c. Approval Number: If a number has been previously assigned for the course, enter it. If it is an excessive hour request, enter the number of the equivalent course after substituting an "8" in the 7th digit position. Otherwise, leave blank and the number will be assigned by Coordinating Board staff.
- d. Subject Prefix: Enter the subject abbreviation for each course as established and used on official transcripts by the institution.
- e. Course Number: Enter the course identification number as used by the institution.
- f. Semester Credit Hour Value: Enter the maximum number of semester credit hours which may be awarded for each course (e.g. if ART NNNN may be taken for 1, 2, 3, or 4 SCH, enter 4).
- g. Course Short Title: Enter the title of each course as established and used on official transcripts by the institution.
- h. Contact Hours:
  - LECTURE: Enter the number of hours per semester in a standard 16 week semester instructors are assigned to be "in contact" (i.e., a structured teaching situation) with students in a lecture situation (e.g., classroom, conference, seminar, individual instruction, independent student). Enter only whole numbers in the space provided. LAB: Enter the number of hours per semester instructors are required to spend "in contact" (i.e., a structured teaching situation) with students in a laboratory situation associated with the course. Enter only whole numbers in the space provided.
- Total Contact Hours: Enter the total number of hours in a standard 16 week semester instructors are assigned to be in contact with students in a lecture and laboratory situation. Enter only whole numbers in the space provided.

**NOTE:** For questions or problems, email <u>uniqueneed@thecb.state.tx.us</u> or call 512-427-6200.

# Texas Higher Education Coordinating Board Request for Evaluation of a Community College Unique Need Course and the Applicability to Baccalaureate Degree Program(s)

is seeking approval from the Texas Higher Education
Coordinating Board to offer a new Unique Need course in
The course would be taught at the lower division level. If the request is approved by Coordinating Board staff, the course would be approved to be offered at this institution only.
As part of the Unique Need approval process, a proposed course must be reviewed and recommended by academic department chairs or appropriate administrators at Texas public universities that offer a degree program in the discipline area. Please review the attached course description, syllabus and course outline. Your recommendation regarding the proposed course will be reviewed by Coordinating Board staff.
Please specifically address the applicability of the proposed course to the degree program or othe curriculum requirements at your university.
Name of Evaluator:
Title:
Institution:
(Check appropriate box)
The course <u>will be accepted</u> as a transfer equivalent. Indicate your institution's course name and number.
The course will apply toward a degree requirement in a specific degree program/major. Indicate at least one degree program toward which this course would apply at your institution
The course <u>will be accepted</u> as fulfilling a core curriculum requirement. Indicate the core curriculum component area requirement that the course would satisfy at your institution.
The course <u>will be accepted</u> as general elective credit. Indicate whether this decision will be institution-wide or specific to a particular degree program.
The course will not be accepted at this institution.
Other Comments or Recommendations (please attach a separate sheet if needed)
Signature Date

# TEXAS HIGHER EDUCATION COORDINATING BOARD Certification form for New Out-of-State and Out-of-Country Courses

Institution			Date		
Course Number and Title		Destination and State/Country Code			
Length of Course in Number of Weeks	Approx Dates of Travel	SCH	Contact Hours	Approval No. Assigned	
Objectives of Course		ı			
Rationale for Travel					
CTC Only – If this cou to be employed at the	rrse is taught by adjunct faculty, e out-of-state site:	describe the	e unique quali	fications of personnel	
Institution			Date		
Course Number and Title		Destina	Destination and State/Country Code		
Length of Course in Number of Weeks	Approx Dates of Travel	SCH	Contact Hours	Approval No. Assigned	
Objectives of Course					
Rationale for Travel					
CTC Only – If this cou to be employed at the	rse is taught by adjunct faculty, e out-of-state site:	describe the	e unique quali	fications of personnel	

# TEXAS HIGHER EDUCATION COORDINATING BOARD Certification Form for New Out-of-State and Out-of-Country Courses

- 1. All students enrolled will meet institutional standards for admission and will be actually admitted to the institution, or one of the participating institutions in an approved Texas Consortium.
- 2. All students enrolled will pay the appropriate tuition and fees for their residency category. Financial aid will be available to students registering in foreign classes on the same basis as for on-campus students.
- 3. Instruction will be provided by faculty of the institution or a consortium institution and will be supervised and evaluated according to institutional policies. Exception will be made only to take advantage of uniquely qualified personnel at the out-of-state location.
- 4. Each course is on the approved main course inventory of the institution, is a part of an approved degree or certification program, and is justified in terms of academic, cultural, or other resources available at the specified location.
- 5. Instruction will conform to all relevant academic policies. All classes will conform to workload and enrollment requirements, contact hour/credit ratio, and similar matters.
- 6. Courses will not offer credit for activities undertaken primarily for travel, recreation, or pleasure.
- 7. Minimum enrollments will conform to the same standards applicable were the class to be offered on campus.
- 8. Multi-course offerings will meet the standards and criteria outlined in Notification and Approval Procedures Distance Education and Off-Campus Programs and Courses approved by the Coordinating Board in October 1999.
- 9. Advertising and marketing for out-of-state and foreign classes will emphasize the instructional nature of the classes, and not create the impression that they are primarily credit-for-travel experiences.
- 10. Faculty and staff will not realize unusual perquisites or financial gain for teaching out-of-state or foreign classes.
- 11. Except for funds specifically appropriated for international activities (e.g., state incentive programs, scholarships, etc.), state funds will not be used for faculty or student travel, meals and lodging, or other incidental expenses.
- 12. Free tickets for travel, accommodations, or other expenses provided by travel agents, carriers, or hotels will be used in direct support of the instructional program and will not be used as gifts to faculty, staff, or their families.
- 13. State funds will not be used to offer courses or credits by instructional telecommunications to reception sites outside state boundaries and will not be submitted for formula funding.
- 14. All courses offered in a shortened format will consist of the same number of contact hours, normally 45-48, as courses offered in a regular or summer session. Students will not carry more courses at a time in a shortened format than will give them total credit of one semester credit hour per week of instruction. (Chapter 4, §4.6 of CB Rules). Pre- or post-travel class sessions will be scheduled to attain the required minimum length standard.

Signature of Chief Academic Officer	Date	
Institution		

Lower-Division Academic Course Guide Manual
Appendix E: Distance Education and Off-Campus Instruction

# Chapter 4. Rules Applying to all Public Institutions of Higher Education in Texas

#### SubChapter P. Approval of Distance Education Courses and Programs for Public Institutions

- 4.255 Purpose
- 4.256 Authority
- 4.257 Definitions
- 4.258 General Provisions
- 4.259 Institutional Plan for Distance Education
- 4.260 Standards and Criteria for Institutions
- 4.261 Standards and Criteria for Distance Education Courses and Programs
- 4.262 Standards and Criteria for Distance Education Courses
- 4.263 Standards and Criteria for Distance Education Faculty
- 4.264 Formula Funding General Provisions

# 4.255 Purpose

This subchapter establishes rules for all public institutions of higher education in Texas regarding the delivery of distance education courses and programs. The rules are designed to provide Texas residents with access to courses and programs that meet their needs, to ensure course and program quality, and to prevent the unnecessary duplication of these courses and programs.

# 4.256 Authority

Authority for these provisions is provided by Texas Education Code § 61.051(j), which provides the Board with the authority to approve courses for credit and distance education programs.

#### 4.257 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

- (1) Academic credit course -- A college-level course that, if successfully completed, can be applied toward the number of courses required for achieving a degree, diploma, certificate, or other formal award.
- (2) Board -- The Texas Higher Education Coordinating Board.
- (3) Commissioner -- The Commissioner of Higher Education; as used in this subchapter, "Commissioner" means the agency acting through its executive, and his or her designees, staff, or agents.
- (4) Community College -- Any public community college as defined in Texas Education Code, §61.003 and §130.005, and whose role, mission, and purpose is outlined in Texas Education Code, §130.0011 and §130.003.
- (5) Continuing Education Course A Coordinating Board-approved higher education technical course offered for continuing education units and conducted in a competency-based format. Such a course has specific occupational and/or apprenticeship training objectives.
- (6) Continuing Education Unit or CEU -- Ten contact hours of participation in an organized educational experience under responsible sponsorship, capable direction, and qualified instruction and not offered for academic credit.

- (7) Degree -- Any title or designation, mark, abbreviation, appellation, or series of letters or words, including "associate", "bachelor's", "master's", and "doctor's" and their equivalents and foreign cognates, which signifies satisfactory completion of the requirements of a program of study which is generally regarded and accepted as an academic degree-level program by accrediting agencies recognized by the Board.
- (8) Distance Education -- The formal educational process that occurs when students and instructors are not in the same physical setting for the majority (more than 50 percent) of instruction.
- (9) Distance Education Course -- A course in which a majority (more than 50 percent) of the instruction occurs when the student(s) and instructor(s) are not in the same place. Two categories of distance education courses are defined:
  - (A) Fully Distance Education Course -- A course which may have mandatory face-to-face sessions totaling no more than 15 percent of the instructional time. Examples of face-to-face sessions include orientation, laboratory, exam review, or an in-person test.
  - (B) Hybrid/Blended Course -- A course in which a majority (more than 50 percent but less than 85 percent), of the planned instruction occurs when the students and instructor(s) are not in the same place.
- (10) Distance Education Degree or Certificate Program -- A program in which a student may complete a majority (more than 50 percent) of the credit hours required for the program through distance education courses.
- (11) Doctoral Degree -- An academic degree beyond the level of a master's degree that typically represents the highest level of formal study or research in a given field.
- (12) First-Professional Degree -- An award that requires completion of a program that meets all of the following criteria:
  - (A) completion of the academic requirements to begin practice in the profession;
  - (B) at least two years of college work prior to entering the program; and
  - (C) a total of at least six academic years of college work to complete the degree program, including prior required college work plus the length of the professional program itself. First-Professional degrees are discipline-specific, including, but not limited to, degrees such as: Dentistry (D.D.S. or D.M.D.); Medicine (M.D.); Veterinary Medicine (D.V.M.); Law (L.L.B, J.D.); and Pharmacy (Pharm.D).
- (13) Formula Funding -- The method used to allocate appropriated sources of funds among institutions of higher education.
- (14) Formula-funded Course -- An academic credit course delivered face-to-face or by distance education whose semester credit hours are submitted for formula funding.
- (15) Institution of Higher Education or Institution -- Any public technical institute, public community college, public senior college or university, medical or dental unit, or other agency of higher education as defined in Texas Education Code, §61.003.
- (16) Institutional Plan for Distance Education -- A plan that must be submitted for Coordinating Board approval prior to an institution offering distance education courses or programs for the first time.

- (17) Non-credit Course -- A course that results in the award of continuing education units (CEU) as specified by Southern Association of Colleges and Schools (SACS) criteria. Only courses that result in the award of CEUs may be submitted for state funding.
- (18) Non-Resident Student -- A student who is not a Texas resident and/or does not qualify for Texas resident tuition.
- (19) Out-of-state/Out-of-country Courses and Programs -- Academic credit courses and programs delivered outside Texas/United States to individuals or groups who are not regularly enrolled, on-campus students. Out-of-state and out-of-country courses do not receive formula funding.
- (20) Program or Program of Study -- Any grouping of courses which are represented as entitling a student to a degree or certificate.
- (21) Public Health-Related Institution or Health-Related Institution -- A medical or dental unit as defined by Texas Education Code, §61.003(5).
- (22) Public University or University -- A general academic teaching institution as defined by Texas Education Code, §61.003(3).
- (23) Regular On-Campus Student -- A student who is admitted to an institution, the majority of whose semester credit hours are reported for formula funding and whose coursework is primarily taken at an institution's main campus or on one or more of the campuses within a multi-campus community college system.
- (24) Self-Supporting Courses and Programs -- Academic credit courses and programs (formerly defined as extension courses or programs) whose semester credit hours are not submitted for formula funding.
- (25) Semester Credit Hour -- A unit of measure of instruction consisting of 60 minutes, of which 50 minutes must be direct instruction over a 15-week period in a semester system.
- (26) Workforce Continuing Education Course -- A course of ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction, as outlined in the Guidelines for Instructional Programs in Workforce Education with an occupationally specific objective and supported by state appropriations. Workforce continuing education courses are offered by community and technical colleges and differ from a community service course which is not eligible for state reimbursement and is offered for recreational or a vocational purposes.

#### 4.258 General Provisions

- (a) This subchapter governs the following types of instruction provided through distance education:
  - (1) Academic credit courses, degree and certificate programs, and self-supporting courses and programs provided by all public institutions of higher education; and
  - (2) Formula-funded workforce continuing education provided by a public community college, Lamar State College, or public technical college.

- (b) This subchapter does not apply to the following types of instruction provided through distance education:
  - (1) Non-credit adult and continuing education courses provided by a senior college or university or health-related institution; and
  - (2) Non-formula-funded continuing education provided by a public community college, Lamar State College, or public technical college.

#### 4.259 Institutional Plan for Distance Education

- (a) Prior to offering any distance education courses or programs for the first time, institutions of higher education shall submit an *Institutional Plan for Distance Education* to the Board for approval. The Commissioner shall provide guidelines for development of the report and a schedule for any periodic submission of updated reports.
- (b) Institutional academic and administrative policies shall reflect a commitment to maintain the quality of distance education courses and programs in accordance with the provisions of this subchapter. An *Institutional Plan for Distance Education* shall conform to Board guidelines and criteria of the Commission on Colleges of the Southern Association of Colleges and Schools in effect at the time of the Report's approval. These criteria shall include provisions relating to:
  - (1) Institutional Issues:
  - (2) Educational Programs;
  - (3) Faculty;
  - (4) Student Support Services; and
  - (5) Distance Education Facilities and Support.

# 4.260 Standards and Criteria for Institutions

The following provisions apply to all institutions covered under this subchapter, unless otherwise specified:

- (1) Institutions shall comply with the standards and criteria of the Commission on Colleges of the Southern Association of Colleges and Schools.
- (2) Institutions shall adhere to criteria outlined in *Principles of Good Practice for Degree and Certificate Programs and Courses Offered Through Distance Education.*
- (3) The Commissioner shall establish procedures governing the quality, review, and approval of distance education programs and courses. The Commissioner may also require institutions to provide reports on distance education programs and courses.
- (4) Students shall be provided academic support services appropriate for distance education, such as advising, career counseling, library, and other learning resources.
- (5) Institutions shall report enrollments, courses, and graduates associated with distance education offerings as required by the Commissioner.
- (6) If a non-Texas resident student enrolls in regular, on-campus courses for at least one-half of the normal full-time course load as determined by the institution, the institution may report that student's fully distance education or hybrid/blended courses for formula funding enrollments.

# 4.261 Standards and Criteria for Distance Education Programs

The following provisions apply to all programs covered under this subchapter, unless otherwise specified:

- (1) Each program shall be within the role and mission of the institution responsible for offering the instruction and shall be on its inventory of approved programs.
- (2) Prior Board approval may be required before an institution may offer programs in certain subject area disciplines or under other conditions specified by the Board or Commissioner.
- (3) An institution shall not offer doctoral or first-professional degree programs by distance education without specific prior approval by the Board. The Commissioner may approve for delivery by other delivery modes doctoral and special professional degree programs that have previously been approved by the Board for electronic or off-campus delivery.
- (4) An institution offering a degree or certificate program shall comply with the standards and criteria of any specialized accrediting agency or professional certification board.
- (5) Each degree program offered via distance education shall be approved by an institution's governing board or the governing board's institutional designee. Certification of approval shall be submitted to the Board upon request.
- (6) Institutions shall require that students (except for students in out-of-country programs) enrolled in a distance education degree program satisfy the same requirements for admission to the institution and the program as required of regular on-campus students. Students in degree programs to be offered collaboratively shall meet the admission standards of their home institution.
- (7) Out-of-country students shall meet equivalent standards for admission into programs and shall be assessed for academic guidance purposes in a manner determined by the admitting institution.

#### 4.262 Standards and Criteria for Distance Education Courses

The following provisions apply to all courses covered under this subchapter, unless otherwise specified:

- (1) Each course shall be within the role and mission of the institution responsible for offering the instruction and shall be on its inventory of approved courses.
- (2) All courses covered under this subchapter shall meet the quality standards applicable to oncampus courses.
- (3) Institutions shall report to the Coordinating Board, in accordance with Board policy and procedures, all distance education courses and programs.
- (4) Except for students in out-of-country courses, students shall satisfy the same requirements for enrollment in an academic credit course as required of on-campus students.
- (5) Out-of-country students shall meet equivalent standards for enrollment in an academic credit course and shall be assessed for academic guidance purposes in a manner determined by the admitting institution.
- (6) The instructor of record shall bear responsibility for the delivery of instruction and for evaluation of student progress.

(7) Prior Board approval may be required before an institution may offer programs in certain subject area disciplines or under other conditions specified by the Board or Commissioner.

# 4.263 Standards and Criteria for Distance Education Faculty

The following provisions apply to faculty teaching in programs covered under this subchapter, unless otherwise specified:

- (1) Faculty shall be selected and evaluated by equivalent standards, review, and approval procedures used by the institution to select and evaluate faculty responsible for on-campus courses.
- (2) Institutions shall provide training and support to enhance the added skills required of faculty teaching courses through electronic means.
- (3) The supervision, monitoring, and evaluation processes for faculty shall be equivalent to those for on-campus courses.

# 4.264 Formula Funding General Provisions

- (a) Institutions shall report distance education courses submitted for formula funding in accordance with the Board's uniform reporting system and the provisions of this subchapter.
- (b) Institutions may submit for formula funding academic credit courses delivered by distance education to any student located in Texas or to Texas residents located out-ofstate or out-of-country.
- (c) Institutions shall not submit for formula funding distance education courses taken by non-resident students who are located out-of-state or out-of-country, courses in out-of-state or out-of-country programs taken by any student, or self-supporting courses.
- (d) For courses not submitted for formula funding, institutions shall charge fees that are equal to or greater than Texas resident tuition and applicable fees and that are sufficient to cover the total cost of instruction and overhead, including administrative costs, benefits, computers and equipment, and other related costs. Institutions shall report fees received for self-supporting and out-of-state/country courses in accordance with general institutional accounting practices.

# Subchapter Q. Approval of Off-Campus and Self-Supporting Courses and Programs for Public Institutions

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### 4.270 Purpose

This subchapter establishes rules for all public institutions of higher education in Texas regarding the delivery of off-campus and on-campus self-supporting courses and programs. The rules are designed to provide Texas residents with access to off-campus courses and self-supporting courses and programs that meet their needs, to ensure course and program quality, and to assure the adequacy of the technical and managerial infrastructure necessary to support such courses and programs.

### 4.271 Authority

Authority for these provisions is provided by Texas Education Code §61.051(j) which provides the Board with the authority to approve courses for credit and distance education programs, including off-campus and self-supporting programs, and Texas Education Code §130.008 and §28.009, which provide for the offering of dual credit courses by public institutions of higher education.

#### 4.272 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

- (1) Academic credit course -- A college-level course that, if successfully completed, can be applied toward the number of courses required for achieving a degree, diploma, certificate, or other formal award.
- (2) Area Institution -- A university, health-related institution, independent institution, or legislatively established or Board-approved higher education center which is within a 50-mile radius of a proposed off-campus instruction site.
- (3) Board -- The Texas Higher Education Coordinating Board.
- (4) Commissioner -- The Commissioner of Higher Education; as used in this subchapter, "Commissioner" means the agency acting through its executive, and his or her designees, staff, or agents.
- (5) Community College -- Any public community college as defined in Texas Education Code, §§61.003 and 130.005, and whose role, mission, and purpose is outlined in Texas Education Code, §§130.0011 and 130.003.

- (6) Continuing education course -- A Coordinating Board-approved higher education technical course offered for continuing education units and conducted in a competency-based format. Such a course has specific occupational and/or apprenticeship training objectives.
- (7) Continuing Education Unit or CEU -- Ten contact hours of participation in an organized educational experience under responsible sponsorship, capable direction, and qualified instruction and not offered for academic credit.
- (8) Degree -- Any title or designation, mark, abbreviation, appellation, or series of letters or words, including "associate", "bachelor's", "master's", and "doctor's" and their equivalents and foreign cognates, which signifies satisfactory completion of the requirements of a program of study which is generally regarded and accepted as an academic degree-level program by accrediting agencies recognized by the Board.
- (9) Doctoral Degree -- An academic degree beyond the level of a master's degree that typically represents the highest level of formal study or research in a given field.
- (10) First-Professional Degree -- An award that requires completion of a program that meets all of the following criteria:
  - (A) completion of the academic requirements to begin practice in the profession;
  - (B) at least two years of college work prior to entering the program; and
  - (C) a total of at least six academic years of college work to complete the degree program, including prior required college work plus the length of the professional program itself. First-Professional degrees are discipline-specific, including, but not limited to, degrees such as: Dentistry (D.D.S. or D.M.D.); Medicine (M.D.); Veterinary Medicine (D.V.M.); Law (L.L.B, J.D.); and Pharmacy (Pharm.D).
- (11) Formula Funding -- The method used to allocate appropriated sources of funds among institutions of higher education.
- (12) Formula-funded Course -- An academic credit course delivered face-to-face or by distance education whose semester credit hours are submitted for formula funding.
- (13) Institution of Higher Education or Institution -- Any public technical institute, public community college, public senior college or university, medical or dental unit, or other agency of higher education as defined in Texas Education Code, §61.003.
- (14) Main Campus -- The primary campus or campuses of an institution of higher education supplying instruction and supported by on-site administration, also referred to as on-campus.
- (15) Non-credit course -- A course that results in the award of continuing education units (CEU) as specified by Southern Association of Colleges and Schools (SACS) criteria. Only courses that result in the award of CEUs may be submitted for state funding.
- (16) Off-Campus Course -- A course in which a majority (more than 50 percent) of the instruction occurs when the students and instructor(s) are in the same physical location and which meets one of the following criteria: for public senior colleges and universities, Lamar state colleges, or public technical colleges, off-campus locations are locations away from the main campus; for public community colleges, off-campus locations are sites outside the service area.
- (17) Off-Campus Degree or Certificate Program -- A program in which a student may complete a majority (more than 50 percent) of the credit hours required for the program through off-campus courses.
- (18) Off-Campus Instruction -- The formal educational process in which a majority (more than 50 percent) of the instruction occurs when the students and instructor(s) are in the same

- physical location and which meets one of the following criteria: for public senior colleges and universities, Lamar state colleges, or public technical colleges, off-campus locations are locations away from the main campus; for public community colleges, off-campus locations are sites outside the service area.
- (19) Out-of-State/Out-of-Country Courses and Programs -- Academic credit courses and programs delivered outside Texas/United States to individuals or groups who are not regularly enrolled on-campus students. Out-of-state and out-of-country courses do not receive formula funding.
- (20) Public Health-Related Institution or Health-Related Institution -- A medical or dental unit as defined by Texas Education Code, §61.003(5).
- (21) Public Technical Institute or College -- The Lamar Institute of Technology or any campus of the Texas State Technical College System.
- (22) Public University or University -- A general academic teaching institution as defined by Texas Education Code, §61.003(3).
- (23) Regional Council -- A cooperative arrangement among representatives of all public, private or independent institutions of higher education within a Uniform State Service Region, as established under Texas Education Code, §51.662.
- (24) Regular On-Campus Student -- A student who is admitted to an institution, the majority of whose semester credit hours are reported for formula funding and whose coursework is primarily taken at an institution's main campus or on one or more of the campuses within a multi-campus community college system.
- (25) Self-Supporting Courses and Programs -- Academic credit courses and programs (formerly defined as extension courses or programs) whose semester credit hours are not submitted for formula funding.
- (26) Semester Credit Hour -- A unit of measure of instruction consisting of 60 minutes, of which 50 minutes must be direct instruction, over a 15-week period in a semester system.
- (27) Service Area -- The territory served by a community college district as defined in Texas Education Code, §130.161.
- (28) Study-in-America Courses -- Off-campus, academic credit instruction which is delivered outside Texas but in the United States primarily to regular on-campus students.
- (29) Study-Abroad Courses -- Off-campus, academic credit instruction which is delivered outside the United States primarily to regular on-campus students.
- (30) Workforce Continuing Education Course -- A course of ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction, as outlined in the Guidelines for Instructional Programs in Workforce Education with an occupationally specific objective and supported by state appropriations. Workforce continuing education courses are offered by community and technical colleges and differ from a community service course which is not eligible for state reimbursement and is offered for recreational or a vocational purposes.

#### 4.273 General Provisions

- (a) This subchapter governs the following types of instruction offered by institutions of higher education:
  - (1) Academic credit courses, degree and certificate programs, and formula-funded workforce continuing education provided by a community college outside the boundaries of its service area through off-campus instruction;
  - (2) Academic credit courses, and degree and certificate programs provided by a public technical college, Lamar State College, public senior college or university, or public health-related institution through off-campus instruction;
  - (3) Formula-funded workforce continuing education provided by a public technical college or Lamar State College through off-campus instruction;
  - (4) Academic credit courses and programs offered by any public institution of higher education outside of Texas, including Study-Abroad, Study-in-America, out-of-state, and out-of-country courses; and
  - (5) Self-supporting courses and programs that are offered through off-campus instruction.
- (b) This subchapter does not apply to the following types of instruction:
  - (1) Non-credit adult and continuing education courses provided through off-campus delivery or as on-campus self-supporting courses or programs by a senior college or university or health-related institution.
  - (2) Continuing education, except formula-funded workforce continuing education, provided by public two-year colleges.

#### 4.274 Standards and Criteria for Institutions

The following provisions apply to all institutions covered under this subchapter, unless otherwise specified:

- (1) Institutions shall comply with the standards and criteria of the Commission on Colleges of the Southern Association of Colleges and Schools.
- (2) The Commissioner shall establish procedures governing the quality, review, and approval of off-campus and self-supporting programs and courses. The Commissioner may also require institutions to provide reports on off-campus, out-of-state/country, and self supporting programs and courses.
- (3) For off-campus programs and self-supporting programs, the parent institution shall notify all potentially affected area institutions in accordance with Board policy and procedures.
- (4) The Commissioner shall develop procedures and standards for offering out-of-state/country programs and courses and for Study-in-America and Study-Abroad offerings.
- (5) Institutions shall report enrollments, courses and graduates associated with self-supporting offerings as required by the Commissioner.
- (6) Institutions shall report fees received for self-supporting and out-of-state/country courses in accordance with general institutional accounting practices.
- (7) Students shall be provided academic support services appropriate for off-campus instruction such as academic advising, career counseling, library, and other learning resources.
- (8) Off-campus instruction sites shall be of sufficient quality for the delivery methods and courses offered.

# 4.275 Standards and Criteria for Off-Campus and Self-Supporting Programs

The following provisions apply to all programs covered under this subchapter, unless otherwise specified:

- (1) Each program shall be within the role and mission of the institution responsible for offering the instruction and shall be on its inventory of approved programs.
- (2) Prior Board approval may be required before an institution may offer programs in certain subject area disciplines or under other conditions specified by the Board or Commissioner.
- (3) An institution shall not offer doctoral or first-professional degree programs off-campus or as a self-supporting program without specific prior approval by the Board. The Commissioner may approve for delivery by other modes doctoral and special professional degree programs that have previously been approved by the Board for delivery through off- campus instruction or as a self-supporting program.
- (4) An institution offering an off-campus degree or certificate program shall comply with the standards and criteria of any specialized accrediting agency or professional certification board.
- (5) Each degree program offered off-campus shall be approved by an institution's governing board or the governing board's institutional designee. Certification of approval shall be submitted to the Board upon request.
- (6) Institutions shall require that students (except for students in out-of-country programs) enrolled in an off-campus or self-supporting degree program satisfy the same requirements for admission to the institution and the program as required of regular on-campus students. Students in degree programs to be offered collaboratively shall meet the admission standards of their home institution. Out-of-country students shall meet equivalent standards for admission into programs.

#### 4.276 Standards and Criteria for Off-Campus and Self-Supporting Courses

The following provisions apply to all courses covered under this subchapter, unless otherwise specified:

- (1) Each course shall be within the role and mission of the institution responsible for offering the instruction and shall be on its inventory of approved courses.
- (2) Prior Board approval may be required before an institution may offer courses in certain subject area disciplines or under other conditions specified by the Board or Commissioner.
- (3) Study-in-America and Study-Abroad courses offered by institutions of higher education, or by an approved consortium composed of Texas public institutions, must be reported to the Board in the manner prescribed by the Commissioner in order for the semester credit hours or contact hours generated in those courses to receive formula funding.
- (4) All courses shall meet the quality standards applicable to on-campus courses.
- (5) Institutions shall report to the Coordinating Board and notify all potentially affected area institutions all off-campus courses and programs in accordance with Coordinating Board policy and procedures.
- (6) Except for students in out-of-country courses, students shall satisfy the same requirements for enrollment in an academic credit course as required of on-campus students. Out-of-country students shall be assessed for academic guidance purposes.

(7) The instructor of record shall bear responsibility for the delivery of instruction and for evaluation of student progress.

### 4.277 Standards and Criteria for Off-Campus and Self-Supporting Courses Faculty

The following provisions apply to faculty teaching in programs covered under this subchapter, unless otherwise specified:

- (1) Faculty shall be selected and evaluated by equivalent standards, review, and approval procedures used by the institution to select and evaluate faculty responsible for on-campus courses.
- (2) Institutions shall provide training and support to enhance the added skills required of faculty teaching off-campus or self-supporting courses.
- (3) The supervision, monitoring, and evaluation processes for faculty shall be equivalent to those for on-campus courses.

# 4.278 Functions of Regional Councils

- (a) Regional Councils shall advise the Commissioner on appropriate policies and procedures for effective state-level administration of off-campus lower-division instruction.
- (b) With the exception of subsections (e) and (i) of this section, Regional Councils in each of the ten Uniform State Service Regions shall make recommendations to the Commissioner and shall resolve disputes regarding plans for lower-division courses and programs proposed by public institutions.
- (c) With the exception of subsections (e) and (i) of this section, for any dispute arising from off-campus delivery of lower-division courses to groups, any institution party to the disagreement may appeal first to the Regional Council, and then to the Commissioner and then the Board.
- (d) Each Regional Council shall make recommendations to the Commissioner regarding offcampus courses and programs proposed for delivery within its Uniform State Service Region in accordance with the consensus views of Council members, except for courses and programs proposed to be offered by public community colleges in their designated service areas and courses and programs governed by the provisions of subsections (e) and (i) of this section.
- (e) A public community college may enter into an agreement to offer only a dual credit course with a high school located in the service area of another public community college only if the other public community college is unable to provide the requested course to the satisfaction of the school district and the school district has explicitly invited the institution to do so.
- (f) A public community college proposing to offer a dual credit course at a high school outside of the college's service area shall notify the Regional Council in whose service area the high school is located. It must provide a letter from the school district stating that the local community college is not offering the proposed dual credit course to the satisfaction of the school district and that the school district has invited the other community college to offer the course.

- (g) Public community colleges shall submit for the appropriate Regional Council's review all off-campus lower-division courses proposed for delivery to sites outside their service areas.
- (h) With the exception of subsection (i) of this section, universities, health-related institutions, public technical colleges, and Lamar state colleges shall submit for Regional Council review all off-campus lower-division courses proposed for delivery to sites in the Council's Service Region.
- (i) Universities, health-related institutions, public technical colleges, and Lamar state colleges may enter into an agreement to offer lower-division dual credit courses with a school district and/or high school that makes such a request, and regional council approval is not required in order to offer requested lower-division, dual credit courses.
- (j) All institutions of higher education shall provide notice to the Higher Education Regional Councils when planning to offer requested off-campus and/or electronic to groups dual credit courses in the council's service area.

# 4.279 Formula Funding General Provisions

- (a) Institutions shall report off-campus courses submitted for formula funding in accordance with the Board's uniform reporting system and the provisions of this subchapter.
- (b) Institutions shall not submit for formula funding courses in out-of-state or out-of-country programs.
- (c) Institutions shall not submit self-supporting courses for formula funding.
- (d) Institutions shall not submit non-state funded lower-division credit courses to Regional Councils.
- (e) Institutions shall not jeopardize or diminish the status of formula-funded on-campus courses and programs in order to offer self-supporting courses. Self-supporting courses shall not be a substitute for offering a sufficient number of formula-funded on-campus courses.
- (f) For courses not submitted for formula funding, institutions shall charge fees that are equal to or greater than Texas resident tuition and applicable fees, and that are sufficient to cover the total cost of instruction and overhead, including administrative costs, benefits, computers and equipment, and other related costs. Institutions shall report fees received for self-supporting and out-of-state/country courses in accordance with general institutional accounting practices.

# **Approval of Distance Education Courses and Programs**

Public institutions have guidelines explained in Coordinating Board rules that govern certain types of instruction provided through distance education. For instance, academic credit on-line and hybrid courses, degree and certificate programs, and self-supporting courses and programs (formerly defined as extension courses and programs) provided by all public institutions of higher education, and formula-funded workforce continuing education provided by a public community college, Lamar State College, or public technical college are governed by Chapter 4, Subchapter P, of Board Rules. (Chapter 4 SubChapter P)

That subchapter *does not* apply to non-credit adult and continuing education courses provided by a senior college or university or a health-related institution, or non-formula-funded continuing education provided by a public community college, Lamar State College, or public technical college. Information related to the approval of off-campus face-to-face and electronic-to-groups courses and programs and self-supporting courses and programs for public institutions can be found in Chapter 4, Subchapter Q, of Board rules. (Chapter4SubChapterQ)

#### **Institutional Plan for Distance Education**

Before institutions offer any distance education courses or programs **for the first time**, an *Institutional Plan for Distance Education* must be submitted to the Coordinating Board. To clarify, the plan must be submitted by institutions who have *never* offered distance education, such as newly created institutions. The Commissioner of Higher Education may require institutions to provide supplemental reports on distance education programs and/or courses.

Each *Institutional Plan for Distance Education* should reflect institutional academic and administrative policies that express commitment to maintain the quality of distance education courses and programs and should conform to Coordinating Board guidelines, including the <a href="Principles of Good Practice">Principles of Good Practice</a>, as well as criteria set out by the Southern Association of Colleges and Schools. These criteria shall include provisions relating to:

- Institutional Issues;
- Educational Programs;
- Faculty:
- Student Support Services; and
- Distance Education Facilities and Support

Board rules cover standards and criteria for distance education programs, courses and faculty. Each program and/or course must comply with the following:

- Be within the role and mission of the offering institution, and be on the inventory of approved programs/courses;
- Any offered degree or certificate program shall comply with the standards and criteria of any specialized accrediting agency;
- Courses shall meet the quality standards applicable to on-campus courses;
- Programs shall be approved by the institution's governing board or the governing board's designee;
- Doctoral or first-professional degree programs may not be offered via distance education unless specifically approved by the Coordinating Board;
- The instructor of record has the responsibility for the delivery of instruction and for evaluation of student progress; and,

• Institutions shall report, in accordance with Board policy and procedures, all distance education courses and programs.

Prior board approval may be required before institutions may offer programs in certain subject area disciplines.

Additional criteria and standards associated with faculty teaching distance education are:

- Faculty shall be selected and evaluated using the same standards and procedures used for on-campus faculty;
- Institutions shall provide training and support to those faculty teaching distance education courses; and,
- The supervision and monitoring processes shall be the same as those for on-campus faculty.

# Higher Education Regional Councils and Notification Procedures for All Off-Campus Lower-Division Courses and Programs

There are ten Higher Education Regional Councils in Texas that consist of the universities, community colleges, technical colleges, and Lamar State Colleges within that region. These Regional Councils correspond to the ten Uniform State Service Regions. The purpose of the Higher Education Regional Councils is to advise the Commissioner on appropriate policies and procedures for the effective state-level administration of off-campus lower-division instruction. The Regional Councils are also expected to help facilitate inter-institutional cooperation in the conduct of off-campus instruction and to encourage excellence in the conduct of off-campus lower-division instruction.

The membership of each Regional Council is comprised of the presidents or designated representative of each public and independent institution with its main campus within the region. A Council Chair is elected by the members. The term of service for the Council Chair is also determined by the members. Regional Councils are expected to meet annually each spring to perform their designated duties. Any business that arises during other times of the year may be conducted electronically at the discretion of the Council Chair. The responsibilities of the Regional Councils include:

- Reviewing the proposed off-campus lower-division course and program offerings of each
  member public institution as presented in their Off-Campus Instruction Plans. Regional
  Councils may review additional courses not originally included in the Off-Campus
  Instruction Plan proposed by institutions after the regular annual meeting through a format
  of the Chair's choosing which can include electronic and/or telephonic deliberations.
- Assuring that each institution in the region receives notification of all off-campus lowerdivision courses and programs proposed to be offered in the Region by any other public institution, and to provide each public institution in the Region full opportunity to review and comment on the plans of other public institutions, excluding dual credit courses.
- Resolving any disputes associated with the proposed off-campus lower-division course
  offerings, excluding dual credit. If a resolution cannot be reached or an institution wishes
  to appeal the Regional Council's resolution, the Commissioner has the authority to resolve
  disputes between institutions regarding the offering of courses and has the authority to
  approve or disapprove such courses as well as the approval or disapproval of Off-Campus
  Instruction Plans. The Commissioner will then report to area institutions on approvals and

- disapprovals of disputed courses and programs. The Board may hear appeals to approvals and disapprovals made by the Commissioner.
- Studying cooperatively the various methods of providing lower-division off-campus instruction, and promoting the use of those methods which support quality and promise the most effective and efficient use of state resources.

Regional Councils are also expected to provide the Coordinating Board with the following documentation within fourteen days following each annual meeting:

- Procedures and guidelines for reviewing Off-Campus Instruction Plans;
- Minutes from the annual meeting;
- The member public institutions' Off-Campus Instruction Plans;
- The member public institutions' off-campus dual credit offerings; and
- Contact information for the Council Chair, including term of service, and a roster of Council members.

All off-campus lower-division courses and programs offered by community colleges, universities, health-related institutions, public technical colleges, and Lamar State Colleges shall be reviewed by the Higher Education Regional Council serving each site proposed to receive instruction, except for the following courses:

- Off-campus lower-division courses and programs offered by a community college within its service area;
- Off-campus lower-division dual credit courses offered by a university, health-related institution, public technical college, and/or Lamar State College that have been requested by a school district and/or high school; and
- Off-campus lower division dual credit courses offered by a community college at a high school outside of the college's service area that have been requested by the school district because the local public community college is unable to provide the requested course to the satisfaction of the school district. A public community college proposing to offer a dual credit course at a high school outside of the college's service area shall notify the Regional Council in whose service area the high school is located. The college must provide a letter from the school district stating that the local community college is not offering the proposed dual credit course to the satisfaction of the school district and that the school district has invited the other community college to offer the course.

An Off-Campus Instruction Plan must be submitted to the Regional Council by each public institution of higher education that is planning to offer off-campus lower-division courses, clinicals, and/or programs in that region. The Plan should include a listing of all off-campus lower-division course offerings, lower-division programs, and clinical sites as well as the following information:

- The semester, course number, name, day, meeting time, and location of delivery for each off-campus lower-division face-to-face or electronic-to-group course;
- The facility name and addresses for clinical sites; and
- The name and location of delivery for off-campus lower-division face-to-face or electronicto-group programs.

NOTE: Electronic-to-individual courses (whether they be delivered via the internet or iTV) should not be included on the Off-Campus Instruction Plan.

In addition to submitting its Off-Campus Instruction Plan to the Regional Council in which an institution resides, public institutions are also responsible for notifying the chair of each Regional Council in which they are planning to offer off-campus lower-division courses and programs of those proposed offerings, even if they are not subject to Regional Council review. This notification should be made prior to the Regional Council's annual meeting. For those courses and programs that are subject to Regional Council review, the Council shall return a recommendation for approval or disapproval to the originating institution as well as provide both the institution's request and the Regional Council's recommendation to the Coordinating Board.

Although dual credit courses are no longer subject to Regional Council review, all off-campus face-to-face or electronic-to-group dual credit courses must be reported to the Regional Council, including off-campus or electronic-to-group dual credit courses offered by a community college within its service area. Dual credit courses offered on an institution of higher education's campus or offered electronically to individuals are not required to be reported. When reporting dual credit courses, institutions should provide the following information:

- Course number;
- Course name;
- Number of sections; and
- Location of delivery.

# Study-Abroad and Study-in-America Courses

Study-abroad courses are defined in Chapter 4, Subchapter Q of Coordinating Board rules as "off-campus, academic credit instruction which is delivered outside the United States primarily to regular on-campus students." Study-in-America courses are also defined in Chapter 4, Subchapter Q as "off-campus, academic credit instruction which is delivered outside Texas but in the United States primarily to regular on-campus students."

In an effort to streamline the process of approval of study-abroad and study-in-America courses for which institutions of higher education receive state funding, the Coordinating Board has developed an online submission and certification form for your convenience. Institutions of higher education planning to offer study-abroad and/or study-in-America courses as defined below may enter their courses in the online system and certify that the courses meet the minimum standards identified in the online form. Unless an institution is petitioning to have the course included as a Unique Needs Course, no other paperwork is required.

The online certification system can be found at:

https://www1.thecb.state.tx.us/apps/StudyAbroad. To access the online certification system, enter your institutional FICE code and a password issued by the Coordinating Board. To receive a password, please contact Rhonda Griffin at <a href="mailto:rhonda.griffin@thecb.state.tx.us">rhonda.griffin@thecb.state.tx.us</a>. An e-mail notification will be sent to the institutional contact once certification is completed and confirmed. If you have any questions, please contact Dr. Van L. Davis at <a href="mailto:vanessa.davis@thecb.state.tx.us">vanessa.davis@thecb.state.tx.us</a> or at 512-427-6223.

As a part of the certification process, institutions certify compliance with the "Standards for New Study-Abroad and Study-in-America Courses." Courses must only be registered with the Coordinating Board once; subsequent offerings do not need to be reported in the certification system unless the delivery site for the course changes.

# Standards for New Study-Abroad and Study-in-America Courses

- 1. All students enrolled will meet institutional standards for admission and will be actually admitted to the institution, or one of the participating institutions in an approved Texas Consortium.
- 2. All students enrolled will pay the appropriate tuition and fees for their residency category. Financial aid will be available to students registering in foreign classes on the same basis as for on-campus students.
- 3. Instruction will be provided by faculty of the institution or a consortium institution and will be supervised and evaluated according to institutional policies. Exception will be made only to take advantage of uniquely qualified personnel at the out-of-state location.
- 4. Each course is on the approved main course inventory of the institution, is a part of an approved degree or certification program, and is justified in terms of academic, cultural, or other resources available at the specified location.
- 5. Instruction will conform to all relevant academic policies. All classes will conform to workload and enrollment requirements, contact hour/credit ratio, and similar matters.
- 6. Courses will not offer credit for activities undertaken primarily for travel, recreation, or pleasure.
- 7. Minimum enrollments will conform to the same standards applicable were the class to be offered on campus.
- 8. Multi-course offerings will meet the standards and criteria outlined in Notification and Approval Procedures Distance Education and Off-Campus Programs and Courses.
- 9. Advertising and marketing for out-of-state and foreign classes will emphasize the instructional nature of the classes, and not create the impression that they are primarily credit-for-travel experiences.
- 10. Faculty and staff will not realize unusual perquisites or financial gain for teaching out-of-state or foreign classes.
- 11. Except for funds specifically appropriated for international activities (e.g., state incentive programs, scholarships, etc.), state funds will not be used for faculty or student travel, meals and lodging, or other incidental expenses.
- 12. Free tickets for travel, accommodations, or other expenses provided by travel agents, carriers, or hotels will be used in direct support of the instructional program and will not be used as gifts to faculty, staff, or their families.
- 13. State funds will not be used to offer courses or credits by instructional telecommunications to reception sites outside state boundaries and will not be submitted for formula funding.
- 14. All courses offered in a shortened format will consist of the same number of contact hours, normally 45-48, as courses offered in a regular or summer session. Students will not carry more courses at a time in a shortened format than will give them total credit of one semester credit hour per week of instruction. (CB Rules 4.6). Pre- or post-travel class sessions will be scheduled to attain the required minimum length standard.

Lower-Division Academic Course Guide Manua	al
Appendix F: Academic Associate Degree and Certificate Programs	

## **Chapter 9 - Program Development in Public Two-Year Colleges**

## **Subchapter J. Academic Associate Degree and Certificate Programs**

- 9.181 Purpose
- 9.182 Authority
- 9.183 Degree Titles, Program Length, and Program Content
- 9.184 Criteria for New Academic Associate Degree Programs and Steps for Implementation
- 9.185 Academic Certificates

## 9.181 Purpose

This subchapter provides rules for the structure of academic associate degree programs offered by public community colleges, Texas State Technical College – Harlingen, and the Lamar State colleges that are eligible for state appropriations.

## 9.182 Authority

The Texas Education Code, §§61.003, 61.051(e) - (f), 61.0513, 61.053, 61.054, 61.055, 61.061, 61.062(c) - (d), 61.075, 130.001(b)(3) - (4), 130.003(e)(1)(2)(3) and (7) and 135.04, authorize the Coordinating Board to adopt policies, enact regulations, and establish rules for the coordination of postsecondary certificate and associate degree programs eligible for state appropriations.

## 9.183 Degree Titles, Program Length, and Program Content

- (a) An academic associate degree may be called an associate of arts (AA), an associate of science (AS), or an associate of arts in teaching (AAT) degree.
  - (1) The associate of arts (AA) is the default title for an academic associate degree program if the college offers only one type of academic degree program.
  - (2) If a college offers both associate of arts (AA) and associate of science (AS) degrees, the degree programs may be differentiated in one of two ways, including:
    - (A) The AA program may have additional requirements in the liberal arts and/or the AS program may have additional requirements in disciplines such as science, mathematics, or computer science; or
    - (B) The AA program may serve as a foundation for the BA degree and the AS program for the BS degree.
    - (C) Each academic associate degree must provide a clearly-articulated curriculum that can be associated with a discipline or field of study leading to a baccalaureate degree, and must be identified as such in the institution's program inventory.
  - (3) The associate of arts in teaching (AAT) is a specialized academic associate degree program designed to transfer in its entirety to a baccalaureate program that leads to initial Texas teacher certification. This title should only be used for an associate degree program that consists of a Board-approved AAT curriculum.

- (b) Academic associate degree programs must consist of a minimum of 60 SCH and a maximum of 66 SCH.
- (c) Except as provided in paragraphs (1), (2), and (3) of this subsection, academic associate degree programs must incorporate the institution's approved core curriculum as prescribed by §4.28 of this title (relating to Core Curriculum) and §4.29 of this title (relating to Core Curricula Larger than 42 Semester Credit Hours).
  - (1) A college may offer a specialized academic associate degree that incorporates a Board-approved field of study curriculum as prescribed by §4.32 of this title (relating to Field of Study Curricula) and a portion of the college's approved core curriculum if the coursework for both would total more than 66 SCH; or
  - (2) A college may offer a specialized academic associate degree that incorporates a Board-approved statewide articulated transfer curriculum and a portion of the college's approved core curriculum if the coursework for both would total more than 66 SCH.
  - (3) A college that has a signed articulation agreement with a General Academic Teaching Institution to transfer a specified curriculum may offer a specialized AA or AS (but not AAT) degree program that incorporates that curriculum.

# 9.184 Criteria for New Academic Associate Degree Programs and Steps for Implementation

- (a) Approval of new academic associate degree programs is automatic if all of the following conditions are met.
  - (1) The institution shall certify that the following criteria have been met:
    - (A) The program has institution and governing board approval.
    - (B) There is recent evidence of both short-term and long-term student demand for the program.
    - (C) Enrollment projections reflect student demand estimates to ensure the financial self-sufficiency of the program.
    - (D) The institution has an enrollment management plan for the program.
    - (E) If the program does not follow a Board-approved field of study curriculum or a Board-approved statewide articulation transfer curriculum, the institution has or will initiate a process to establish transfer of credit articulation agreements for the program with senior-level institutions.
    - (F) The program is designed to be consistent with the standards of the Commission on Colleges of the Southern Association of Colleges and Schools, other applicable accrediting agencies, and is in compliance with applicable licensing authority requirements.
    - (G) Adequate funding is available to cover all new costs to the institution over the first five years after the implementation of the program.
    - (H) The program complies with all applicable provisions contained in Subchapter J of this chapter and, adheres to the Standards for Academic Associate Degree Programs approved by the Board.

- (2) The Coordinating Board shall post the proposed program online for public comment for a period of 30 days. If no objections are received, the Coordinating Board staff shall update the institution's program inventory accordingly. If objections to the proposed program are received by the Coordinating Board staff, the proposed program shall not be implemented until all objections are resolved. The Coordinating Board reserves the right to audit a certificate or degree program at any time to ensure compliance with any of the criteria contained in subsection (a)(1)(A)-(H) of this section.
- (3) New Program Approval. The Board delegates to the Commissioner final approval authority for all certificate programs, applied associate degree programs, and academic associate degrees that meet Board policies for approval as outlined in the Guidelines for Instructional Programs in Workforce Education and this Subchapter. The Commissioner may delegate this final authority.

#### 9.185 Academic Certificates

- (a) A college may award an academic certificate to a student who completes:
  - (1) the college's approved core curriculum; or
  - (2) a Board-approved field of study curriculum; or
  - (3) a Board-approved statewide articulated transfer curriculum of less than degree length.

## 9.186 Academic Programs Offered by Texas State Technical College - Harlingen

- (a) Texas State Technical College Harlingen may offer the associate of science degree in accordance with the provisions of Section 135.51(b)(1-2) Texas Education Code.
- (b) An associate of science degree program offered by TSTC-Harlingen shall not unnecessarily duplicate existing programs offered in the service areas of Del Mar College, South Texas College, or Texas Southmost College.

Appendix G: Core Curriculum

## Chapter 4, Subchapter B

# Chapter 4. Rules Applying to All Public Institutions of Higher Education in Texas Subchapter B. Transfer of Credit, Core Curriculum and Field of Study Curricula

Please note that The Texas Higher Education Coordinating Board makes every effort to ensure that the information published on this Internet site is secure and accurate; however, due to the limitations of Internet security, the rules published here are for information only, and do not represent legal documentation.

## §4.21 Purpose

The purpose of this subchapter is to provide for the development and implementation of policies that encourage the free and appropriate transferability of lower division course credit among institutions of higher education, and especially to provide for the smooth transfer of lower division credit through core curricula, field of study curricula, and a procedure for the resolution of transfer disputes.

Source Note: The provisions of this §4.21 adopted to be effective May 27, 2003, 28 TexReg 4109

## §4.22 Authority

The Board is authorized to adopt rules and establish policies and procedures for the development, adoption, implementation, and evaluation of core curricula, field of study curricula, and a transfer dispute resolution process under Texas Education Code §§61.051(g), and Texas Education Code §§61.821- 832.

**Source Note:** The provisions of this §4.22 adopted to be effective May 27, 2003, 28 TexReg 4109; amended to be effective May 23, 2004, 29 TexReg 5056

## §4.23 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

- (1) Board--The Texas Higher Education Coordinating Board.
- (2) Commissioner--The Commissioner of Higher Education.
- (3) Core Curriculum--the curriculum in the liberal arts, humanities, sciences, and political, social, and cultural history that all undergraduates of an institution of higher education are required to complete before receiving an academic undergraduate degree. Core curriculum provisions apply to public colleges and universities, and to academic degree programs offered at health-related institutions.

- (4) Field of Study Curriculum (FOSC)--a set of courses that will satisfy the lower-division requirements for a baccalaureate degree in a specific academic area at a general academic teaching institution. A field of study curriculum affects academic degree programs at public colleges or universities as designated within the particular field of study curriculum.
- (5) Texas Common Course Numbering System (TCCNS)--a course numbering system for lower-division courses that assigns common course numbers to lower-division academic courses in order to facilitate the transfer of courses among institutions of higher education by promoting consistency in course designation and identification.
- (6) Course consistent with the Texas Common Course Numbering System (TCCNS)--a lower-division course that meets one of three conditions:
  - (A) it has an assigned a TCCNS number and is listed in the Lower Division Academic Course Guide Manual;
  - (B) a TCCNS number and inclusion in the Lower Division Academic Course Guide Manual have been requested for the course; or
  - (C) the institution which offers the course has specified at least one TCCNS course listed in the Lower Division Academic Course Guide Manual that will be accepted in transfer in lieu of the course.
- (7) Institution of Higher Education or institution--any public technical institute, public junior college, public senior college or university, medical or dental unit, other agency of higher education as defined in Texas Education Code, §61.003.
- (8) The Lower Division Academic Course Guide Manual (ACGM)--an official Board publication that lists a basic core of general academic courses which are freely transferable among all public institutions of higher education in Texas in accordance with the Texas Education Code, §61.051(g). TCCNS numbers are assigned to most courses in the manual.
- (9) Faculty member--a person who is employed full-time by an institution of higher education as a member of the faculty whose primary duties include teaching, research, academic service, or administration. However, the term does not include a person holding faculty rank who spends a majority of the person's time for the institution engaged in managerial or supervisory activities, including a chancellor, vice chancellor, president, vice president, provost, associate or assistant provost, or dean.

**Source Note:** The provisions of this §4.23 adopted to be effective May 27, 2003, 28 TexReg 4109; amended to be effective May 23, 2004, 29 TexReg 5056

### §4.24 General Provisions

- (a) All successfully completed lower-division academic courses that are identified by the Texas Common Course Numbering System (TCCNS) and published in the Lower Division Academic Course Guide Manual (ACGM) shall be fully transferable among public institutions and shall be substituted for the equivalent course at the receiving institution. Except in the case of courses belonging to a Board-approved Field of Study Curriculum (FOSC), applicability of transferred courses to requirements for specific degree programs is determined by the receiving institution.
- (b) Nothing in this subchapter restricts the authority of an institution of higher education to adopt its own admission standards in compliance with this subchapter or its own grading policies so long as it treats transfer students and native students in the same manner.
- (c) Institutional policies regarding acceptance of credit for correspondence courses, credit-by-examination, and other credit-earning instruments must be consistent with Southern Association of Colleges and Schools' guidelines and must treat transfer students and native students in the same manner.
- (d) This subchapter applies specifically to academic courses and degree programs, and does not apply to technical courses or technical degree programs.

Source Note: The provisions of this §4.24 adopted to be effective May 27, 2003, 28 TexReg 4109

## §4.25 Requirements and Limitations

- (a) Each institution of higher education shall identify in its undergraduate catalog each lowerdivision course that is substantially equivalent to an academic course listed in the current edition of the Lower Division Academic Course Guide Manual.
- (b) Each institution of higher education must offer at least 45 semester credit hours of academic courses that are substantially equivalent to courses listed in the Lower Division Academic Course Guide Manual including those that fulfill the lower-division portion of the institution's Core Curriculum.
- (c) All institutions of higher education must accept transfer of credit for successfully completed courses identified in subsections (a) and (b) of this section as applicable to an associate or baccalaureate degree in the same manner as credit awarded to non-transfer students in that degree program.
- (d) Each institution shall be required to accept in transfer into a baccalaureate degree program the number of lower-division credit hours in the program which are allowed for their non-transfer students in that program; however,
  - (1) No institution shall be required to accept in transfer more credit hours in the major area of a degree program Texas Administrative Code Chapter 4, Subchapter B Transfer of Credit, Core Curriculum and Field of Study Curricula than the number set out in any applicable Board-approved Field of Study Curriculum for that program.

- (2) In any degree program for which there is no Board-approved Field of Study Curriculum, no institution shall be required to accept in transfer more lower-division course credit in the major applicable to a baccalaureate degree than the institution allows their non-transfer students in that major.
- (3) An institution of higher education may deny the transfer of credit in courses with a grade of "D" as applicable to the student's field of study curriculum courses, core curriculum courses, or major.
- (e) All institutions of higher education in Texas shall provide support services appropriate to meet the needs of transfer students. These support services should be comparable to those provided to non-transfer students regularly enrolled at the institutions, including an orientation program similar to that provided for entering freshman enrollees.
- (f) No institution of higher education shall be required to accept in transfer, or apply toward a degree program, more than sixty-six (66) semester credit hours of lower-division academic credit. Institutions of higher education, however, may choose to accept additional credit hours.
- (g) Each institution of higher education shall permit a student who transfers from another Texas public institution of higher education to choose a catalog for the purpose of specifying graduation requirements, based upon the dates of attendance at the receiving institution and at the transferring institution, in the same manner that a non-transfer student may choose a catalog. Each Texas public institution of higher education shall include information about graduation requirements under a particular catalog in its official publications, including print and electronic catalogs.

**Source Note:** The provisions of this §4.25 adopted to be effective May 27, 2003, 28 TexReg 4109; amended to be effective May 12, 2005, 30 TexReg 2660

#### §4.26 Penalty for Noncompliance with Transfer Rules

If it is determined by the Board that an institution inappropriately or unnecessarily required a student to retake a course that is substantially equivalent to a course already taken at another institution, in violation of the provisions of §4.25 of this title (relating to Requirements and Limitations), formula funding for credit hours in the repeated course will be deducted from the institution's appropriation.

Source Note: The provisions of this §4.26 adopted to be effective May 27, 2003, 28 TexReg 4109

## §4.27 Resolution of Transfer Disputes for Lower-Division Courses

- (a) The following procedures shall be followed by institutions of higher education in the resolution of credit transfer disputes involving lower-division courses:
  - (1) If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied,

- and shall include in that notice the reasons for denying the credit. Attached to the written notice shall be the procedures for resolution of transfer disputes for lower-division courses as outlined in this section, accompanied by clear instructions outlining the procedure for appealing the decision to the Commissioner.
- (2) A student who receives notice as specified in paragraph (1) of this subsection may dispute the denial of credit by contacting a designated official at either the sending or the receiving institution.
- (3) The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rules and guidelines.
- (4) If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the sending institution may notify the Commissioner in writing of the request for transfer dispute resolution, and the institution that denies the course credit for transfer shall notify the Commissioner in writing of its denial and the reasons for the denial.
- (b) The Commissioner or the Commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.
- (c) Each institution of higher education shall publish in its course catalogs the procedures specified in subsections (a), (b), (d), and (e) of this section.
- (d) The Board shall collect data on the types of transfer disputes that are reported and the disposition of each case that is considered by the Commissioner or the Commissioner's designee.
- (e) If a receiving institution has cause to believe that a course being presented by a student for transfer from another school is not of an acceptable level of quality, it should first contact the sending institution and attempt to resolve the problem. In the event that the two institutions are unable to come to a satisfactory resolution, the receiving institution may notify the Commissioner, who may investigate the course. If its quality is found to be unacceptable, the Board may discontinue funding for the course.

Source Note: The provisions of this §4.27 adopted to be effective May 27, 2003, 28 TexReq 4109

#### §4.28 Core Curriculum

- (a) General: In accordance with Texas Education Code, §§61.821 61.831, each general academic institution, community college, and health-related institution shall design and implement a core curriculum, including specific courses composing the curriculum, of no less than 42 lower-division semester credit hours. Health-related institutions should encourage their students to complete their core curriculum requirement at a general academic institution or community college.
- (b) Component Areas: Each institution's core curriculum must be designed to satisfy the exemplary educational objectives specified for the component areas of the "Core Curriculum: Assumptions and Defining Characteristics" adopted by the Board; all lower-division courses

included in the core curriculum must be consistent with the "Texas Common Course Numbering System," and must be consistent with the framework identified in Charts I and II of this subsection. Chart I specifies the minimum number of semester credit hours required in each of five major component areas that a core curriculum must include (with sub-areas noted in parentheses). Chart II specifies options available to institutions for the remaining 6 - 12 semester credit hours.

Figure: 19 TAC §4.28(b)

**Chart I** - Institutions must select 36 semester credit hours of the core curriculum according to the parameters described below:

Component Area	Required Semester Credit Hours
010** Communication (English rhetoric/composition)	6
020** Mathematics (the first college-level math course a student completes, including but not limited to introductory statistics, logic, college algebra, or any more advanced math course for which the student is qualified upon enrollment)	3
030** Natural Sciences	6
Humanities & Visual and Performing Arts	6
Must include:	
050** Visual/Performing Arts  040** Other (literature, philosophy, modern or classical language/literature and cultural studies*)	(3)
Social/Behavioral Sciences	15
Must include: 060** U.S. History (legislatively mandated)	(6)
070** Political Science (legislatively mandated) 080** Social/Behavioral Science	(6)
	(3)
Total Minimum Requirements	36

- \* **Humanities** application of language skills includes a study of literature in the original language and/or cultural studies related to a modern or classical language.
- \*\* Identifying numbers recommended by the Texas Association of Collegiate Registrars and Admissions Officers (TACRAO) for use on students transcripts, in order to indicate courses utilized to satisfy core curriculum component area requirements. Student transcripts should also indicate whether a student has completed the core curriculum satisfactorily.

**Chart II** - To complete the required 42-semester-credit-hour core curriculum, institutions shall select an additional 6 semester credit hours from one or more of the following:

Component Area	Possible Additional Semester Credit Hours (6 Minimum)
011*** Communication (composition, speech, modern language communication skills*)	Up to 6
021*** Mathematics (the second college-level math course a student completes, including but not limited to finite math, statistics, calculus, or above)	Up to 3
031*** Natural Sciences	Up to 3
041*** Humanities (literature, philosophy, modern or classical language/literature and cultural studies**) & 051*** Visual and Performing Arts	Up to 3
081*** Social and Behavioral Sciences	Up to 3
090*** Institutionally Designated Option (may include additional semester credit hours in the categories listed above, computer literacy, health/wellness, kinesiology, capstone or interdisciplinary courses, etc.	Up to 6
Total Additional Hours	6

<sup>\*</sup> **Communication** application of a modern language means the basic proficiency skills acquired during introductory courses and including a working competency in grammar, writing, speaking, and listening/comprehension in a foreign language.

<sup>\*\*</sup> **Humanities** application of language skills includes a study of literature in the original language, and/or the cultural studies related to a modern or classical language.

<sup>\*\*\*</sup> Identifying numbers recommended by the Texas Association of Collegiate Registrars and Admissions Officers (TACRAO) for use on students transcripts, in order to indicate courses utilized to satisfy core curriculum component area requirements. Student transcripts should also indicate whether a student has completed the core curriculum satisfactorily.

(c) Transfer of Credit--Completed Core Curriculum: If a student successfully completes the 42 semester credit hour core curriculum at a Texas public institution of higher education, that block of courses may be transferred to any other Texas public institution of higher education and 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 that institution.

### (d) Concurrent Enrollment:

- (1) A student concurrently enrolled at more than one institution of higher education shall follow the core curriculum requirements in effect for the institution at which the student is classified as a degree-seeking student.
- (2) A student who is concurrently enrolled at more than one institution of higher education may be classified as a degree-seeking student at only one institution.
- (3) If a student maintains continuous enrollment from a spring semester to the subsequent fall semester at an institution at which the student has declared to be seeking a degree, the student remains a degree-seeking student at that institution regardless of the student's enrollment during the intervening summer session(s) at another institution.
- (e) Transfer of Credit--Core Curriculum Not Completed: Except as specified in subsection (f) of this section, a student who transfers from one institution of higher education to another without completing the core curriculum of the sending institution shall receive academic credit within 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. Following receipt of credit for these courses, the student may be required to satisfy the remaining course requirements in the core curriculum of the receiving institution.
- (f) Satisfaction of Component Areas: Each student must meet the minimum number of semester credit hours in each component area; however, an institution receiving a student in transfer is not required to accept component core course semester credit hours beyond the maximum specified in a core component area.
- (g) Exemplary Educational Objectives From More Than One Component Area: An institution may include within its core curriculum a course or courses that combine exemplary educational objectives from two or more component areas of the exemplary educational objectives defined in this section.
- (h) Transcripts: Each institution must note core courses on student transcripts as recommended by the Texas Association of Collegiate Registrars and Admissions Officers (TACRAO).
- (i) Notice: Each institution must publish and make readily available to students its core curriculum requirements stated in terms consistent with the "Texas Common Course Numbering System."
- (j) Substitutions and Waivers. No institution or institutional representative may approve course substitutions or waivers of the institution's core curriculum requirements for any currently enrolled student, except as provided in subsection (k) of this section. For students who transfer to a public institution from a college or university that is not a Texas public institution of higher education, courses the student completed prior to admission should be evaluated to determine whether they apply to one of the institution's core curriculum component areas. Only those courses the institution has accepted for transfer that can demonstrate fulfillment of the exemplary educational objectives for the appropriate component area or areas should be applied to the institution's core curriculum.

#### (k) Accommodations:

- (1) An institution of higher education may, on a case-by-case basis, approve an accommodation of a specific core curriculum component area requirement as described in paragraph (3) of this subsection for a student with a medically-documented learning disability, including but not limited to dyslexia, dysgraphia, or Asperger's Syndrome.
- (2) Accommodation shall not include a waiver or exemption of any core curriculum requirement.
- (3) An institution may approve for core curriculum applicability a course the institution offers but that is not approved as a part of the institution's core curriculum, if the institution demonstrates that the course has been approved to fulfill the same specific core curriculum component area requirement at five or more other Texas public colleges or universities. The Texas Common Course Numbering System course number may be used as evidence of the suitability of the course under this subsection.

**Source Note:** The provisions of this §4.28 adopted to be effective May 27, 2003, 28 TexReg 4109; amended to be effective August 15, 2006, 31 TexReg 6325; amended to be effective February 18, 2008, 33 TexReg 1324; amended to be effective May 26, 2010, 35 TexReg 4147

## §4.29 Core Curricula Larger than 42 Semester Credit Hours

- (a) An institution may adopt a core curriculum under this subchapter in excess of 42 semester credit hours, but no more than 48 semester credit hours, if the courses in excess of 42 semester credit hours are selected from the first five component areas of Chart II of §4.28(b) of this title (relating to Core Curriculum) (excluding additional credit in the Institutionally Designated Option) and are approved by the institution's governing board.
- (b) No institution may adopt a core curriculum of more than 42 semester credit hours without approval by the Board if the courses in excess of 42 semester credit hours are selected from component areas other than the first five component areas of Chart II of §4.28(b) of this title (relating to Transfer of Credit, Core Curriculum and Field of Study Curricula). The Board may approve a core curriculum under this section if:
  - (1) It has been previously approved by the institution's governing board;
  - (2) The institution has provided to the Board a narrative justification of the need and appropriateness of a larger core curriculum that is consistent with its role and mission; and
  - (3) No proposed upper-division core course is substantially comparable in content or depth of study to a lower-division course listed in the "Texas Common Course Numbering System."

Source Note: The provisions of this §4.29 adopted to be effective May 27, 2003, 28 TexReg 4109

## §4.30 Criteria for Evaluation of Core Curricula

(a) Each public institution of higher education shall review and evaluate its core curriculum every ten years on the schedule that accords with the institution's accreditation reaffirmation self-study report to the Southern Association of Colleges and Schools or its successor, and report the results of that evaluation to the Board. The evaluation should include:

- (1) the extent to which the core curriculum is consistent with the elements of the core curriculum recommended by the Board;
- (2) the extent to which the core curriculum is consistent with the Texas Common Course Numbering System (TCCNS);
- (3) the extent to which the core curriculum is consistent with the elements of the core curriculum component areas, intellectual competencies, and perspectives as expressed in Core Curriculum: Assumptions and Defining Characteristics adopted by the Board; and
- (4) the extent to which the institution's educational goals and the exemplary educational objectives of the core curriculum recommended by the Board are being achieved.
- (b) Each institution's evaluation report must contain at least the following:
  - (1) a table that compares the institution's core curriculum with the core component areas and exemplary educational objectives of the core curriculum recommended by the Board:
  - (2) a brief description of the purpose and substance of the institution's core curriculum;
  - (3) a description of the processes and procedures used to evaluate the institution's core curriculum; and
  - (4) a description of the ways in which the evaluation results are being or will be utilized to improve the core curriculum at the institution.

**Source Note:** The provisions of this §4.30 adopted to be effective May 27, 2003, 28 TexReg 4109; amended to be effective February 18, 2008, 33 TexReg 1324

### §4.31 Revision of Existing Approved Core Curricula

- (a) Each public institution of higher education that does not already have a Board-approved core curriculum on file must submit its proposed core curriculum to the Board for staff review and approval. The request for approval should include a description of the goals of the core curriculum, a table showing the institution's core curriculum by component area (based on the model found in Charts I and II in §4.28(b) of this title, relating to Core Curriculum), and a complete listing of courses approved by the institution to fulfill core component requirements, organized to reflect each required and supplemental component area of the core curriculum as detailed in the document Core Curriculum: Assumptions Texas Administrative Code Chapter 4, Subchapter B Transfer of Credit, Core Curriculum and Field of Study Curricula and Defining Characteristics, adopted by the Board. Courses should be selected to fulfill component requirements in a core curriculum based at least in part on their ability to meet most of the exemplary educational outcome statements for the component area as described in the document Core Curriculum: Assumptions and Defining Characteristics, adopted by the Board.
- (b) An institution should follow these procedures to modify its core curriculum to add or delete courses, change the total number of semester credit hours in a non-required component area, or change the total number of semester credit hours required in its core curriculum:
  - (1) submit to the Board a letter documenting each change to be made, the component area(s) affected, and a rationale for the change;

- (2) requests that involve changing the overall number of semester credit hours in the core curriculum or the number in a given component area require documentation of prior approval by the institution's governing board;
- (3) the institution shall receive a letter from the Board staff giving notice of acceptance of the proposed changes and/or indicating any changes that do not meet Board-approved criteria.
- (c) Upon receiving an approval letter from Board staff, the institution shall make any required changes to its core curriculum and will document those changes in institutional publications.

Source Note: The provisions of this §4.31 adopted to be effective May 27, 2003, 28 TexReg 4109

## §4.32 Field of Study Curricula

- (a) In accordance with Texas Education Code, §61.823, the Board approves field of study curricula for certain fields of study/academic disciplines. Field of study curricula shall be developed with the assistance of advisory committees whose membership includes at least a majority of members who are teaching faculty (as defined by §4.23(8) of this title, relating to Definitions for Core Curriculum and Field of Study Curricula) within the field of study under consideration.
- (b) If a student successfully completes a field of study curriculum developed by the Board, that block of courses may be transferred to a general academic teaching institution and must be substituted for that institution's lower-division requirements for the degree program for the field of study into which the student transfers, and the student shall receive full academic credit toward the degree program for the block of courses transferred.
- (c) A student who transfers from one institution of higher education to another without completing the field of study curriculum of the sending institution shall receive academic credit in the field of study curriculum of the receiving institution for each of the courses that the student has successfully completed in the field of study curriculum of the sending institution. Following receipt of credit for these courses, the student may be required to satisfy the remaining course requirements in the field of study curriculum of the receiving institution, or to complete additional requirements in the receiving institution's program, as long as those requirements do not duplicate course content already completed through the field of study curriculum.
- (d) A student concurrently enrolled at more than one institution of higher education shall follow the field of study curriculum requirements of the institution at which the student is classified as a degree-seeking student.
- (e) Each institution must note field of study curriculum courses on student transcripts as recommended by the Texas Association of Collegiate Registrars and Admissions Officers (TACRAO).
- (f) Each institution must review and evaluate its procedures for complying with field of study curricula at intervals specified by the Board and shall report the results of that review to the Board. These reports shall be submitted following the same timetable as the regular reports of core curriculum evaluations.

Source Note: The provisions of this §4.32 adopted to be effective May 27, 2003, 28 TexReg 4109

## §4.33 Criteria for Evaluation of Field of Study Curricula

- (a) Every five years, each public institution of higher education shall review and evaluate its policies and practices regarding the acceptance and application of credit earned as part of a Board-approved field of study curriculum, and reports the results of that evaluation to the Board. The evaluation should include:
  - (1) the extent to which the institution's compliance with the acceptance of transfer credit through field of study curricula is being achieved;
  - (2) the extent to which the institution's application to the appropriate degree program of credit earned as part of a Board-approved field of study curriculum facilitates academic success;
  - (3) the effectiveness of field of study curricula in the retention and graduation of transfer students in those degree programs that have Board-approved field of study curricula.
- (b) Each institution's evaluation report must contain at least the following:
  - (1) a listing of the institution's degree programs that have Board-approved field of study curricula;
  - (2) a description of the institution's policies and practices regarding applicable Boardapproved field of study curricula, including admission-point evaluation of transfer credit, advising practices (including catalogue and website information on existing field of study curricula and advising/counseling practices for enrolled students), and transcripting practices to show field of study participation and completion;
  - (3) a chart or table showing the number of total transfer students for each degree program that has a Board-approved field of study curriculum, for each of the last five years; the chart should indicate year-by-year the percentage of students who transferred having completed the applicable field of study curriculum, the percentage of students who transferred without having completed the applicable field of study curriculum, and any information about progress toward graduation or graduation rates that can compare transfer student performance with non-transfer student performance during the evaluation period.

Source Note: The provisions of this §4.33 adopted to be effective May 27, 2003, 28 TexReq 4109

### §4.34 Revision of Existing Approved Field of Study Curricula

- (a) The Board shall have the authority to modify or revise a Board-approved field of study curriculum when a need for such a revision is identified, as specified in current Board policy and procedures.
- (b) The need for a revision or modification to a Board-approved field of study curriculum may be identified by one of the following methods, or by other methods that are similarly appropriate:
  - (1) notice of a change in licensure, certification, or accreditation standards that would affect the field of study curriculum and lower-division requirements for a field of study or academic discipline;
  - (2) notice of a change in curricular structure or content that is part of a pervasive change in the academic discipline served by the field of study curriculum, as documented by national or regional professional organizations, faculty organizations, or other indicators of best practices in the discipline;

- (3) receipt of a request from at least three public institutions of higher education that are affected by the field of study curriculum under consideration for modification, including at least one two-year and one four-year academic-degree-granting institution. The request and justifications for the request should be made by the chief academic officers of the institutions, in a joint memorandum sent to the Commissioner.
- (c) Any proposed modification or revision to a Board-approved field of study curriculum should be evaluated by an advisory committee convened under the conditions cited in §4.30(a) of this title (relating to Criteria for Evaluation of Core Curricula). Recommendations for modifications or revisions to a Board-approved field of study curriculum should reflect the advice and wisdom of an advisory committee made up primarily of teaching faculty from the academic discipline(s) affected by the field of study curriculum under consideration.

Source Note: The provisions of this §4.34 adopted to be effective May 27, 2003, 28 TexReg 4109

## §4.35 Texas Common Course Numbering System

- (a) Each institution shall include the applicable course numbers from the TCCNS in its printed and electronic catalogs, course listings, and any other appropriate informational resources, and in the application of the provisions of this subchapter. Institutions that do not use the TCCNS taxonomy as their sole means of course numbering shall publish the following information in their printed and electronic catalogs, course listings, and any other appropriate informational resources:
  - (1) The TCCNS prefix and number must be displayed immediately adjacent to the institutional course prefix and number (e.g. ENG 101 (ENGL 1301) at the beginning of each course description; and
  - (2) The printed and electronic catalogs shall include a chart, table, or matrix, alphabetized by common course prefix, listing all common courses taught at the institution by both the common and local course number. For printed catalogs, the chart, table, or matrix should be referenced in a table of contents and/or a subject index.
- (b) Each institutional catalog shall include an explanation of the TCCNS and the significance of TCCNS courses for transfer purposes.
- (c) Each institution shall comply with the requirements of sections (a) and (b) no later than September 1, 2005.
- (d) For good cause, the Commissioner may approve an exemption from the requirements of this section.

Source Note: The provisions of this §4.35 adopted to be effective May 23, 2004, 29 TexReg 5057

#### CORE CURRICULUM: ASSUMPTIONS AND DEFINING CHARACTERISTICS

#### **REVISED 1999**

**NOTE:** This document refers to Coordinating Board Rules (Chapter 5, Subchapter S) that were in effect in 1999. The rules have been revised over the years, and information about Core Curriculum is now found in Chapter 4 of Board rules. Those rules are included in this manual.

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

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

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

## CORE COMPONENTS AND RELATED EXEMPLARY EDUCATIONAL OBJECTIVES

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

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

**Funding Category Names and Funding Codes** 

Funding Category Names and Fu  Category Name	First 2, 4, or 6 Digits of CIP Code*	Funding Code
Agriculture	01, 03	1
Architecture & Precision Production Trades	04, 47.04, 48	2
Biology, Physical Sciences & Science Technologies	26, 40, 41	3
Business Management, Marketing & Administrative Services	11.0202, 11.05, 11.09, 22.03, 51.07, 52	4
Career Pilot	49.0102	5
Communication	09, 10, 13.05	6
Computer and Information Sciences	11*	7
Construction Trades	46	8
Consumer and Homemaking Education	12, 13*, 19	9
Engineering	14	10
Engineering Related	15	11
English Language, Literature, Philosophy, Humanities & Interdisciplinary	23, 24, 25, 30, 32*, 38	12
Foreign Languages	16	13
Health Occupations – Dental Assisting, Medical Lab, and Associate Degree Nursing	51.0601 51.0802 51.1000 51.1601	14
Health Occupations – Dental Hygiene	51.0602	15
Health Occupations – Other (Excludes Dental Hygiene, Dental Assisting, Medical Lab, Associate Degree Nursing, Vocational Nursing, and Respiratory Therapy	51*	16
Health Occupations – Respiratory Therapy	51.0908	17
Health Occupations – Vocational Nursing	51.1613	18
Mathematics	27, 32.0104	19
Mechanics and Repairers – Automotive	47*	20
Mechanics and Repairers – Diesel, Aviation, Mechanics & Transportation Workers	47.0605, 47.0607, 47.0608, 47.0609,49	21
Mechanics and Repairers – Electronics	47.01, 47.02	22
Physical Education and Fitness	31, 36.0108, 36.0114	23
Protective Services and Public Administration	22*, 43, 44	24
Psychology, Social Sciences, and History	05, 42, 45,54	25
Visual and Performing Arts	50	26
Non-State Funded	02, 08, 20, 21, 28, 29, 33, 34, 35, 36*, 37, 39, 99	

<sup>\*</sup>The four and six-digit CIP codes, when listed separately, are not included in their corresponding two-digit CIP code funding area.