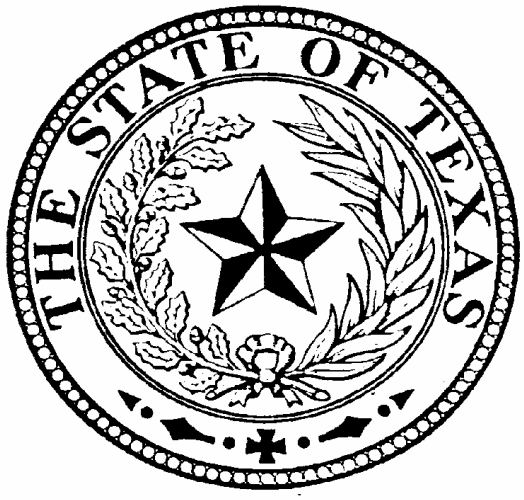
LOWER-DIVISION ACADEMIC COURSE GUIDE MANUAL



TEXAS HIGHER EDUCATION COORDINATING BOARD
COMMUNITY AND TECHNICAL COLLEGES DIVISION
AUSTIN, TEXAS

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Introduction

The *Lower-Division Academic Course Guide Manual (ACGM)* is the official list of courses approved for general academic transfer that may be offered by public community and technical colleges in Texas for state funding. 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 5, Subchapter S. Accordingly, the Coordinating Board established an Academic Course Guide Manual Review Committee with equal representation from public community colleges and public universities. This standing committee meets at least twice annually or more frequently as needed to recommend to the Coordinating Board staff appropriate courses to be added to, revised, 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 2003 edition of the *ACGM* incorporates new CIP (Classification of Instructional Programs) codes included in the migration to CIP 2000. Institutions should check carefully for approval numbers that have changed.

The 2003 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*.) This edition incorporates all course additions and changes summarized in the Summer 2002 *Addendum to the Lower-Division Academic Course Guide 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 2003 *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 for these courses. 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 the basis of unique need. There are no provisions in the 2003 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 either in the *ACGM* or on the college's Academic Unique Need inventory.

Instructions: How to Read and Use the *ACGM*

The 2003 edition of the *ACGM* is organized alphabetically by academic disciplines currently taught at community and technical colleges. All common courses listed in the 2003 *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 appears a line listing the 10-digit approval number for the course, the matching content descriptor, and information about maximum semester credit hours (SCH) per student, maximum SCH per course, and maximum content hours per course. This information is underlined. Finally, a brief course description appears.

For example:

BIOL 1106 *(lab, 1st semester, for Biology majors)*
BIOL 1107 *(lab, 2nd semester, for Biology majors)*
BIOL 1306 *(lecture, 1st semester, for Biology majors)*
BIOL 1307 *(lecture, 2nd semester, for Biology majors)*
BIOL 1406 *(lecture + lab, 1st semester, for Biology majors)*
BIOL 1407 *(lecture + lab, 2nd semester, for Biology majors)*
BIOL 1108 *(lab, 1st semester)*
BIOL 1109 *(lab, 1st semester)*
BIOL 1308 *(lecture, 1st semester)*
BIOL 1309 *(lecture, 2nd semester)*
BIOL 1408 *(lecture + lab, 1st semester)*
BIOL 1409 *(lecture + lab, 2nd semester)*

26.0101.51 03 General Biology

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.

Approval Number 26.0101.51 03
CIP Area ..... Life Sciences
Maximum SCH per student 8
Maximum SCH per course……..…. 4
Maximum contact hours per course…….....96

In this example, the 10-digit approval number is 26.0101.5103. The first six digits of the approval number indicate subject matter and are based upon the *new* CIP codes implemented for Fall 2003. The Coordinating Board staff assigns the last four digits. The 7th and 8th digits further delineate course content, sequence, or approval category. The 9th and 10th digits indicate the funding category. **Reporting officials should review the approval numbers carefully because some of them have changes.**

26.0101 is the CIP code for General Biology

51 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 (as opposed to general approval), the 7th digit will be a 9 instead of a 5. If a course is approved as a permanent unique need, the 7th digit will be a 7 instead of a 5 or 9. If the course is approved for excessive credit and/or contact hours (more than allowed in the approved listing), the 7th digit will be an 8 instead of a 5 or 9.

03 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 E.

(IMPORTANT NOTE: The 2003 edition of the ACGM reflects new state funding codes adopted this year. Some of these codes will not match funding codes found in the 2002 ACGM.)

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

8 is the maximum number of semester credit hours (SCH) per student for courses applicable toward an associate degree under this specific approval number. In this example, a college may allow students to take eight SCH of general biology courses and count them toward an associate degree.

4 is the maximum number of semester credit hours per course under this specific approval number. In this case, the maximum number is four. A college could offer a course under this approval number for four 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 Biology (or any other discipline) lecture course offered for three 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 three contact hours of lecture and three 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 one contact hour of lecture instruction and one semester credit hour is awarded per two to four contact hours of laboratory instruction.

96 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 Biology approval number for 96 or fewer contact hours, but not more. In this example, a four SCH biology course can be offered for up to a maximum 96 contact hours. During a regular 16-week semester, 96 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 96 contact hours.

In rare cases, no common courses have been identified for specific approval numbers. Approval numbers for religion courses, listed under the heading "RELI" in this manual, are an 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 following web sites:

The TCCNS Matrix Online (http://www.tccns.org/ccn/) is hosted by Texas A&M University at Commerce. This web site 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.

The Texas Higher Education Coordinating Board's web site is http://www.thecb.state.tx.us. TCCNS Transfer Guides are available at the site. The Transfer Guides provide information and recommendations regarding specific common courses that students can take at Texas community and junior colleges to ensure degree applicability of transfer credit at four-year public universities. For example, if a student wishes to major in biochemistry and to begin his/her studies at Texarkana College and later transfer to Texas A&M University (TAMU), the student can (and should) consult the TAMU Transfer Guide for biochemistry. This guide will inform the student of exactly which courses to take at Texarkana College.

Addition and Deletion of Courses

At the institution's request, Texas Higher Education Coordinating Board (THECB) staff and the Standing ACGM Review Committee may consider a course for placement in the *ACGM*. If THECB staff members determine that there is continued need for that course at that particular institution, then the course will be presented to the Standing ACGM Review 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 Standing ACGM Review 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.

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).
- The course has met the criteria for inclusion in an institution's course inventory as a Unique Need course for a six-year cycle.
- 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 a course is not approved by the ACGM committee and THECB 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 Standing ACGM Review Committee will review and consider a biannual survey of courses in the *ACGM*. THECB staff, using the CBM004 and other means to determine how frequently courses are taught, will conduct the survey. 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. THECB staff will contact the institutions still teaching the course to alert them of the "under review" status. Any course under review for two years may be removed from the *ACGM* by a majority vote in favor of removal by the Standing ACGM Review Committee.

The basis 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

Approval for a course not available under an *ACGM* approval number or for one with credit and/or contact hours in excess of the limits prescribed by the *ACGM* must be approved by the Coordinating Board according to the Boards Rules and Regulations. When applying for a Unique Need Course, submit a Request for Approval. Be sure that all information requested is addressed or attached as needed. A copy of this form appears in Appendix B.

For courses to be included in the *ACGM* as Unique Need Courses, each specific course must meet the two following 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, preferably for the core curriculum or a specific major, but at least as elective credit.

2. The course requested must have college and university level rigor. Courses designed to meet a community service, leisure, vocational, or a vocational 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*. 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 and that it meets the requirement for college and university rigor.

2. Colleges must reapply for approval of Unique Need Courses annually. At the institution's request upon the third consecutive approval, a course may be considered for continued placement in that institution's course inventory. Requests must include the enrollments and frequency with which the course was offered during the preceding two years.

3. Exemptions to the three year approval procedure may be requested if a Unique Need Course is transferable as part of the state's and the Coordinating Board's mandated Core Curriculum. An institution may request that such a course be considered for inclusion after the course has been taught the previous academic year. These requests must include the enrollments and frequency with which the course was offered during the preceding years.

The Coordinating Board staff is currently reviewing its unique need request procedures. If you have suggestions or comments, please send them to Dr. James Goeman at James.Goeman@thecb.state.tx.us.

Distance Learning

For community colleges, distance learning may take the form of instruction offered at distant sites -- out-of-district, out-of-state, or out-of-country -- or instruction delivered primarily by telecommunications technology. Unless specifically exempted by the Coordinating Board, all state-funded distance learning courses and programs must be submitted for annual review to the appropriate Higher Education Regional Councils (Subchapter H, Approval of Distance Learning for Public Colleges and Universities, of the *Coordinating Board Rules and Regulations*, Chapter 5.) The text of Subchapter H is included in the appendix of this manual.

An "Annual Plan" for Distance Learning consists of a listing by location of distance learning courses and programs planned to be taught during an academic year by an institution. The Annual Plan must include a signed statement of institutional commitment to Distance Learning Standards (see appendix for this form). Each college must prepare an Annual Plan in January for the following academic year. For example, the Annual Plan for 2001-2002 must be prepared in January 2001. The Annual Plan will be submitted by the college to the appropriate Higher Education Regional Council(s) for approval during council meetings in January or February. The Higher Education Regional Councils thereafter make recommendations to the Commissioner of Higher Education regarding the Annual Plans. The Commissioner in turn makes recommendations regarding the Annual Plans to the Coordinating Board at its April meeting.

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 appears in the Appendix.

Developmental Courses

Developmental course work may be reported for state reimbursement but does not result in degree credit. Because developmental courses do not transfer, no common courses are listed 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 course approval numbers are listed in a separate chapter of this manual (See Table of Contents).

List of Approved Courses

ACCT (Accounting)

ACCT 2301 Principles of Accounting I - Financial *(3 SCH version)*
ACCT 2401 Principles of Accounting I - Financial *(4 SCH version)*

ACCT 2302 Principles of Accounting II - Managerial *(3 SCH version)*
ACCT 2402 Principles of Accounting II - Managerial *(4 SCH version*)

Accounting concepts and their application in transaction analysis and financial statement preparation; analysis of financial statements; and asset and equity accounting in proprietorships, partnerships, and corporations. Introduction to cost behavior, budgeting, responsibility accounting, cost control, and product costing.

Approval Number.....52.0301.51 04
CIP Area.....Business, Management, & Administrative Support
maximum SCH per student.....8
maximum SCH per course.....4
maximum contact hours per course.....96

AGRI (Agriculture)

AGRI 1307 Agronomy *(3 SCH version)*
AGRI 1407 Agronomy *(4 SCH version)*

Principles and practices in the development, production, and management of field crops including plant breeding, plant diseases, soils, insect control, and weed control.

Approval Number.....01.1102.51 01
CIP Area..... Agronomy and Crop Science
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....96

AGRI 1309 Computers in Agriculture

Use of computers in agricultural applications. Introduction to programming languages, word processing, electronic spreadsheets, and agricultural software.

Approval Number.....01.0101.51 01
CIP Area.....Agribusiness & Agriculture Production
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....64

AGRI 1311 Dairy Science

Survey of the dairy industry including dairy breeds, standards for selection and culling, herd replacements, feeding, management, physiology, and health maintenance. Food value for milk, tests for composition and quality, and use and processing of market milk and dairy products.

Approval Number.....01.0905.51 01
CIP Area..... Dairy Science
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....64

AGRI 1413 Plant Protection *(freshman version)*
AGRI 2313 Plant Protection *(sophomore version)*

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 student 4
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*)

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

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

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
CIP Area.....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.....Poultry Science
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
CIP Area.....Agribusiness & Agriculture Production
maximum SCH per student.....2
maximum SCH per course.....2
maximum contact hours per course.....32

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
CIP Area.....Agribusiness & Agriculture Production
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....64

AGRI 2303 Agricultural Construction I
AGRI 2304 Agricultural Construction II
AGRI 2403 Agricultural Construction *(4 SCH, single-semester course)*
AGRI 2603 Agricultural Construction *(6 SCH, single-semester course)*

Selection, use, and maintenance of hand and power tools; arc and oxy-acetylene welding; and construction materials and principles.

Approval Number.....01.0201.51 01
CIP Area.....Agribusiness & Agriculture Production
maximum SCH per student.....6
maximum SCH per course.....6
maximum contact hours per course.....128

AGRI 2317 Introduction to Agricultural Economics

Fundamental economic principles and their applications to the problems of the industry of agriculture.

Approval Number.....01.0103.51 01
CIP Area.....Agribusiness & Agriculture Production
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

AGRI 2321 Livestock Evaluation I
AGRI 2322 Livestock Evaluation II
AGRI 1121 Livestock Judging (*1 SCH, single-semester course*)
AGRI 2221 Livestock Evaluation *(2 SCH, single-semester course)*

Selection, evaluation, and classification of livestock and livestock products.

Approval Number.....01.0901.52 01
CIP Area.....Animal Sciences, General
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....96

AGRI 2330 Wildlife Conservation & Management

Principles and practices used in the production and improvement of wildlife resources. Aesthetic, ecological, and recreational uses of public and private lands.

Approval Number.....03.0601.51 01
CIP Area.....Renewable Natural Resources
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....64

ANTH (Anthropology)

ANTH 2301 Physical Anthropology (*lecture*)
ANTH 2302 Introduction of Archeology (*lecture*)
ANTH 1101 Physical Anthropology (*lab*)*
***(*Note: may be taught as an accompaniment to ANTH 2301 only.*)**

Overview of human origins and biocultural adaptations. Also introduces methods and theory in the excavation and interpretation of material remains of past cultures.

Approval Number.....45.0301.51 25
CIP Area.....Social Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....96

ANTH 2346 General Anthropology
(Also see HUMA 2323 World Cultures)

Study of human beings, their antecedents and related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, and ethnology. (*Cross-listed as HUMA 2323*)

Approval Number.....45.0201.51 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ANTH 2351 Cultural Anthropology

Key concepts, methods and theory in the study of cultural diversity, social institutions, linguistics, and culture change among world peoples.

Approval Number.....45.0201.53 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ANTH 2189 Academic Cooperative *(1 SCH version)*
ANTH 2289 Academic Cooperative *(2 SCH version)*
ANTH 2389 Academic Cooperative *(3 SCH version)*
(Also see ECON 2389, GEOG 2389, GOVT 2389, HIST 2389, PSYC 2389, SOCI 2389)

An instructional program designed to integrate on-campus study with practical hands-on experience in anthropology. 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.....112

ARCH (Architecture)

ARCH 1301 Architectural History I
ARCH 1302 Architectural History II

Study of the history of architecture from the ancient civilizations to the present. Emphasis on the relationship of culture, geography, climate, natural resources, and materials to the methods of construction.

Approval Number.....30.1201.51 12
CIP Area.....Multi/Interdisciplinary Studies
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

ARCH 1303 Architectural Design I *(3 SCH version)*
ARCH 1403 Architectural Design I *(4 SCH version)*

ARCH 1304 Architectural Design II *(3 SCH version)*
ARCH 1404 Architectural Design II *(4 SCH version)*

Introduction to architectural concepts. The visual characteristics of two- and three-dimensional forms and spaces.

Approval Number.....04.0201.54 02
CIP Area.....Architecture & Environmental Design
maximum SCH per student.....8
maximum SCH per course.....4
maximum contact hours per course.....144

ARCH 1205 Architectural Aesthetics *(2 SCH version)*
ARCH 1305 Architectural Aesthetics *(3 SCH version)*

Architecture as a contemporary philosophical concept. Visual experiences in the aesthetics of architecture.

Approval Number.....04.0201.52 02
CIP Area.....Architecture & Environmental Design
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ARCH 1307 Architectural Graphics I *(3 SCH version)*
ARCH 1407 Architectural Graphics I *(4 SCH version)*

ARCH 1308 Architectural Graphics II *(3 SCH version)*
ARCH 1408 Architectural Graphics II *(4 SCH version)*

Architectural drafting techniques including orthographic and axonometric studies. Principles of shades and shadows, and perspective drawing.

Approval Number.....15.1303.53 11
CIP Area.....Architectural Drafting & Architectural CAD/CADD
maximum SCH per student.....8
maximum SCH per course.....4
maximum contact hours per course.....96

ARCH 1201 Introduction to Architecture *(2 SCH version)*
ARCH 1311 Introduction to Architecture *(3 SCH version)*

An introduction to the elements of the architectural profession.

Approval Number.....04.0201.59 02
CIP Area.....Architecture & Environmental Design
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ARCH 1315 Architectural Computer Graphics

Introduction to computer graphics systems with emphasis on architectural applications.

Approval Number.....15.1303.52 11
CIP Area.....Architectural Drafting & Architectural CAD/CADD
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....96

ARCH 2201 Architectural Freehand Drawing I *(2 SCH version)*
ARCH 2301 Architectural Freehand Drawing I *(3 SCH version)*

ARCH 2202 Architectural Freehand Drawing II *(2 SCH version)*
ARCH 2302 Architectural Freehand Drawing II *(3 SCH version)*

ARCH 2203 Architectural Freehand Drawing III *(2 SCH version)*

Representational drawing using various media. Emphasis on principles of light, shade, scale, proportion, line, and tonal quality.

Approval Number.....15.1303.51 11
CIP Area.....Architectural Drafting & Architectural CAD/CADD
maximum SCH per student.....8
maximum SCH per course.....3
maximum contact hours per course.....96

ARCH 2312 Architectural Technology I
ARCH 2313 Architectural Technology II

Introduction to the properties, specifications, and application of materials related to architectural structures. Emphasis on the methods of construction and the effect of design.

Approval Number.....15.0101.51 11
CIP Area.....Engineering Related Technologies
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....96

ARTS (Studio Art & Art History)

ARTS 1301 Art Appreciation

Exploration of purposes and processes in the visual arts including evaluation of selected works.

Approval Number.....50.0703.51 26
CIP Area.....Visual & Performing Arts
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ARTS 1303 Art History I
ARTS 1304 Art History II

Examination of painting, sculpture, architecture, and other arts from prehistoric to present time.

Approval Number.....50.0703.52 26
CIP Area.....Visual & Performing Arts
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

ARTS 1311 Design I (*2-dimensional*)
ARTS 1312 Design II (*3-dimensional*)

Elements and principles of art using two- and three-dimensional concepts.

Approval Number.....50.0401.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 9
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 1213 Foundations of Art (*2 SCH version*)
ARTS 1313 Foundations of Art *(3 SCH version)*
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
ARTS 1317 Drawing II

Investigation of drawing media and techniques including descriptive and expressive possibilities.

Approval Number.....50.0705.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 1320 Interior Design I
ARTS 1321 Interior Design II

Studio course in interior design. Includes instruction in professional techniques of designing the interiors of homes, offices, and industrial buildings.

Approval Number.....50.0408.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 1325 Drawing & Painting

Drawing and painting for non-art majors.

Approval Number.....50.0708.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 2311 Design III (*may be 2-D, 3-D, color, or combinations thereof*)
ARTS 2312 Design IV

Elements and principles of art using two- and three-dimensional concepts.

Approval Number.....50.0401.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 9
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 2313 Design Communications I
ARTS 2314 Design Communications II

Communication of ideas through processes and techniques of graphic design and illustration.

Approval Number.....50.0401.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 2316 Painting I
ARTS 2317 Painting II

Exploration of ideas using painting media and techniques.

Approval Number.....50.0708.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 2323 Life Drawing I *(3rd semester drawing)*
ARTS 2324 Life Drawing II *(4th semester drawing)*

Basic study of the human form.

Approval Number.....50.0705.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....144

ARTS 2326 Sculpture I
ARTS 2327 Sculpture II

Exploration of ideas using sculpture media and techniques.

Approval Number.....50.0709.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 2333 Printmaking I
ARTS 2334 Printmaking II

Exploration of ideas using various printmaking processes.

Approval Number.....50.0710.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 2336 Fiber Arts I
ARTS 2337 Fiber Arts II

Structure and design of woven and non-woven fiber forms.

Approval Number.....50.0712.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 2341 Art Metals I
ARTS 2342 Art Metals II

Exploration of ideas using basic techniques in jewelry and metal construction.

Approval Number.....50.0713.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

ARTS 2346 Ceramics I
ARTS 2347 Ceramics II

Exploration of ideas using basic ceramic processes.

Approval Number.....50.0711.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

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 50.0402.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course 96

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*)

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

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..... Visual & Performing Arts
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

ARTS 2189 Academic Cooperative *(1 SCH version)*
ARTS 2289 Academic Cooperative *(2 SCH version)*
ARTS 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 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.....112

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)*
(Also see COSC 1301 & 1401)

Introduction to business programming techniques. Includes structured programming methods, designing customized software applications, testing documentation, input specification, and report generation. (*Cross-listed as COSC 1301 & 1401*)

Approval Number.....11.0202.52 04
CIP Area.....Computer Programming Special Applications
maximum SCH per student 12
maximum SCH per course 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.

Approval Number.....11.0202.54 04
CIP Area.....Computer Programming Special Applications
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....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
CIP Area.....Computer Programming Special Applications
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....80

BCIS 1316 Computer Programming-BASIC *(3 SCH version)*
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.

Approval Number.....11.0202.52 04
CIP Area.....Computer Programming Special Applications
maximum SCH per student 12
maximum SCH per course 4
maximum contact hours per course.....96

BCIS 1320 Introductory C Programming *(3 SCH version)*
BCIS 1420 Introductory C Programming *(4 SCH version)*
(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*)

Approval Number.....11.0202.52 04
CIP Area.....Computer Programming Special Applications
maximum SCH per student 12
maximum SCH per course 4
maximum contact hours per course.....96

BCIS 1331 Programming in BASIC I *(3 SCH version)*
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.

Approval Number.....11.0202.52 04
CIP Area.....Computer Programming Special Applications
maximum SCH per student 12
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.

Approval Number.....11.0202.52 04
CIP Area.....Computer Programming Special Applications
maximum SCH per student.....12
maximum SCH per course.....4
maximum contact hours per course.....96

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.....96

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.....Computer Programming Special Applications
maximum SCH per student.....8
maximum SCH per course.....4
maximum contact hours per course.....96

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.

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 2390 Systems Analysis & Design

Analysis of business information needs and preparation of specifications and requirements for appropriate data system solutions. Includes instruction in information requirements analysis, specification development and writing, prototype evaluation, and network application interfaces.

Approval Number.....11.0501.51 04
CIP Area.....Computer Systems Analyst/Analysis
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....80

BIOL (Biology)

BIOL 1406 Biology for Science Majors I (*lecture* + *lab*)
BIOL 1306 Biology for Science Majors I (*lecture*)
BIOL 1106 Biology for Science Majors Laboratory I *(lab)*

BIOL 1407 Biology for Science Majors II (*lecture* + *lab*)
BIOL 1307 Biology for Science Majors II *(lecture)*
BIOL 1107 Biology for Science Majors Laboratory II *(lab)*

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.

Approval Number.....26.0101.51 03
CIP Area.....Life Sciences
maximum SCH per student.....8
maximum SCH per course.....4
maximum contact hours per course.....96

BIOL 1408 Biology for Non-Science Majors I (*lecture* + *lab*)
BIOL 1308 Biology for Non-Science Majors I *(lecture)*
BIOL 1108 Biology for Non-Science Majors Laboratory I *(lab)*

BIOL 1409 Biology for Non-Science Majors II (*lecture* + *lab*)
BIOL 1309 Biology for Non-Science Majors II *(lecture)*
BIOL 1109 Biology for Non-Science Majors Laboratory II *(lab)*

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.

Approval Number.....26.0101.51 03
CIP Area.....Life Sciences
maximum SCH per student.....8
maximum SCH per course.....4
maximum contact hours per course.....96

BIOL 1411 General Botany *(lecture + lab)*
BIOL 1311 General Botany *(lecture)*
BIOL 1111 General Botany *(lab)*

Study of structure and function of plant cells, tissues, and organs. Includes an evolutionary survey and life histories of the following representative groups: algae, fungi, mosses, liverworts, ferns, and seed producing organisms. Plant reproductive and functional interactions with their environment and with humans. Selected laboratory exercises.

Approval Number.....26.0301.51 03
CIP Area.....Life Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....112

BIOL 1413 General Zoology *(lecture + lab)*
BIOL 1313 General Zoology *(lecture)*
BIOL 1113 General Zoology *(lab)*

Study of the principles of taxonomy, molecular biology, and ecology as they relate to animal form and function, diversity, behavior, and evolution.

Approval Number.....26.0701.51 03
CIP Area.....Life Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....112

BIOL 1322 Nutrition & Diet Therapy I *(may also be single-semester course)*
BIOL 1323 Nutrition & Diet Therapy II *(2nd of 2 semesters)*
(Also see HECO 1322)

Study of the chemical, physical, and sensory properties of food; nutritional quality; and food use and diet applications. (C*ross-listed as HECO 1322)*

Approval Number.....19.0501.51 09
CIP Area.....Home Economics
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

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.....Life Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....112

BIOL 2401 Anatomy & Physiology I *(lecture + lab)*
BIOL 2301 Anatomy & Physiology I *(lecture)*
BIOL 2101 Anatomy & Physiology Laboratory I *(lab)*

BIOL 2402 Anatomy & Physiology II *(lecture + lab)*
BIOL 2302 Anatomy & Physiology II *(lecture)*
BIOL 2102 Anatomy & Physiology II *(lab)*

BIOL 2304 Anatomy & Physiology I *(specialized, lecture only)*
BIOL 2305 Anatomy & Physiology II *(specialized, lecture only)*
BIOL 2404 Anatomy & Physiology (*specialized, single-semester course, lecture + lab*)

Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized.

Approval Number.....26.0707.51 03
CIP Area.....Life Sciences
maximum SCH per student.....12
maximum SCH per course.....4
maximum contact hours per course.....112

BIOL 2206 Environmental Biology *(lecture)*
BIOL 2406 Environmental Biology *(lecture + lab)*
BIOL 2306 Environmental Biology *(lecture)*
BIOL 2106 Environmental Biology *(lab)*

Human interaction with and effect upon plant and animal communities. Conservation, pollution, energy, and other contemporary ecological problems.

Approval Number.....03.0103.51 01
CIP Area.....Renewable Natural Resources
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....96

BIOL 2416 Genetics (*lecture + lab*)
BIOL 2316 Genetics (*lecture*)
BIOL 2116 Genetics (*lab*)

Study of the principles of molecular and classical genetics and the function and transmission of hereditary material. May include population genetics and genetic engineering.

Approval Number.....26.0804.51 03
CIP Area.....Life Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per student.....112

BIOL 2420 Microbiology for Non-Science Majors (*lecture + lab*)
BIOL 2320 Microbiology for Non-Science Majors (*lecture*)
BIOL 2120 Microbiology for Non-Science Majors Laboratory *(lab)*

Study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms. Pure cultures of microorganisms grown on selected media are used in learning laboratory techniques. Includes a brief preview of food microbes, public health, and immunology.

Approval Number.....26.0503.51 03
CIP Area.....Life Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....112

BIOL 2421 Microbiology for Science Majors (*lecture + lab*)
BIOL 2321 Microbiology for Science Majors *(lecture*)
BIOL 2121 Microbiology for Science Majors Laboratory (*lab*)

Study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms. Pure cultures of microorganisms grown on selected media are used in learning laboratory techniques. Includes a brief preview of food microbes, public health, and immunology.

Approval Number.....26.0503.51 03
CIP Area.....Life Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....112

BIOL 2428 Vertebrate Zoology *(lecture + lab)*

Structure, development, physiology, and natural history of the vertebrate animals with emphasis on comparative evolution.

Approval Number.....26.0701.53 03
CIP Area.....Life Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....112

BIOL 2189 Academic Cooperative *(1 SCH version)*
BIOL 2289 Academic Cooperative *(2 SCH version)*
BIOL 2389 Academic Cooperative *(3 SCH version)*

An instructional program designed to integrate on-campus study with practical hands-on work experience in the biological sciences/ life sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of living organisms and their systems.

Approval Number.....26.0101.52 03
CIP Area.....Life Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....112

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 Number.....52.0101.51 04
CIP Area.....Business, Management, & Administrative Support
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

BUSI 1304 Business Report Writing & Correspondence *(freshman level version)*
BUSI 2304 Business Report Writing & Correspondence *(sophomore level version)*

Theory and applications for technical reports and correspondence in business.

Approval Number.....23.1101.52 12
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

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.

Approval Number.....19.0401.51 09
CIP Area.....Home Economics
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

BUSI 1311 Salesmanship

Principles of personal salesmanship including methods and tasks applicable to a wide variety of industries and commercial settings.

Approval Number.....52.1804.51 04
CIP Area..... Selling Skills & Sales Operations
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 3
maximum contact hours per course.....48

BUSI 2302 Legal Environment of Business *(2nd semester Business Law)*

Role of law and government regulations in business and society. Includes legal reasoning, sources of law, social policy and legal institutions, and laws relating to antitrust protection, security regulations, consumer protection, environmental protection, worker health and safety, and employment discrimination.

Approval Number.....22.0101.52 24
CIP Area.....Law
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

CHEM (Chemistry)

CHEM 1405 Introductory Chemistry I *(lecture + lab)*
CHEM 1305 Introductory Chemistry I *(lecture)*
CHEM 1105 Introductory Chemistry Laboratory I *(lab)*

CHEM 1407 Introductory Chemistry II *(lecture + lab)*
CHEM 1307 Introductory Chemistry II *(lecture)*
CHEM 1107 Introductory Chemistry Laboratory II *(lab)*

CHEM 1406 Introductory Chemistry I (*lecture + lab, allied health emphasis*)
CHEM 1306 Introductory Chemistry I (*lecture, allied health emphasis*)
CHEM 1106 Introductory Chemistry I (*lab, allied health emphasis*)
CHEM 1408 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 non-science and allied health students.

Approval Number.....40.0501.51 03
CIP Area..... Physical Sciences
maximum SCH per student 8
maximum SCH per course 4
maximum contact hours per course.....112

CHEM 1411 General Chemistry I *(lecture + lab)*
CHEM 1311 General Chemistry I *(lecture)*
CHEM 1111 General Chemistry I *(lab)*

CHEM 1412 General Chemistry II *(lecture + lab)*
CHEM 1312 General Chemistry II *(lecture)*
CHEM 1112 General Chemistry II *(lab)*

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.....40.0501.52 03
CIP Area..... Physical Sciences
maximum SCH per student 8
maximum SCH per course 4
maximum contact hours per course.....112

CHEM 2401 Analytical Chemistry I *(lecture + lab)*
CHEM 2301 Analytical Chemistry I *(lecture)*
CHEM 2101 Analytical Chemistry Laboratory I *(lab)*

CHEM 2402 Analytical Chemistry II *(lecture + lab)*
CHEM 2302 Analytical Chemistry II *(lecture)*
CHEM 2102 Analytical Chemistry Laboratory II *(lab)*

Principles and methods of quantitative chemical analysis dealing primarily with volumetric and gravimetric analysis and containing a brief introduction to physical methods.

Approval Number.....40.0502.51 03
CIP Area..... Physical Sciences
maximum SCH per student 8
maximum SCH per course 4
maximum contact hours per course.....128

CHEM 1104 Chemical Calculations *(1 SCH version)*
CHEM 1204 Chemical Calculations *(2 SCH version)*

Study of the mathematical applications used in chemistry. Designed for science and engineering students.

Approval Number.....40.0502.52 03
CIP Area..... Physical Sciences
maximum SCH per student 2
maximum SCH per course 2
maximum contact hours per course.....48

CHEM 1419 Introductory Organic Chemistry I
CHEM 1420 Introductory Organic Chemistry II

Survey course introducing organic chemistry. Not designed for students in science or pre-professional programs.

Approval Number.....40.0504.51 03
CIP Area..... Physical Sciences
maximum SCH per student 8
maximum SCH per course 4
maximum contact hours per course.....112

CHEM 2423 Organic Chemistry I *(lecture + lab)*
CHEM 2323 Organic Chemistry I *(lecture)*
CHEM 2223 Organic Chemistry Laboratory I *(lab, 2 SCH version)*
CHEM 2123 Organic Chemistry Laboratory I *(lab, 1 SCH version)*

CHEM 2425 Organic Chemistry II *(lecture + lab)*
CHEM 2325 Organic Chemistry II *(lecture)*
CHEM 2225 Organic Chemistry Laboratory II *(lab, 2 SCH version)*
CHEM 2125 Organic Chemistry Laboratory II *(lab, 1 SCH version)*

Study of the properties and behavior of hydrocarbon compounds and their derivatives. Designed for students in science or pre-professional programs.

Approval Number.....40.0504.52 03
CIP Area..... Physical Sciences
maximum SCH per student 10
maximum SCH per course 5
maximum contact hours per course.....128

CHEM 2189 Academic Cooperative *(1 SCH version)*
CHEM 2289 Academic Cooperative *(2 SCH version)*
CHEM 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..... Physical Sciences
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....112

CHIN (Chinese Language)

CHIN 1311 Beginning Chinese I (*1st semester Chinese, 3 SCH version*)
CHIN 1411 Beginning Chinese I (*1st semester Chinese, 4 SCH version*)
CHIN 1511 Beginning Chinese I (*1st semester Chinese, 5 SCH version*)

CHIN 1312 Beginning Chinese II (*2nd semester Chinese, 3 SCH version*)
CHIN 1412 Beginning Chinese II (*2nd semester Chinese, 4 SCH version*)
CHIN 1512 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.

Approval Number.....16.0301.51 13
CIP Area.....Foreign Languages
maximum SCH per student 10
maximum SCH per course 5
maximum contact hours per course.....112

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.....3
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.....Communication
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....96

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 3
maximum contact hours per course.....96

COMM 1129 News Publications I
COMM 1130 News Publications II
COMM 2129 News Publications III
COMM 2130 News Publications IV

COMM 1131 Other Publications I
COMM 1132 Other Publications II
COMM 2131 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 1
maximum contact hours per course.....80

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 Television Production I *(1 SCH version)*
COMM 1236 Television Production I *(2 SCH version)*
COMM 1336 Television Production I *(3 SCH version)*

COMM 1137 Television Production II *(1 SCH version)*
COMM 1237 Television Production II *(2 SCH version)*
COMM 1337 Television Production II *(3 SCH version)*

COMM 1138 Television Production III *(1 SCH version)*
COMM 1238 Television Production III *(2 SCH version)*

Practical experience in the operation of television studio and control room equipment, including both pre- and post-production needs.

Approval Number.....10.0202.52 06
CIP Area..... Communication Technologies
maximum SCH per student 8
maximum SCH per course 3
maximum contact hours per course.....96

COMM 2303 Audio/Radio Production

Concepts and techniques of sound production, including the coordinating and directing processes. Hands-on experience with equipment, sound sources, and direction of talent.

Approval Number.....10.0202.51 06
CIP Area..... Communication Technologies
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....64

COMM 2305 Editing & Layout

Editing and layout processes, with emphasis on accuracy and fairness, including the principles and techniques of design.

Approval Number.....09.0401.51 06
CIP Area.....Communication
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....96

COMM 2209 News Editing & Copy Reading I *(2 SCH version)*
COMM 2309 News Editing & Copy Reading I *(3 SCH version)*

COMM 2210 News Editing & Copy Reading II *(2 SCH version)*
COMM 2310 News Editing & Copy Reading II *(3 SCH version)*

Copy editing for errors of fact and interpretation of English. Includes newspaper style, headline writing, proofreading, and page makeup.

Approval Number 09.0401.53 06
CIP Area ..... Communication
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course 96

COMM 2311 News Gathering & Writing I

Fundamentals of writing news for the mass media. Includes instruction in methods and techniques for gathering, processing, and delivering news in a professional manner.

Approval Number 09.0401.57 06
CIP Area ..... Communication
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course 96

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 ..... Communication
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course 96

COMM 2120 Practicum in Electronic Media *(1 SCH version)*
COMM 2121 Practicum in Electronic Media *(1 SCH version)*
COMM 2122 Practicum in Electronic Media *(1 SCH version)*

COMM 2220 Practicum in Electronic Media *(2 SCH version)*

COMM 2324 Practicum in Electronic Media *(3 SCH version)*
COMM 2325 Practicum in Electronic Media *(3 SCH version)*
COMM 2326 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 3
maximum contact hours per course 96

COMM 2327 Principles of Advertising

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

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

COMM 2331 Radio/Television Announcing

Principles of announcing: study of voice, diction, pronunciation, and delivery. Experience in various types of announcing. Study of phonetics is recommended.

Approval Number....09.0701.54 06
CIP Area....Communication
maximum SCH per student....3
maximum SCH per course....3
maximum contact hours per course....48

COMM 2332 Radio/Television News

Preparation and analysis of news styles for the electronic media.

Approval Number....09.0402.52 06
CIP Area....Communication
maximum SCH per student....3
maximum SCH per course....3
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
CIP Area....Communication
maximum SCH per student....3
maximum SCH per course....3
maximum contact hours per course....48

COMM 2189 Academic Cooperative *(1 SCH version)*
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 3
maximum SCH per course 3
maximum contact hours per course.....112

COSC (Computer Science)

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

COSC 1300 Introduction to Computing *(3 SCH version)*
COSC 1400 Introduction to Computing *(4 SCH version)*

Effect of computers on society, the history and use of computers, computer applications in various segments of society, programming concepts, and hardware and software terminology. This course may not be applied towards a computer science major or minor.

Approval Number.....11.0101.51 07
CIP Area.....Computer & Information Sciences
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....96

COSC 1301 Microcomputer Applications *(3 SCH version)*
COSC 1401 Microcomputer Applications *(4 SCH version)*
(Also see BCIS 1301 and 1401)

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. (*Cross-listed as BCIS 1301 and 1401*)

Approval Number.....11.0101.52 07
CIP Area.....Computer & Information Sciences
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....96

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.....Computer & Information Sciences
maximum SCH per student.....3
maximum SCH per course.....3
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
CIP Area.....Computer & Information Sciences
maximum SCH per student.....12
maximum SCH per course.....4
maximum contact hours per course.....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.....12
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.....Computer & Information Sciences
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.

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

COSC 1320 "C" Programming I *(3 SCH version)*
COSC 1420 "C" Programming I *(4 SCH version)*
(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 student.....12
maximum SCH per course.....4
maximum contact hours per course.....96

COSC 1330 Computer Programming *(3 SCH version)*
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.

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

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.

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

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 ..... Computer & Information Sciences
maximum SCH per student 4
maximum SCH per course 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
maximum SCH per course 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.....4
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.....Computer & Information Sciences
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.....Computer & Information Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....96

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.....Computer & Information Sciences
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
CIP Area.....Computer & Information Sciences
maximum SCH per student.....4
maximum SCH per course.....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
CIP Area.....Computer & Information Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....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
CIP Area.....Computer & Information Sciences
maximum SCH per student.....4
maximum SCH per course.....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.)

Approval Number.....11.0201.57 07
CIP Area.....Computer & Information Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....96

CRIJ (Criminal Justice)

CRIJ 1301 Introduction to Criminal Justice

History, philosophy, and ethical considerations of criminal justice; the nature and impact of crime; and an overview of the criminal justice system, including law enforcement and court procedures.

Approval Number.....43.0104.51 24
CIP Area.....Protective Services
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

CRIJ 1306 Court Systems & Practices

Study of the judiciary in the American criminal justice system and the adjudication processes and procedures.

Approval Number.....22.0101.54 24
CIP Area.....Law
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

CRIJ 1307 Crime in America

American crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime.

Approval Number.....45.0401.52 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

CRIJ 1310 Fundamentals of Criminal Law

Study of criminal law, its philosophical and historical development, major definitions and concepts, classifications and elements of crime, penalties using Texas statutes as illustrations, and criminal responsibility.

Approval Number.....22.0101.53 24
CIP Area.....Law
maximum SCH per student.....3
maximum SCH per course.....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.....3
maximum contact hours per course.....48

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.....3
maximum contact hours per course.....48

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.

Approval Number.....43.0104.56 24
CIP Area.....Protective Services
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

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.

Approval Number.....43.0104.57 24
CIP Area.....Protective Services
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

CZEC (Czechoslovakian Language)

CZEC 1311 Beginning Czech I (*1st semester Czech, 3 SCH version*)
CZEC 1411 Beginning Czech I (*1st semester Czech, 4 SCH version*)
CZEC 1511 Beginning Czech I (*1st semester Czech, 5 SCH version*)

CZEC 1312 Beginning Czech II (*2nd semester Czech, 3 SCH version*)
CZEC 1412 Beginning Czech II (*2nd semester Czech, 4 SCH version*)
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.....16.0400.51 13
CIP Area.....Foreign Languages
maximum SCH per student.....10
maximum SCH per course.....5
maximum contact hours per course.....112

CZEC 2311 Intermediate Czech I *(3rd semester Czech)*
CZEC 2312 Intermediate Czech II *(4th semester Czech)*

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

Approval Number.....16.0400.52 13
CIP Area.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....80

DANC (Dance)

DANC 1101 Dance Composition I
DANC 1102 Dance Composition II
DANC 1103 Dance Composition III
DANC 1201 Dance Composition (*single-semester course, 2 SCH version*)
DANC 1301 Dance Composition (*single-semester course, 3 SCH version*)

Development of basic principles and theories involved in composition. Emphasis is placed on movement principles, group and structural forms.

Approval Number.....50.0301.55 26
CIP Area.....Visual & Performing Arts
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....96

DANC 1110 Tap I (*1 SCH version*)
DANC 1210 Tap I (*2 SCH version*)

DANC 1111 Tap II (*1 SCH version*)
DANC 1211 Tap II (*2 SCH version*)

DANC 2110 Tap III (*1 SCH version*)
DANC 2208 Tap III (*2 SCH version*)

DANC 2111 Tap IV (*1 SCH version*)
DANC 2209 Tap IV (*2 SCH version*)

Instruction and participation in Tap dance technique.

Approval Number.....50.0301.52 26
CIP Area.....Visual & Performing Arts
maximum SCH per student.....18
maximum SCH per course.....3
maximum contact hours per course.....96

DANC 1112 Dance Practicum I *(1 SCH version)*
DANC 1212 Dance Practicum I *(2 SCH version)*

DANC 1113 Dance Practicum II *(1 SCH version)*
DANC 1213 Dance Practicum II *(2 SCH version)*

DANC 2112 Dance Practicum III *(1 SCH version)*
DANC 2212 Dance Practicum III *(2 SCH version)*

DANC 2113 Dance Practicum IV *(1 SCH version)*
DANC 2213 Dance Practicum IV *(2 SCH version)*

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 1122 Folk I (*1 SCH version*)
DANC 1222 Folk I (*2 SCH version*)

DANC 1123 Folk II (*1 SCH version*)
DANC 1223 Folk II (*2 SCH version*)

DANC 2122 Folk III (*1 SCH version*)
DANC 2222 Folk III (*2 SCH version*)

DANC 2123 Folk IV (*1 SCH version*)
DANC 2223 Folk IV (*2 SCH version*)

Instruction and participation in Folk dance technique.

Approval Number 50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student.....18
maximum SCH per course 3
maximum contact hours per course 96

DANC 1128 Ballroom I (*1 SCH version*)
DANC 1228 Ballroom I (*2 SCH version*)

DANC 1129 Ballroom II (*1 SCH version*)

Instruction and participation in Ballroom dance technique.

Approval Number 50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 18
maximum SCH per course 3
maximum contact hours per course 96

DANC 1133 Country and Western I (*1 SCH version*)
DANC 1233 Country and Western I (*2 SCH version*)

DANC 1134 Country and Western II (*1 SCH version*)
DANC 1234 Country and Western II (*2 SCH version*)

Instruction and participation in Country and Western dance technique.

Approval Number 50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 18
maximum SCH per course 3
maximum contact hours per course 96

DANC 1141 Ballet I *(1 SCH version)*
DANC 1241 Ballet I *(2 SCH version)*
DANC 1341 Ballet I *(3 SCH version)*

DANC 1142 Ballet II *(1 SCH version)*
DANC 1242 Ballet II *(2 SCH version)*
DANC 1342 Ballet II *(3 SCH version)*

DANC 2141 Ballet III *(1 SCH version)*
DANC 2241 Ballet III *(2 SCH version)*
DANC 2341 Ballet III *(3 SCH version)*

DANC 2142 Ballet IV *(1 SCH version)*
DANC 2242 Ballet IV *(2 SCH version)*
DANC 2342 Ballet IV *(3 SCH version)*

Instruction and participation in ballet technique.

Approval Number.....50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 18
maximum SCH per course 3
maximum contact hours per course.....96

DANC 1145 Modern Dance I *(1 SCH version)*
DANC 1245 Modern Dance I *(2 SCH version)*
DANC 1345 Modern Dance I *(3 SCH version)*

DANC 1146 Modern Dance II *(1 SCH version)*
DANC 1246 Modern Dance II *(2 SCH version)*
DANC 1346 Modern Dance II *(3 SCH version)*

DANC 2145 Modern Dance III *(1 SCH version)*
DANC 2245 Modern Dance III *(2 SCH version)*
DANC 2345 Modern Dance III *(3 SCH version)*

DANC 2146 Modern Dance IV *(1 SCH version)*
DANC 2246 Modern Dance IV *(2 SCH version)*
DANC 2346 Modern Dance IV *(3 SCH version)*

Instruction and participation in modern dance technique.

Approval Number.....50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 18
maximum SCH per course 3
maximum contact hours per course.....96

DANC 1147 Jazz Dance I *(1 SCH version)*
DANC 1247 Jazz Dance I *(2 SCH version)*
DANC 1347 Jazz Dance I *(3 SCH version)*

DANC 1148 Jazz Dance II *(1 SCH version)*
DANC 1248 Jazz Dance II *(2 SCH version)*
DANC 1348 Jazz Dance II *(3 SCH version)*

DANC 2147 Jazz Dance III *(1 SCH version)*
DANC 2247 Jazz Dance III *(2 SCH version)*
DANC 2347 Jazz Dance III *(3 SCH version)*

DANC 2148 Jazz Dance IV *(1 SCH version)*
DANC 2248 Jazz Dance IV *(2 SCH version)*
DANC 2348 Jazz Dance IV *(3 SCH version)*

Instruction and participation in jazz dance technique.

Approval Number.....50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 18
maximum SCH per course 3
maximum contact hours per course.....96

DANC 1149 Ballet Folklorico I *(1 SCH version)*
DANC 1249 Ballet Folklorico I *(2 SCH version*)
DANC 1349 Ballet Folklorico I *(3 SCH version)*

DANC 1150 Ballet Folklorico II *(1 SCH version)*
DANC 1250 Ballet Folklorico II *(2 SCH version)*
DANC 1350 Ballet Folklorico II *(3 SCH version)*

DANC 2149 Ballet Folklorico III *(1 SCH version*)
DANC 2249 Ballet Folklorico III *(2 SCH version*)
DANC 2349 Ballet Folklorico III *(3 SCH version)*

DANC 2150 Ballet Folklorico IV *(1 SCH version)*
DANC 2250 Ballet Folklorico IV *(2 SCH version)*
DANC 2350 Ballet Folklorico IV *(3 SCH version)*

Instruction and participation in folk dance technique.

Approval Number.....50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 18
maximum SCH per course 3
maximum contact hours per course.....96

DANC 1151 Dance Performance I *(1 SCH version)*
DANC 1251 Dance Performance I *(2 SCH version)*
DANC 1351 Dance Performance I *(3 SCH version)*

DANC 1152 Dance Performance II *(1 SCH version)*
DANC 1252 Dance Performance II *(2 SCH version)*
DANC 1352 Dance Performance II *(3 SCH version)*

DANC 2151 Dance Performance III *(1 SCH version)*
DANC 2251 Dance Performance III *(2 SCH version)*
DANC 2351 Dance Performance III *(3 SCH version)*

DANC 2152 Dance Performance IV *(1 SCH version)*
DANC 2252 Dance Performance IV *(2 SCH version)*
DANC 2352 Dance Performance IV *(3 SCH version)*

Instruction and participation in dance performance.

Approval Number.....50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 18
maximum SCH per course 3
maximum contact hours per course.....96

DANC 1153 Spanish Ballet I *(1 SCH version)*
DANC 1253 Spanish Ballet I *(2 SCH version)*
DANC 1353 Spanish Ballet I *(3 SCH version)*

DANC 1154 Spanish Ballet II *(1 SCH version)*
DANC 1254 Spanish Ballet II *(2 SCH version)*
DANC 1354 Spanish Ballet II *(3 SCH version)*

DANC 2153 Spanish Ballet III *(1 SCH version)*
DANC 2253 Spanish Ballet III *(2 SCH version)*
DANC 2353 Spanish Ballet III *(3 SCH version)*

DANC 2154 Spanish Ballet IV *(1 SCH version)*
DANC 2254 Spanish Ballet IV *(2 SCH version)*
DANC 2354 Spanish Ballet IV *(3 SCH version)*

Instruction and participation in Spanish ballet technique.

Approval Number.....50.0301.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 18
maximum SCH per course 3
maximum contact hours per course.....96

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..... Visual & Performing Arts
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..... Visual & Performing Arts
maximum SCH per student 12
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..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....96

DANC 2189 Academic Cooperative *(1 SCH version)*
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..... Interdisciplinary
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....112

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..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....96

DRAM 1120 Theater Practicum I *(1 SCH version)*
DRAM 1220 Theater Practicum I *(2 SCH version)*
DRAM 1320 Theater Practicum I *(3 SCH version)*

DRAM 1121 Theater Practicum II *(1 SCH version)*
DRAM 1221 Theater Practicum II *(2 SCH version)*
DRAM 1321 Theater Practicum II *(3 SCH version)*

DRAM 2120 Theater Practicum III *(1 SCH version)*
DRAM 2220 Theater Practicum III *(2 SCH version)*

DRAM 2121 Theater Practicum IV *(1 SCH version)*

DRAM 1323 Basic Theater Practice *(single-semester course)*

Practicum in theater with emphasis on technique and procedures with experience gained in play productions.

Approval Number.....50.0506.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 9
maximum SCH per course 3
maximum contact hours per course.....96

DRAM 1330 Stagecraft I
DRAM 2331 Stagecraft II

Study and application of visual aesthetics of design which may include the physical theater, scenery construction and painting, properties, lighting, costume, makeup, and backstage organization.

Approval Number.....50.0502.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

DRAM 1141 Makeup *(1 SCH version)*
DRAM 1241 Makeup *(2 SCH version)*
DRAM 1341 Makeup *(3 SCH version)*

Design and execution of makeup for the purpose of developing believable characters. Includes discussion of basic makeup principles and practical experience of makeup application.

Approval Number.....50.0502.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....96

DRAM 1142 Introduction to Costume *(1 SCH version)*
DRAM 1242 Introduction to Costume *(2 SCH version)*
DRAM 1342 Introduction to Costume *(3 SCH version)*

Principles and techniques of costume design and construction for theatrical productions.

Approval Number.....50.0502.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....96

DRAM 1322 Stage Movement

Principles, practices, and exercises in body techniques and stage movement; emphasis on character movement and body control.

Approval Number..... 50.0506.54 26
CIP Area.....Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course..... 96

DRAM 1351 Acting I
DRAM 1352 Acting II
DRAM 2351 Acting III
DRAM 2352 Acting IV

Development of basic skills and techniques of acting including increased sensory awareness, ensemble performing, character analysis, and script analysis. Emphasis on the mechanics of voice, body, emotion, and analysis as tools for the actor.

Approval Number.....50.0506.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 12
maximum SCH per course 3
maximum contact hours per course.....96

DRAM 1161 Musical Theater I
DRAM 1162 Musical Theater II
(Also see MUSI 1159 & 2159)

Study and performance of works from the musical theater repertoire.
(*Cross-listed as MUSI 1159 & 2159*)

Approval Number.....50.0903.61 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 2
maximum SCH per course 1
maximum contact hours per course.....80

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..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

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 Area..... Visual & Performing Arts
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.

Approval Number.....50.0602.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

DRAM 2189 Academic Cooperative *(1 SCH version)*
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.....112

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 3
maximum contact hours per course.....48

ECON 2189 Academic Cooperative *(1 SCH version)*
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 3
maximum contact hours per course.....112

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 3
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 3
maximum contact hours per course 48

EDUC (Education)

EDUC 1300 Learning Framework
(Also see PSYC 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 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 42.0301.51 25
CIP Area ..... Psychology
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course 48

EDUC 1301 Introduction to Education/ Schools and Society *(3 SCH version)*
OR
EDUC 1101 Schools and Society I *(1st 1 SCH Course)*
EDUC 1102 Schools and Society II *(2nd 1 SCH Course)*
EDUC 1103 Schools and Society III *(3rd 1 SCH Course)*

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

1) provides active recruitment and support of undergraduates interested in a teaching career, especially in high need fields such as secondary math and science education. Bilingual education, and special education;

2) provides students with opportunities to participate in early field experiences including middle and high school classrooms 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 introducing and analyzing the culture of schooling and classrooms from the perspectives of language, gender, socioeconomic, ethnic, and disability-based academic diversity and equity.

Approval Number.....13.0101.51 09
CIP Area.....Education
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

NOTE: May be offered as a single 3 SCH course or three 1 SCH courses.

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.....13.0101.51 09
CIP Area.....Education
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

EDUC 2301 Introduction to Special Education

Introduction to special education including characteristics, problems, and needs of the exceptional learner. Public and private services available to the handicapped citizen. Field trips may be required.

Approval Number.....13.1001.51 09
CIP Area.....Education
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL (English)

ENGL 1111 Creative Writing Workshop

Practical experience in the techniques of imaginative writing. May include fiction, nonfiction, poetry, or drama.

Approval Number.....23.0501.51 12
CIP Area.....Letters
maximum SCH per student.....1
maximum SCH per course.....1
maximum contact hours per course.....48

ENGL 1301 Composition I
ENGL 1302 Composition II

Principles and techniques of written, expository, and persuasive composition; analysis of literary, expository, and persuasive texts; and critical thinking.

Approval Number.....23.0401.51 12
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....64

ENGL 1306 Composition for Non-Native Speakers I
ENGL 1307 Composition for Non-Native Speakers II

Principles and techniques of college-level composition and reading. Open only to non-native speakers. (*Courses Under Review)*

Approval Number.....23.0401.52 12
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....96

ENGL 1311 Business English

Principles, techniques, and skills needed for college level scientific, technical, or business writing.

Approval Number.....23.1101.51 12
CIP Area.....Letters
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL 1312 Business Writing

Principles, techniques, and skills needed for college level scientific, technical, or business writing.

Approval Number.....23.1101.51 12
CIP Area.....Letters
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL 2307 Creative Writing I
ENGL 2308 Creative Writing II

Practical experience in the techniques of imaginative writing. May include fiction, nonfiction, poetry, or drama.

Approval Number.....23.0501.51 12
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL 2311 Technical & Business Writing *(single-semester course)*
ENGL 2314 Technical & Business Writing I
ENGL 2315 Technical & Business Writing II

Principles, techniques, and skills needed for college level scientific, technical, or business writing.

Approval Number.....23.1101.51 12
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL 2321 British Literature *(single-semester course)*
ENGL 2322 British Literature I
ENGL 2323 British Literature II

Selected significant works of British literature. May include study of movements, schools, or periods.

Approval Number.....23.0801.51 12
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL 2326 American Literature *(single-semester course)*
ENGL 2327 American Literature I
ENGL 2328 American Literature II

Selected significant works of American literature. May include study of movements, schools, or periods.

Approval Number.....23.0701.51 12
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL 2331 World Literature *(single-semester course)*
ENGL 2332 World Literature I
ENGL 2333 World Literature II

Selected significant works of world literature. May include study of movements, schools, or periods.

Approval Number.....16.0104.52 13
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL 2341 Forms of Literature *(single-semester course)*
ENGL 2342 Forms of Literature I
ENGL 2343 Forms of Literature II

The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film.

Approval Number.....16.0104.51 13
CIP Area.....Letters
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

ENGL 2189 Academic Cooperative *(1 SCH version)*
ENGL 2289 Academic Cooperative *(2 SCH version)*
ENGL 2389 Academic Cooperative *(3 SCH version)*

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

Approval Number.....24.0103.52 12
CIP Area..... Interdisciplinary
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....112

ENGR (Engineering)

ENGR 1101 Introduction to Engineering I
ENGR 1102 Introduction to Engineering II
ENGR 1201 Introduction to Engineering *(single-semester course)*

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

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

ENGR 1204 Engineering Graphics I *(2 SCH version)*
ENGR 1304 Engineering Graphics I *(3 SCH version)*
ENGR 1205 Engineering Graphics II (*Descriptive Geometry, 2 SCH version*)
ENGR 1305 Engineering Graphics II (*Descriptive Geometry, 3 SCH version*)

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

Approval Number.....15.1301.51 02
CIP Area..... Drafting & Design Technology/Technician, General
maximum SCH per student 6
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 I - Statics *(3 SCH version)*
ENGR 2401 Engineering Mechanics I - Statics *(4 SCH version)*

Calculus-based study of composition and resolution of forces, equilibrium of force systems, friction, centroids, and moments of inertia. Prerequisite: the first calculus-based physics course. Corequisite: a second course in calculus.

Approval Number.....14.1101.52 10
CIP Area..... Engineering
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....64

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

Calculus-based study of dynamics of rigid bodies, force-mass-acceleration, work-energy, and impulse-momentum computation. Prerequisite: Vector Mechanics: Statics. Corequisite: a third course in calculus.

Approval Number.....14.1101.53 10
CIP Area..... Engineering
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....64

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.....14.1101.53 10
CIP Area..... Engineering
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....64

ENGR 2304 FORTRAN for Engineers

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

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

ENGR 2305 Circuits I for Electrical Engineering

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

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

ENGR 2332 Mechanics of Materials *(3 SCH version)*
ENGR 2432 Mechanics of Materials *(4 SCH version)*

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

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

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.....……..4
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 ..... ……..4
maximum contact hours per course ..... ……96

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.... ……Engineering Related
maximum SCH per student ..... ……..4
maximum SCH per course ..... ……..4
maximum contact hours per course ..... ……96

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..... ……..15.0303.53 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*.)

Approval Number ..... ……..15.0805.51 11
CIP Area.... ……Engineering Related
maximum SCH per student..... ……..3
maximum SCH per course ..... ……..3
maximum contact hours per course ..... ……64

ENGT 2310 Introduction to Manufacturing Processes

Exploration of a variety of methods used in manufacturing. Theory and application of processes including but not limited to metal forming, welding, machining, heat treating, plating, assembly procedures, process controls considerations, casting and injection molding. (*This course is included in the Field of Study Curriculum for Engineering Technology*.)

Approval Number ..... ……..15.0612.51 11
CIP Area.... ……Engineering Related
maximum SCH per student..... ……..3
maximum SCH per course ..... ……..3
maximum contact hours per course ..... ……64

ENVR (Environmental Science)

ENVR 1401 Environmental Science I (*lecture + lab*)
ENVR 1301 Environmental Science I (*lecture*)
ENVR 1101 Environmental Science I (*lab*)

ENVR 1402 Environmental Science II (*lecture + lab*)
ENVR 1302 Environmental Science II (*lecture*)
ENVR 1102 Environmental Science II (*lab*)

General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. May or may not include a laboratory.

Approval Number 03.0103.52 01
CIP Area..... Renewable Natural Resources
maximum SCH per student 8
maximum SCH per course 4
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.....Forestry & Related Sciences
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course..... 80

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.....Forestry & Related Sciences
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course..... 80

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 03.0506.52 01
CIP Area ..... Forestry & Related Sciences
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course 80

FREN (French Language)

FREN 1100 Conversational French I *(1 SCH version)*
FREN 1200 Conversational French I *(2 SCH version)*
FREN 1300 Conversational French I *(3 SCH version)*

FREN 1110 Conversational French II *(1 SCH version)*
FREN 1210 Conversational French II *(2 SCH version)*
FREN 1310 Conversational French II *(3 SCH version)*

Basic practice in comprehension and production of the spoken language.

Approval Number 16.0901.54 13
CIP Area ..... Foreign Languages
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course 48

FREN 1311 Beginning French I (1st semester French, 3 SCH version)
FREN 1411 Beginning French I (1st semester French, 4 SCH version)
FREN 1511 Beginning French I (1st semester French, 5 SCH version)

FREN 1312 Beginning French II (2nd semester French, 3 SCH version)
FREN 1412 Beginning French II (2nd semester French, 4 SCH version)
FREN 1512 Beginning French II (2nd semester French, 5 SCH version)

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

Approval Number 16.0901.51 13
CIP Area ..... Foreign Languages
maximum SCH per student 10
maximum SCH per course 5
maximum contact hours per course 112

FREN 2303 Introduction to French Literature I
FREN 2304 Introduction to French Literature II

Readings representative of this culture.

Approval Number.....16.0901.53 13
CIP Area.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

FREN 2306 Intermediate French Conversation

Basic practice in comprehension and production of the spoken language.

Approval Number.....16.0901.54 13
CIP Area.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

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.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....80

FREN 2189 Academic Cooperative *(1 SCH version)*
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
CIP Area.....Interdisciplinary
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....112

GEOG (Geography)

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

Approval Number.....45.0701.53 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

GEOG 2312 Economic Geography
(Also see ECON 2311)

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 ECON 2311*)

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

GEOG 2189 Academic Cooperative *(1 SCH version)*
GEOG 2289 Academic Cooperative *(2 SCH version)*
GEOG 2389 Academic Cooperative *(3 SCH version)*

An instructional program designed to integrate on-campus study with practical hands-on experience in geography. 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.....112

GEOL (Geology)

GEOL 1401 Earth Sciences I *(lecture + lab)*
GEOL 1301 Earth Sciences I *(lecture)*
GEOL 1101 Earth Sciences Laboratory I *(lab)*

GEOL 1402 Earth Sciences II *(lecture + lab)*
GEOL 1302 Earth Sciences II *(lecture)*
GEOL 1102 Earth Sciences Laboratory II *(lab)*

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

Approval Number.....40.0601.51 03
CIP Area.....Physical Sciences
maximum SCH per student.....8
maximum SCH per course.....4
maximum contact hours per course.....96

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

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

Approval Number.....40.0601.51 03
CIP Area.....Physical Sciences
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....112

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

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

Approval Number.....40.0601.51 03
CIP Area..... Physical Sciences
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....112

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

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

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

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

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

Approval Number.....40.0601.51 03
CIP Area..... Physical Sciences
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....96

GEOL 1446 Astronomy *(lecture + lab)*
GEOL 1346 Astronomy *(lecture)*
GEOL 1146 Astronomy *(lab)*

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

Approval Number.....40.0601.51 03
CIP Area..... Physical Sciences
maximum SCH per student 8
maximum SCH per course 4
maximum contact hours per course.....96

GEOL 1447 Meteorology *(lecture + lab)*
GEOL 1347 Meteorology *(lecture)*
GEOL 1147 Meteorology *(lab)*

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

Approval Number.....40.0601.51 03
CIP Area..... Physical Sciences
maximum SCH per student 14
maximum SCH per course 4
maximum contact hours per course.....96

GEOL 2405 Optical Mineralogy *(lecture + lab)*
GEOL 2305 Optical Mineralogy *(lecture)*
GEOL 2105 Optical Mineralogy *(lab)*

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

Approval Number.....40.0601.53 03
CIP Area..... Physical Sciences
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....96

GEOL 2407 Geological Field Methods *(lecture + lab)*
GEOL 2307 Geological Field Methods *(lecture)*
GEOL 2107 Geological Field Methods *(lab)*

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

Approval Number.....40.0601.55 03
CIP Area..... Physical Sciences
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....96

GEOL 2309 Mineralogy & Petrology I *(3 SCH version)*
GEOL 2409 Mineralogy & Petrology I *(4 SCH version)*

GEOL 2310 Elementary Geophysics *(single-semester course)*

GEOL 2311 Mineralogy & Petrology II *(3 SCH version)*
GEOL 2411 Mineralogy & Petrology II *(4 SCH version)*

Study of mineral crystallography, chemistry, classification, identification, and occurrence. Includes the genesis, classification, and identification of igneous, sedimentary, and metamorphic rocks. Prerequisite: three hours of Chemistry.

Approval Number.....40.0601.52 03
CIP Area..... Physical Sciences
maximum SCH per student 8
maximum SCH per course 4
maximum contact hours per course.....96

GEOL 2189 Academic Cooperative *(1 SCH version)*
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..... Physical Sciences
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....112

GERM (German Language)

GERM 1100 Conversational German I *(1 SCH version)*
GERM 1200 Conversational German I *(2 SCH version)*
GERM 1300 Conversational German I *(3 SCH version)*

GERM 1110 Conversational German II *(1 SCH version)*
GERM 1210 Conversational German II *(2 SCH version)*
GERM 1310 Conversational German II *(3 SCH version)*

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 3
maximum contact hours per course.....48

GERM 1311 Beginning German I (*1st semester German, 3 SCH version*)
GERM 1411 Beginning German I (*1st semester German, 4 SCH version*)
GERM 1511 Beginning German I (*1st semester German, 5 SCH version*)

GERM 1312 Beginning German II (*2nd semester German, 3 SCH version*)
GERM 1412 Beginning German II (*2nd semester German, 4 SCH version*)
GERM 1512 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.....3
maximum contact hours per course.....80

GERM 2189 Academic Cooperative *(1 SCH version)*
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.....Interdisciplinary
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....112

GOVT (Government)

GOVT 2304 Introduction to Political Science

Introductory survey of the discipline of political science focusing on the history, scope, and methods of the field, and the substantive topics in the discipline.

Approval Number.....45.1001.52 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

GOVT 2301 American Government I *(Federal & Texas constitutions)*
GOVT 2302 American Government II *(Federal & Texas topics)*

GOVT 2305 Federal Government (*Federal constitution & topics*)
GOVT 2306 Texas Government (*Texas constitution & topics*)

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.)

Approval Number.....45.1002.51 25
CIP Area.....Social Sciences
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

GOVT 2189 Academic Cooperative *(1 SCH version)*
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.

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.....112

GREE (Greek Language)

GREE 1311 Beginning Greek I (*1st semester Greek, 3 SCH version*)
GREE 1411 Beginning Greek I (*1st semester Greek, 4 SCH version*)
GREE 1511 Beginning Greek I (*1st semester Greek, 5 SCH version*)

GREE 1312 Beginning Greek II (*2nd semester Greek, 3 SCH version*)
GREE 1412 Beginning Greek II (*2nd semester Greek, 4 SCH version*)
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.

Approval Number.....16.0601.51 13
CIP Area.....Foreign Languages
maximum SCH per student.....10
maximum SCH per course.....5
maximum contact hours per course.....112

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 SCH per student.....6
maximum SCH per course.....3
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.

Approval Number.....19.0101.51 09
CIP Area.....Home Economics
maximum SCH per student.....1
maximum SCH per course.....1
maximum contact hours per course.....16

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.....19.0501.51 09
CIP Area.....Home Economics
maximum SCH per student.....6
maximum SCH per course.....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.....19.0905.52 09
CIP Area.....Vocational Home Economics
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....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
CIP Area.....Home Economics
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

HECO 1325 Housing & Interior Design I
HECO 1326 Housing & Interior Design II

Study of the psychological, sociological, economic, and aesthetic factors in the selection of housing and in the planning and analysis of interior home environments.

Approval Number.....19.0601.51 09
CIP Area.....Home Economics
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....96

HECO 1328 Clothing Selection, Design, & Construction I
HECO 1329 Clothing Selection, Design, & Construction II

Selection, design, and construction of clothing apparel and accessories.

Approval Number.....19.0905.61 09
CIP Area.....Vocational Home Economics
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....96

HECO 2311 Fashion Merchandising

Principles, techniques, and practices for successful merchandising of fashion products.

Approval Number.....52.1902.51 04
CIP Area.....Fashion Merchandising
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....96

HIST (History)

HIST 1301 United States History I
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
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....48

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
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....48

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..... History, General
maximum SCH per student 6
maximum SCH per course 3
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..... History, General
maximum SCH per student 6
maximum SCH per course 3
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.....History, General
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

HIST 2380 Mexican-American History
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.....3
maximum contact hours per course.....48

HIST 2189 Academic Cooperative *(1 SCH version)*
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.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....112

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..... Interdisciplinary
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

HUMA 1315 Fine Arts Appreciation

Understanding purposes and processes in the visual and musical arts including evaluation of selected works.

Approval Number.....50.0101.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

HUMA 2319 American Minority Studies

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.....3
maximum contact hours per course.....48

HUMA 2323 World Cultures
(Also see ANTH 2346)

Study of human beings, their antecedents and related primates, and their cultural behavior and institutions. Introduces the major sub-fields: physical and cultural anthropology, archeology, linguistics, and ethnology. (*Cross-listed as ANTH 2346*)

Approval Number.....45.0201.51 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

ITAL (Italian Language)

ITAL 1311 Beginning Italian I (*1st semester Italian, 3 SCH version*)
ITAL 1411 Beginning Italian I (*1st semester Italian, 4 SCH version*)
ITAL 1511 Beginning Italian I (*1st semester Italian, 5 SCH version*)

ITAL 1312 Beginning Italian II (*2nd semester Italian, 3 SCH version*)
ITAL 1412 Beginning Italian II (*2nd semester Italian, 4 SCH version*)
ITAL 1512 Beginning Italian II (*2nd semester Italian, 5 SCH version*)

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

Approval Number.....16.0902.51 13
CIP Area.....Foreign Languages
maximum SCH per student.....10
maximum SCH per course.....5
maximum contact hours per course.....112

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.....80

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.....Foreign Languages
maximum SCH per student.....10
maximum SCH per course.....5
maximum contact hours per course.....112

JAPN 1311 Beginning Japanese I (*1st semester Japanese, 3 SCH version*)
JAPN 1411 Beginning Japanese I (*1st semester Japanese, 4 SCH version*)
JAPN 1511 Beginning Japanese I (*1st semester Japanese, 5 SCH version*)

JAPN 1312 Beginning Japanese II (*2nd semester Japanese, 3 SCH version*)
JAPN 1412 Beginning Japanese II (*2nd semester Japanese, 4 SCH version*)
JAPN 1512 Beginning Japanese II (*2nd semester Japanese, 5 SCH version*)

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

Approval Number.....16.0302.51 13
CIP Area.....Foreign Languages
maximum SCH per student.....10
maximum SCH per course.....5
maximum contact hours per course.....112

JAPN 2311 Intermediate Japanese I *(3rd semester Japanese)*
JAPN 2312 Intermediate Japanese II *(4th semester Japanese)*

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

Approval Number.....16.0302.52 13
CIP Area.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....80

KINE (KINESIOLOGY): SEE PHED LISTINGS

KORE (Korean Language)

KORE 1311 Beginning Korean I *(1st semester Korean, 3 SCH version)*
KORE 1411 Beginning Korean I *(1st semester Korean, 4 SCH version)*
KORE 1511 Beginning Korean I *(1st semester Korean, 5 SCH version)*

KORE 1312 Beginning Korean II *(2nd semester Korean, 3 SCH version)*
KORE 1412 Beginning Korean II *(2nd semester Korean, 4 SCH version)*
KORE 1512 Beginning Korean II *(2nd semester Korean, 5 SCH version)*

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

Approval Number 16.0303.5113
CIP Area ..... Foreign Languages
maximum SCH per student 10
maximum SCH per course 5
maximum contact hours per course 112

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

LATI (Latin Language)

LATI 1311 Elementary Latin I (*1st semester Latin, 3 SCH version*)
LATI 1411 Elementary Latin I (*1st semester Latin, 4 SCH version*)
LATI 1511 Elementary Latin I (*1st semester Latin, 5 SCH version*)

LATI 1312 Elementary Latin II (*2nd semester Latin, 3 SCH version*)
LATI 1412 Elementary Latin II (*2nd semester Latin, 4 SCH version*)
LATI 1512 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.....Foreign Languages
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.....3
maximum contact hours per course.....80

MATH (Mathematics)

(NOTE: Effective September 1, 2001, MATH 1335 and 1336 (math for elementary school teachers, 1st and 2nd semesters) were deleted and replaced with MATH 1350 and 1351.)

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.....4
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.....3
maximum contact hours per course.....48

MATH 1324 Mathematics for Business & Social Sciences I *(finite mathematics)*
MATH 1325 Mathematics for Business & Social Sciences II (*business calculus, 3 SCH version)*
MATH 1425 Mathematics for Business & Social Sciences II (*business calculus, 4 SCH version)*

Sets, probability, functions, inequalities, linear programming, and differential and integral calculus with applications.

Approval Number.....27.0301.52 19
CIP Area.....Mathematics
maximum SCH per student.....7
maximum SCH per course.....4
maximum contact hours per course.....64

MATH 1332 Contemporary Mathematics I
MATH 1333 Contemporary Mathematics II

Topics may include introductory treatments of sets, logic, number systems, number theory, relations, functions, probability and statistics. Appropriate applications are included.

Approval Number.....27.0101.51 19
CIP Area.....Mathematics
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

MATH 1350 Fundamentals of Mathematics I

(NOTE: This course replaces MATH 1335 and is a required part of the approved field of study curriculum for middle grades (4 through 8) teacher certification. This course may also be appropriate for early childhood education majors.)

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.

Approval Number.....27.0101.56 19
CIP Area.....Mathematics
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

MATH 1351 Fundamentals of Mathematics II

(NOTE: This course replaces MATH 1336 and is a required part of the approved field of study curriculum for middle grades (4 through 8) teacher certification. This course may also be appropriate for early childhood education majors.)

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.....27.0101.56 19
CIP Area..... Mathematics
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

MATH 1342 Elementary Statistical Methods *(3 SCH version, freshman level)*
MATH 1442 Elementary Statistical Methods *(4 SCH version, freshman level)*
MATH 2342 Elementary Statistical Methods *(3 SCH version, sophomore level)*
MATH 2442 Elementary Statistical Methods *(4 SCH version, sophomore level)*

Presentation and interpretation of data, probability, sampling, correlation and regression, analysis of variance, and the use of statistical software.

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

MATH 1348 Analytic Geometry

Lines, circles, and other conic sections; transformation of coordinates; polar coordinates; and parametric equations.

Approval Number.....27.0101.55 19
CIP Area..... Mathematics
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

MATH 2312 Precalculus Math ***(3 SCH version)***
MATH 2412 Precalculus Math ***(4 SCH version)***

Applications of algebra and trigonometry to the study of elementary functions and their graphs including polynomial, rational, exponential, logarithmic, and trigonometric functions. May include topics from analytical geometry.

Approval Number.....27.0101.58 19
CIP Area.....Mathematics
maximum SCH per student.....4
maximum SCH per course.....4
maximum contact hours per course.....80

MATH 2313 Calculus I ***(3 SCH version)***
MATH 2413 Calculus I ***(4 SCH version)***
MATH 2513 Calculus I *(5 SCH version)*

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

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

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.....12
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 eigen values and eigen vectors.

Approval Number.....27.0101.61 19
CIP Area..... Mathematics
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....64

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

Solutions of ordinary differential equations and applications.

Approval Number.....27.0301.51 19
CIP Area..... Mathematics
maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course.....64

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…….. 4
maximum contact hours per course…… 80

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

Presentation and interpretation of data, probability, sampling, correlation and regression, analysis of variance, and the use of statistical software.

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

MUAP (Applied Music)

Individual Instruction
(Course number under review.)

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

Approval Number.....50.0903.54 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 20
maximum SCH per course 3
maximum contact hours per course.....32

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 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. A range of possible 3rd & 4th digits identifies the subject and course sequence.

Approval Number	course	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..... Visual & Performing Arts
maximum SCH per student 8
maximum SCH per course 2
maximum contact hours per course.....96

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.....64

Major (Large) Vocal Ensembles

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

Approval Number.....50.0903.57 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 8
maximum SCH per course 2
maximum contact hours per course.....96

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 2
maximum contact hours per course.....64

MUSI (Music)

MUSI 1300 Foundations of Music (*"Music Education" in TCCN Matrix*)

MUSI 1104 Teaching Music in the Elementary School *(1 SCH version)*
MUSI 1304 Foundations of Music (*3 SCH version, "Teaching Music in the Elementary School I" in TCCN Matrix*)

Study of the basic fundamentals of music with an introduction to melodic, rhythmic, and harmonic instruments. Emphasis on participation in singing and reading music.

Approval Number.....50.0904.54 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....80

MUSI 1301 Fundamentals of Music I *(3 SCH version, keyboard-based)*
MUSI 1101 Fundamentals of Music I *(1 SCH version, keyboard-based)*

MUSI 1302 Fundamentals of Music II *(3 SCH version, keyboard-based)*
MUSI 1102 Fundamentals of Music II *(1 SCH version, keyboard-based)*

MUSI 1303 Fundamentals of Music (*single-semester course, guitar-based*)

Introduction to the elements of music theory: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm.

Approval Number.....50.0904.55 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....48

MUSI 1306 Music Appreciation

Understanding music through the study of cultural periods, major composers, and musical elements. Illustrated with audio recordings and live performances.

Approval Number.....50.0902.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

MUSI 1307 Music Literature *(one semester version)*
MUSI 1308 Music Literature I *(3 SCH version)*
MUSI 1309 Music Literature II *(3 SCH version)*

Survey of the principal musical forms and cultural periods as illustrated in the literature of major composers.

Approval Number.....50.0902.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....80

MUSI 1310 American Music

General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music.

Approval Number.....50.0902.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

MUSI 1114 Keyboard Harmony I
MUSI 1115 Keyboard Harmony II

MUSI 1211 Music Theory I *(2 SCH version)*
MUSI 1311 Music Theory I *(3 SCH version)*

MUSI 1212 Music Theory II *(2 SCH version)*
MUSI 1312 Music Theory II *(3 SCH version)*

Analysis and writing of tonal melody and diatonic harmony up to and including the chords. Analysis and writing of small compositional forms. Correlated study at the keyboard.

Approval Number.....50.0904.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

MUSI 1116 Elementary Sight Singing & Ear Training I *(1 SCH version)*
MUSI 1216 Elementary Sight Singing & Ear Training I *(2 SCH version)*
MUSI 1316 Elementary Sight Singing & Ear Training I *(3 SCH version)*

MUSI 1117 Elementary Sight Singing & Ear Training II *(1 SCH version)*
MUSI 1217 Elementary Sight Singing & Ear Training II *(2 SCH version)*
MUSI 1317 Elementary Sight Singing & Ear Training II *(3 SCH version)*

Singing tonal music in treble, bass, alto, and tenor clefs. Aural study, including dictation, of rhythm, melody, and diatonic harmony.

Approval Number.....50.0904.56 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

MUSI 1157 Opera Workshop I
MUSI 1158 Opera Workshop II
MUSI 2157 Opera Workshop III
MUSI 2158 Opera Workshop IV
MUSI 1258 Opera Workshop *(single-semester course)*

Performance of portions of or complete operas and the study of the integration of music, acting, and staging of an opera.

Approval Number.....50.0908.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 2
maximum contact hours per course.....48

MUSI 1159 Musical Theater I
MUSI 2159 Musical Theater II
(Also see DRAM 1161 & 1162)

Study and performance of works from the musical theater repertoire. *(Cross-listed as DRAM 1161 & 1162)*

Approval Number.....50.0903.61 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 2
maximum SCH per course 1
maximum contact hours per course.....80

MUSI 1160 Italian Diction
MUSI 1161 English Diction
MUSI 2160 German Diction
MUSI 2161 French Diction
(Also see MUSI 1162, 1165, 1262, & 2262)

Study of phonetic sounds of the English, French, German, or Italian languages to promote the ability to sing in those languages. (*Cross-listed as MUSI 1162, 1165, 1262, & 2262*)

Approval Number.....50.0908.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 2
maximum contact hours per course.....32

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)*
(Also see MUSI 1160, 1161, 2160, & 2161)

Study of phonetic sounds of the English, French, German, or Italian languages to promote the ability to sing in those languages. *(Cross-listed as MUSI 1160, 1161, 2160, & 2161)*

Approval Number.....50.0908.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 2
maximum contact hours per course.....32

MUSI 1163 Improvisation I *(1 SCH version)*
MUSI 1263 Improvisation I *(2 SCH version)*

MUSI 1164 Improvisation II *(1 SCH version)*
MUSI 1264 Improvisation II *(2 SCH version)*

MUSI 2163 Improvisation III
MUSI 2164 Improvisation IV

Materials and practices for improvisation or extemporaneous playing.

Approval Number.....50.0903.65 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 2
maximum contact hours per course.....48

MUSI 1166 Woodwind Class I
MUSI 1167 Woodwind Class II
MUSI 2166 Woodwind Class III
MUSI 2167 Woodwind Class IV

Class instruction in the fundamental techniques of playing and teaching woodwind instruments.

Approval Number.....50.0903.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 1
maximum contact hours per course.....48

MUSI 1168 Brass Class I
MUSI 2168 Brass Class II

Class instruction in the fundamental techniques of playing and teaching brass instruments.

Approval Number.....50.0903.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 1
maximum contact hours per course.....48

MUSI 1181 Piano Class I
MUSI 1182 Piano Class II
MUSI 2181 Piano Class III
MUSI 2182 Piano Class IV

Class instruction in the fundamentals of keyboard technique for beginning piano students.

Approval Number.....50.0907.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 1
maximum contact hours per course.....48

MUSI 1183 Voice Class I
MUSI 1184 Voice Class II
MUSI 2183 Voice Class III
MUSI 2184 Voice Class IV

Class instruction in the fundamentals of singing including breathing, tone production, and diction. Designed for students with little or no previous voice training.

Approval Number.....50.0908.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 1
maximum contact hours per course.....48

MUSI 1186 Composition I *(1 SCH version)*
MUSI 1286 Composition I *(2 SCH version)*
MUSI 1386 Composition I (*3 SCH version, freshman level*)

MUSI 1187 Composition II *(1 SCH version)*
MUSI 1287 Composition II *(2 SCH version)*
MUSI 2386 Composition II *(3 SCH version, sophomore-level)*

MUSI 2186 Composition III *(1 SCH version)*
MUSI 2286 Composition III *(2 SCH version)*

MUSI 2187 Composition IV *(1 SCH version)*

Individual or class instruction in music composition. Composing in small forms for simple media in both traditional styles and styles of the student's choice.

Approval Number.....50.0904.53 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....48

MUSI 1188 Percussion Class I
MUSI 2188 Percussion Class II

Class instruction in the fundamental techniques of playing and teaching percussion instruments.

Approval Number.....50.0903.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 1
maximum contact hours per course.....48

MUSI 1190 Strings Class I
MUSI 2190 Strings Class II

Class instruction in the fundamental techniques of playing and teaching stringed instruments.

(NOTE: Strings Class I was formerly MUSI 1189 and Strings Class II was formerly MUSI 2189.)

Approval Number.....50.0903.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 1
maximum contact hours per course.....48

MUSI 1290 Electronic Music I *(2 SCH version)*
MUSI 1390 Electronic Music I *(3 SCH version)*

MUSI 1291 Electronic Music II *(2 SCH version)*
MUSI 1391 Electronic Music II *(3 SCH version)*

Introduction to the use of synthesizers, computers, sequencing and music printing software, multi-track recorders and other MIDI (Music Instrument Digital Interface) devices in the notation, arrangement, composition and performance of music. Prerequisite should be either the completion of a Music Fundamentals, Music Theory, Private Piano, or Class Piano Course.

Approval Number.....50.0904.58 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....48

MUSI 1192 Guitar Class I
MUSI 1193 Guitar Class II
MUSI 2192 Guitar Class III
MUSI 2193 Guitar Class IV

Class instruction in the fundamental techniques of playing and teaching guitar.

Approval Number.....50.0903.51 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 4
maximum SCH per course 1
maximum contact hours per course.....48

MUSI 2114 Music Theory III *(1 SCH version)*
MUSI 2211 Music Theory III *(2 SCH version)*
MUSI 2311 Music Theory III *(3 SCH version)*

MUSI 2115 Music Theory IV *(1 SCH version)*
MUSI 2212 Music Theory IV *(2 SCH version)*
MUSI 2312 Music Theory IV *(3 SCH version)*

Advanced harmony part writing and keyboard analysis and writing of more advanced tonal harmony including chromaticism and extended tertian structures. Introduction to 20th century compositional procedures and survey of the traditional large forms of composition. Correlated study at the keyboard.

Approval Number.....50.0904.52 26
CIP Area..... Visual & Performing Arts
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....96

MUSI 2116 Advanced Sight Singing & Ear Training I *(1 SCH version)*
MUSI 2216 Advanced Sight Singing & Ear Training I *(2 SCH version)*

MUSI 2117 Advanced Sight Singing & Ear Training II *(1 SCH version)*
MUSI 2217 Advanced Sight Singing & Ear Training II *(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 6
maximum SCH per course 3
maximum contact hours per course.....96

MUSI 2189 Academic Cooperative *(1 SCH version)*
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.....112

(NOTE: The course number for the one semester credit hour version of the academic cooperative in music was formerly designated as Strings Class II.)

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.)

Approval Number.....36.0108.51 23
CIP Area.....Leisure & Recreational Activities
maximum SCH per student ..... 4 (non-major); 8 (major)
maximum SCH per course 1
maximum contact hours per course.....48

Recreational Dance

Instruction and participation in folk, social, tap, or other dance forms.

(NOTE: These courses are recreational in nature and should bear the KINE/PHED prefix instead of the DANC prefix.)

Approval Number.....36.0114.51 23
CIP Area.....Leisure & Recreational Activities
maximum SCH per student ..... 4 (non-major); 8 (major)
maximum SCH per course 2
maximum contact hours per course.....64

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

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 1304 Personal/Community Health I *(may also be single-semester course)*
PHED 1305 Personal/Community Health II

Investigation of the principles and practices in relation to personal and community health.

Approval Number.....51.1504.51 16
CIP Area.....Health Sciences
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

PHED 1206 First Aid *(2 SCH version)*
PHED 1306 First Aid *(3 SCH version)*
(Also see PHED 1166)

Instruction in and practice of first aid techniques. (*Cross-listed as PHED 1166*)

Approval Number.....51.1504.53 16
CIP Area.....Health Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PHED 1308 Sports Officiating I
PHED 1309 Sports Officiating II

Instruction in rules, interpretation, and mechanics of officiating selected sports.

Approval Number.....31.0101.51 23
CIP Area.....Parks, Recreation & Leisure Studies
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....64

PHED 1321 Coaching/Sports/Athletics I
PHED 1322 Coaching/Sports/Athletics II

Study of the history, theories, philosophies, rules, and terminology of competitive sports. Includes coaching techniques.

Approval Number.....31.0505.51 23
CIP Area.....Recreation & Physical Fitness
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....64

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 II

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

Approval Number.....31.0101.51 23
CIP Area..... Recreation & Physical Fitness
maximum SCH per student 6
maximum SCH per course 3
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 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 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.....Health Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PHED 1151 Scuba Diving I *(1 SCH version)*
PHED 1251 Scuba Diving I *(2 SCH version)*

PHED 1152 Scuba Diving II *(1 SCH version)*
PHED 1252 Scuba Diving II *(2 SCH version)*

PHED 1153 Lifeguard Training *(1 SCH version)*
PHED 1253 Lifeguard Training *(2 SCH version)*

Participation and instruction in advanced aquatic activities. Prerequisite: demonstrated swimming skills.

Approval Number.....36.0108.53 23
CIP Area.....Leisure & Recreational Activities
maximum SCH per student.....2
maximum SCH per course.....2
maximum contact hours per course.....64

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 fitness. (*Cross-listed as PHED 1238 & 1301*)

Approval Number.....31.0501.52 23
CIP Area.....Recreation & Physical Fitness
maximum SCH per student.....1
maximum SCH per course.....1
maximum contact hours per course.....48

PHED 1166 First Aid
(Also see PHED 1206 & 1306)

Instruction in and practice of first aid techniques. (*Cross-listed as PHED 1206 & 1306*)

Approval Number.....51.1504.53 16
CIP Area.....Health Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PHED 2155 Water Safety *(1 SCH version)*
PHED 2255 Water Safety *(2 SCH version)*

Participation and instruction in advanced aquatic activities. Prerequisite: demonstrated swimming skills.

Approval Number.....36.0108.53 23
CIP Area.....Leisure & Recreational Activities
maximum SCH per student.....2
maximum SCH per course.....2
maximum contact hours per course.....64

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.....31.0503.51 23
CIP Area.....Recreation & Physical Fitness
maximum SCH per student.....1
maximum SCH per course.....1
maximum contact hours per course.....16

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.....31.0503.52 23
CIP Area.....Recreation & Physical Fitness
maximum SCH per student.....3
maximum SCH per course.....3
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.....Philosophy & Religion
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.....Philosophy & Religion
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

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

An historical survey of major religions.

Approval Number.....38.0201.52 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.

Approval Number.....38.0101.52 12
CIP Area.....Philosophy & Religion
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PHIL 2306 Introduction to Ethics

Classical and contemporary theories concerning the good life, human conduct in society, and moral and ethical standards.

Approval Number.....38.0101.53 12
CIP Area.....Philosophy & Religion
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PHIL 2307 Intro to Social & Political Philosophy

Critical examination of the major theories concerning the organization of societies and government.

Approval Number.....38.0101.54 12
CIP Area.....Philosophy & Religion
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PHIL 2316 History of Classical & Modern Philosophy I
PHIL 2317 History of Classical & Modern Philosophy II
PHIL 2318 Contemporary Philosophy *(single-semester course)*

Study of major philosophers and philosophical systems from ancient, through medieval, to modern times.

Approval Number.....38.0101.55 12
CIP Area.....Philosophy & Religion
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

PHIL 2321 Philosophy of Religion

A critical investigation of major religious ideas and experiences.

Approval Number.....38.0201.53 12
CIP Area.....Philosophy & Religion
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PHIL 2189 Academic Cooperative *(1 SCH version)*
PHIL 2289 Academic Cooperative *(2 SCH version)*
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.

Approval Number.....24.0103.52 12
CIP Area..... Interdisciplinary
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....112

PHYS (Physics)

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

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

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

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

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

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

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

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

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

PHYS 1411 Introductory Astronomy I *(lecture + lab)*
PHYS 1311 Introductory Astronomy I *(lecture)*
PHYS 1111 Introductory Astronomy Laboratory I *(lab)*

PHYS 1412 Introductory Astronomy II *(lecture + lab)*
PHYS 1312 Introductory Astronomy II *(lecture)*
PHYS 1112 Introductory Astronomy Laboratory II *(lab)*

Study of the solar system, stars, and galaxies. May or may not include a laboratory.

Approval Number.....40.0201.51 03
CIP Area..... Physical Sciences
maximum SCH per student 8
maximum SCH per course 4
maximum contact hours per course.....96

PHYS 1415 Physical Science I *(lecture + lab)*
PHYS 1315 Physical Science I *(lecture)*
PHYS 1115 Physical Science Laboratory I *(lab)*

PHYS 1417 Physical Science II *(lecture + lab)*
PHYS 1317 Physical Science II *(lecture)*
PHYS 1117 Physical Science Laboratory II *(lab)*

Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology. May or may not include a laboratory.

Approval Number.....40.0101.51 03
CIP Area..... Physical Sciences
maximum SCH per student 8
maximum SCH per course 4
maximum contact hours per course.....96

PHYS 2425 University Physics I *(lecture + lab)*
PHYS 2325 University Physics I *(lecture)*
PHYS 2125 University Physics Laboratory I *(lab)*

PHYS 2426 University Physics II *(lecture + lab)*
PHYS 2326 University Physics II *(lecture)*
PHYS 2126 University Physics Laboratory II *(lab)*

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 12
maximum SCH per course 4
maximum contact hours per course.....112

PHYS 2189 Academic Cooperative *(1 SCH version)*
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.....40.0101.53 03
CIP Area..... Physical Sciences
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....112

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 1300 Learning Framework
(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.....42.0301.51 25
CIP Area.....Psychology
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.....Psychology
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PSYC 2302 Applied Psychology
PSYC 2303 Business 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.....48

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
maximum SCH per course 3
maximum contact hours per course.....48

PSYC 2307 Adolescent Psychology I
PSYC 2308 Child Psychology
PSYC 2309 Child Guidance & Self
PSYC 2310 Early Childhood
PSYC 2311 Adult Development
PSYC 2312 Human Development
PSYC 2313 Adolescent Psychology II
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.....42.0701.51 25
CIP Area..... Psychology
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course.....48

PSYC 2315 Psychology of Adjustment
PSYC 1301 Human Relations

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

Approval Number.....42.0101.56 25
CIP Area..... Psychology
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

PSYC 2316 Psychology of Personality

Study of various approaches to determinants, development, and assessment of personality.

Approval Number.....42.0101.57 25
CIP Area..... Psychology
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

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.....3
maximum contact hours per course.....48

PSYC 2318 Juvenile Delinquency

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.

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

PSYC 2319 Social Psychology
(Also see SOCI 2336)

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.....Psychology
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

PSYC 2189 Academic Cooperative *(1 SCH version)*
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.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....112

REAL (Real Estate)

REAL 1301 Principles of Real Estate

The study of basic principles of land economics, the mortgage money market, real estate terminology, instruments, relationships, promotion, regulations, and planning.

Approval Number.....52.1501.51 04
CIP Area.....Business, Management, & Administrative Support
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

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 is included in the Field of Study Curriculum for Nursing.)

Approval Number……..51.1601.51 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 is included in the Field of Study Curriculum for Nursing.)

Approval Number……..51.1601.52 14
CIP Area…….Nursing, General
Maximum SCH per student...…….2
Maximum SCH per course.....…….2
Maximum contact hours per course…….80

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 is included in the Field of Study Curriculum for Nursing.)*

Approval Number……...51.1601.53 14
CIP Area…….Nursing, General
Maximum SCH per student…….2
Maximum SCH per course……..2
Maximum contact hours per course……...80

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 is included in the Field of Study Curriculum for Nursing.)

Approval Number.....51.1601.54 14
CIP Area…….....Nursing, General
Maximum SCH per student…….....3
Maximum SCH per course……..3
Maximum contact hours per course……..96

RNSG 2213 Mental Health Nursing
RNSG 2313 Mental Health Nursing
RNSG 2113 Mental Health Nursing
RNSG 2114 Mental Health Nursing

Principles and concepts of mental health, psychopathology, and treatment modalities related to the nursing care of clients and their families.
(This course is included in the Field of Study Curriculum for Nursing.)

Approval Number……...51.1601.55 14
CIP Area…….…Nursing, General
Maximum SCH per student…….....3
Maximum SCH per course……..3
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 is included in the Field of Study Curriculum for Nursing.)

Approval Number.....51.1601.5614
CIP Area…….Nursing, General
Maximum SCH per student…….5
Maximum SCH per course……..5
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 is included in the Field of Study Curriculum for Nursing.)

Approval Number.....51.1601.57 14
CIP Area…….……Nursing, General
Maximum SCH per student…….……....2
Maximum SCH per course…….…….2
Maximum contact hours per course…….……..80

RNSG 2101 Care of Children and Families
RNSG 2201 Care of Children and Families
RNSG 2102 Care of Children and Families
RNSG 2103 Care of Children and Families

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 is included in the Field of Study Curriculum for Nursing.)

Approval Number……...51.1601.58 14
CIP Area…….Nursing, General
Maximum SCH per student…….2
Maximum SCH per course…….....2
Maximum contact hours per course……..80

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 is included in the Field of Study Curriculum for Nursing.)*

Approval Number……...51.1601.59 14
CIP Area…….Nursing, General
Maximum SCH per student…….3
Maximum SCH per course……...3
Maximum contact hours per course……...96

RNSG 1331 Principles of Clinical Decision-making
RNSG 1431 Principles of Clinical Decision-making
RNSG 1231 Principles of Clinical Decision-making
RNSG 1232 Principles of Clinical Decision-making

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 is included in the Field of Study Curriculum for Nursing.)*

Approval Number……...51.1601.61 14
CIP Area…….Nursing, General
Maximum SCH per student…….4
Maximum SCH per course……..4
Maximum contact hours per course…….128

RNSG 1347 Concepts of Clinical Decision-making
RNSG 1447 Concepts of Clinical Decision-making
RNSG 1247 Concepts of Clinical Decision-making
RNSG 1248 Concepts of Clinical Decision-making

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 is included in the Field of Study Curriculum for Nursing.)

Approval Number……51.1601.62 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 is included in the Field of Study Curriculum for Nursing.)*

Approval Number……...51.1601.63 14
CIP Area……Nursing, General
Maximum SCH per student……4
Maximum SCH per course……4
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 is included in the Field of Study Curriculum for Nursing.)*

Approval Number……51.1601.64 14
CIP Area……..Nursing, General
Maximum SCH per student……..4
Maximum SCH per course……4
Maximum contact hours per course……...128

RNSG 1423 Introduction to Professional Nursing for Integrated Programs
RNSG 1523 Introduction to Professional Nursing for Integrated Programs
RNSG 1222 Introduction to Professional Nursing for Integrated Programs
RNSG 1223 Introduction to Professional Nursing for Integrated Programs

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 is included in the Field of Study Curriculum for Nursing.)*

Approval Number…..…….……51.1601.65 14
CIP Area.…….……..Nursing, General
Maximum SCH per student …….……..5
Maximum SCH per course…….……5
Maximum contact hours per course…….……..144

RNSG 1119 Integrated Nursing Skills
RNSG 1219 Integrated Nursing Skills

Study of the concepts and principles essential for demonstrating competence in the performance of basic nursing skills for care of diverse clients across the life span. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. *(This course is included in the Field of Study Curriculum for Nursing.)*

Approval Number…….…….51.1601.66 14
CIP Area……Nursing, General
Maximum SCH per student……2
Maximum SCH per course…….2
Maximum contact hours per course…….80

RNSG 1129 Integrated Nursing Skills II
RNSG 1229 Integrated Nursing Skills II

Study of the concepts and principles necessary to perform intermediate or advanced nursing skills for care of diverse clients across the life span. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework.
(This course is included in the Field of Study Curriculum for Nursing.)

Approval Number……..51.1601.67 14
CIP Area……Nursing, General
Maximum SCH per student……2
Maximum SCH per course…….2
Maximum contact hours per course…….80

RNSG 2404 Integrated Care of the Client with Common Health Care Needs
RNSG 2504 Integrated Care of the Client with Common Health Care Needs
RNSG 2203 Integrated Care of the Client with Common Health Care Needs
RNSG 2204 Integrated Care of the Client with Common Health Care Needs

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 is included in the Field of Study Curriculum for Nursing.)

Approval Number……..51.1601.68 14
CIP Area……Nursing, General
Maximum SCH per student……5
Maximum SCH per course……..5
Maximum contact hours per course……128

CLINICAL

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 51.1601.69 14
CIP Area..... Nursing, General
Maximum SCH per student.....19
Maximum SCH per course.....6
Maximum contact hours per course.....576

RUSS (Russian Language)

RUSS 1311 Beginning Russian I (*1st semester Russian, 3 SCH version*)
RUSS 1411 Beginning Russian I (*1st semester Russian, 4 SCH version*)
RUSS 1511 Beginning Russian I (*1st semester Russian, 5 SCH version*)

RUSS 1312 Beginning Russian II (*2nd semester Russian, 3 SCH version*)
RUSS 1412 Beginning Russian II (*2nd semester Russian, 4 SCH version*)
RUSS 1512 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.....Foreign Languages
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.....Foreign Languages
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.)

SGNL 1201 Beginning American Sign Language I *(1st semester ASL, 2 SCH version)*
SGNL 1301 Beginning American Sign Language I *(1st semester ASL, 3 SCH version)*
SGNL 1401 Beginning American Sign Language I *(1st semester ASL, 4 SCH version)*
SGNL 1501 Beginning American Sign Language I *(1st semester ASL, 5 SCH version)*

SGNL 1202 Beginning American Sign Language II *(2nd semester ASL, 2 SCH version)*
SGNL 1302 Beginning American Sign Language II *(2nd semester ASL, 3 SCH version)*
SGNL 1402 Beginning American Sign Language II *(2nd semester ASL, 4 SCH version)*
SGNL 1502 Beginning American Sign Language II *(2nd semester ASL, 5 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.....Sign Language Interpretation & Translation
maximum SCH per student.....10
maximum SCH per course.....5
maximum contact hours per course.....112

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.....6
maximum SCH per course.....3
maximum contact hours per course.....80

SOCI (Sociology)

SOCI 1301 Introductory Sociology

Introduction to the concepts and principles used in the study of group life, social institutions, and social processes.

Approval Number.....45.1101.51 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

SOCI 1306 Social Problems

Application of sociological principles to the major problems of contemporary society such as inequality, crime and violence, substance abuse, deviance, or family problems.

Approval Number.....45.1101.52 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

SOCI 2301 Marriage & the Family

Sociological examination of marriage and family life. Problems of courtship, mate selection, and marriage adjustment in modern American society.

Approval Number.....45.1101.54 25
CIP Area.....Social Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

SOCI 2306 Human Sexuality
(Also see PSYC 2306)

Study of the psychological, sociological, and physiological aspects of human sexuality. (*Cross-listed as PSYC 2306*)

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

SOCI 2319 Minority Studies I
SOCI 2320 Minority Studies II

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.....3
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
maximum SCH per course.....3
maximum contact hours per course.....48

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.....48

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.....Health Sciences
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

SOCI 2189 Academic Cooperative *(1 SCH version)*
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.....112

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.....3
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.....3
maximum contact hours per course.....48

SPAN (Spanish Language)

SPAN 1100 Beginning Spanish Conversation I ***(1 SCH version)***
SPAN 1110 Beginning Spanish Conversation II ***(1 SCH version)***

SPAN 1200 Beginning Spanish Conversation I ***(2 SCH version)***
SPAN 1210 Beginning Spanish Conversation II ***(2 SCH version)***

SPAN 1300 Beginning Spanish Conversation I ***(3 SCH version)***
SPAN 1310 Beginning Spanish Conversation II ***(3 SCH version)***

SPAN 2106 Intermediate Spanish Conversation ***(1 SCH version)***
SPAN 2206 Intermediate Spanish Conversation ***(2 SCH version)***
SPAN 2306 Intermediate Spanish Conversation (*3 SCH version*)

Basic practice in comprehension and production of the spoken language.

Approval Number.....16.0905.54 13
CIP Area.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

SPAN 1305 Intensive Beginning Spanish

Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. Covers material comparable to separate 1st- and 2nd-semester Spanish courses.

Approval Number.....16.0905.51 13
CIP Area.....Foreign Languages
maximum SCH per student.....10
maximum SCH per course.....5
maximum contact hours per course.....112

SPAN 1311 Beginning Spanish I (*1st semester Spanish, 3 SCH version*)
SPAN 1411 Beginning Spanish I (*1st semester Spanish, 4 SCH version*)
SPAN 1511 Beginning Spanish I (*1st semester Spanish, 5 SCH version*)

SPAN 1312 Beginning Spanish II (*2nd semester Spanish, 3 SCH version*)
SPAN 1412 Beginning Spanish II (*2nd semester Spanish, 4 SCH version*)
SPAN 1512 Beginning Spanish II (*2nd semester Spanish, 5 SCH version*)

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

Approval Number.....16.0905.51 13
CIP Area.....Foreign Languages
maximum SCH per student.....10
maximum SCH per course.....5
maximum contact hours per course.....112

SPAN 2106 Intermediate Spanish Conversation *(1 SCH version)*
SPAN 2306 Intermediate Spanish Conversation *(3 SCH version)*

Basic practice in comprehension and production of the spoken language.

Approval Number.....16.0905.54 13
CIP Area.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

SPAN 2311 Intermediate Spanish I *(3rd semester Spanish)*
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.

Approval Number.....16.0905.52 13
CIP Area.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....80

SPAN 2313 Spanish for Native Speakers I
SPAN 2315 Spanish for Native Speakers II
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 SCH per student.....6
maximum SCH per course.....3
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.

Approval Number.....16.0905.53 13
CIP Area.....Foreign Languages
maximum SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....48

SPAN 2189 Academic Cooperative *(1 SCH version)*
SPAN 2289 Academic Cooperative *(2 SCH version)*
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.

Approval Number.....24.0103.52 12
CIP Area..... Interdisciplinary
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....112

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.

Approval Number.....23.1001.60 12
CIP Area.....Letters
maximum SCH per student 4
maximum SCH per course 1
maximum contact hours per course.....64

SPCH 1311 Introduction to Speech Communication

Theories and practice of communication in interpersonal, small group, and public speech.

Approval Number.....23.1001.51 12
CIP Area.....Letters
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

SPCH 1315 Public Speaking

Research, composition, organization, delivery, and analysis of speeches for various purposes and occasions.

Approval Number.....23.1001.53 12
CIP Area.....Letters
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

SPCH 1318 Interpersonal Communication

Theories and exercises in verbal and nonverbal communication with focus on interpersonal relationships.

Approval Number.....23.1001.54 12
CIP Area.....Letters
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

SPCH 1321 Business & Professional Speaking

Theories and practice of speech communication as applied to business and professional situations.

Approval Number.....23.1001.52 12
CIP Area.....Letters
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....48

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 SCH per student.....6
maximum SCH per course.....3
maximum contact hours per course.....96

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.....3
maximum SCH per course.....3
maximum contact hours per course.....48

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.....3
maximum SCH per course.....3
maximum contact hours per course.....48

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.....3
maximum SCH per course.....3
maximum contact hours per course.....48

SPCH 2189 Academic Cooperative *(1 SCH version)*
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..... Interdisciplinary
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....112

TECA (Early Childhood Education)

TECA 1303 Families & the Community

A study of the relationship between the child, family, community, and educators, including a study of parent education and involvement, family and community lifestyles, child abuse, and current family life issues.

Approval Number.....19.0701.51 09
CIP Area.....Vocational Home Economics
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....96

TECA 1311 Introduction to Early Childhood Education

An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues.

Approval Number.....19.0708.51 09
CIP Area.....Vocational Home Economics
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....80

TECA 1318 Nutrition, Health, & Safety

A study of nutrition, health, and safety including community health, universal health precautions, and legal implications. Practical application of these principles in a variety of settings.

Approval Number.....19.0708.52 09
CIP Area.....Vocational Home Economics
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 principles of child growth and development from conception through adolescence. Focus on physical, cognitive, social, and emotional domains of development.

Approval Number.....19.0706.52 09
CIP Area.....Home Economics
maximum SCH per student.....3
maximum SCH per course.....3
maximum contact hours per course.....96

VIET (Vietnamese Language)

VIET 1311 Beginning Vietnamese I *(1st semester Vietnamese, 3 SCH version)*
VIET 1411 Beginning Vietnamese I *(1st semester Vietnamese, 4 SCH version)*
VIET 1511 Beginning Vietnamese I *(1st semester Vietnamese, 5 SCH version)*

VIET 1312 Beginning Vietnamese II *(2nd semester Vietnamese, 3 SCH version)*
VIET 1412 Beginning Vietnamese II *(2nd semester Vietnamese, 4 SCH version)*
VIET 1512 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.....4
maximum contact hours per course 96

New Courses

ARTS

ARTS 2348 Digital Art I
ARTS 2349 Digital Art II

COSC

COSC 1336 Programming Fundamentals I *(3 SCH version)*
COSC 1436 Programming Fundamentals I *(4 SCH version)*
COSC 1337 Programming Fundamentals II *(3 SCH version)*
COSC 1437 Programming Fundamentals II *(4 SCH version)*
COSC 2336 Programming Fundamentals III *(3 SCH version)*
COSC 2436 Programming Fundamentals III *(4 SCH version)*

DANC

DANC 1110 Tap I (*1 SCH version*)
DANC 1210 Tap I (*2 SCH version*)
DANC 1111 Tap II (*1 SCH version*)
DANC 1211 Tap II (*2 SCH version*)
DANC 2110 Tap III (*1 SCH version*)
DANC 2208 Tap III (*2 SCH version*)
DANC 2111 Tap IV (*1 SCH version*)
DANC 2209 Tap IV (*2 SCH version*)
DANC 1122 Folk I (*1 SCH version*)
DANC 1222 Folk I (*2 SCH version*)
DANC 1123 Folk II (*1 SCH version*)
DANC 1223 Folk II (*2 SCH version*)
DANC 2122 Folk III (*1 SCH version*)
DANC 2222 Folk III (*2 SCH version*)
DANC 2123 Folk IV (*1 SCH version*)
DANC 2223 Folk IV (*2 SCH version*)
DANC 1128 Ballroom I (*1 SCH version*)
DANC 1228 Ballroom I (*2 SCH version*)
DANC 1129 Ballroom II (*1 SCH version*)
DANC 1133 Country and Western I (*1 SCH version*)
DANC 1233 Country and Western I (*2 SCH version*)
DANC 1134 Country and Western II (*1 SCH version*)
DANC 1234 Country and Western II (*2 SCH version*)

DRAM

DRAM 1322 Stage Movement

ENGT

ENGT 1401 Circuits I for Engineering Technology (*lecture* + *lab*)
ENGT 1402 Circuits II for Engineering Technology (*lecture* + *lab*)
ENGT 1407 Digital Fundamentals (*lecture* + *lab*)
ENGT 1409 AC/DC Circuits for Engineering Technology
ENGT 2304 Materials and Methods for Engineering Technology
ENGT 2307 Engineering Materials I for Engineering Technology (*lecture* + *lab*)
ENGT 2310 Introduction to Manufacturing Processes

FORE

FORE 1301 Introduction to Forestry (*lecture* + *lab*)
FORE 1314 Dendrology (*lecture* + *lab*)
FORE 2309 Forest Ecology (*lecture* + *lab*)

KORE

KORE 1311 Beginning Korean I *(1st semester Korean, 3 SCH version)*
KORE 1411 Beginning Korean I *(1st semester Korean, 4 SCH version)*
KORE 1511 Beginning Korean I *(1st semester Korean, 5 SCH version)*
KORE 1312 Beginning Korean II *(2nd semester Korean, 3 SCH version)*
KORE 1412 Beginning Korean II *(2nd semester Korean, 4 SCH version)*
KORE 1512 Beginning Korean II *(2nd semester Korean, 5 SCH version)*
KORE 2311 Intermediate Korean I *(3rd semester Korean)*
KORE 2312 Intermediate Korean II *(4th semester Korean)*

MATH

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

RNSG

RNSG 1413 Foundations for Nursing Practice
RNSG 1513 Foundations for Nursing Practice
RNSG 1105 Nursing Skills I
RNSG 1205 Nursing Skills I
RNSG 1144 Nursing Skills II
RNSG 1244 Nursing Skills II
RNSG 1209 Introduction to Nursing
RNSG 1309 Introduction to Nursing
RNSG 2213 Mental Health Nursing
RNSG 2313 Mental Health Nursing
RNSG 2113 Mental Health Nursing
RNSG 2114 Mental Health Nursing

RNSG 1412 Nursing Care of the Childbearing and Childrearing Family
RNSG 1512 Nursing Care of the Childbearing and Childrearing Family
RNSG 1151 Care of the Childbearing Family
RNSG 1251 Care of the Childbearing Family
RNSG 2101 Care of Children and Families
RNSG 2201 Care of Children and Families
RNSG 2102 Care of Children and Families
RNSG 2103 Care of Children and Families
RNSG 2208 Maternal/Newborn Nursing and Women's Health
RNSG 2308 Maternal/Newborn Nursing and Women's Health
RNSG 1331 Principles of Clinical Decision-making
RNSG 1431 Principles of Clinical Decision-making
RNSG 1231 Principles of Clinical Decision-making
RNSG 1232 Principles of Clinical Decision-making
RNSG 1347 Concepts of Clinical Decision-making
RNSG 1447 Concepts of Clinical Decision-making
RNSG 1247 Concepts of Clinical Decision-making
RNSG 1248 Concepts of Clinical Decision-making
RNSG 1341 Common Concepts of Adult Health
RNSG 1441 Common Concepts of Adult Health
RNSG 1343 Complex Concepts of Adult Health
RNSG 1443 Complex Concepts of Adult Health
RNSG 1423 Introduction to Professional Nursing for Integrated Programs
RNSG 1523 Introduction to Professional Nursing for Integrated Programs
RNSG 1222 Introduction to Professional Nursing for Integrated Programs
RNSG 1223 Introduction to Professional Nursing for Integrated Programs
RNSG 1119 Integrated Nursing Skills
RNSG 1219 Integrated Nursing Skills
RNSG 1129 Integrated Nursing Skills II
RNSG 1229 Integrated Nursing Skills II
RNSG 2404 Integrated Care of the Client with Common Health Care Needs
RNSG 2504 Integrated Care of the Client with Common Health Care Needs
RNSG 2203 Integrated Care of the Client with Common Health Care Needs
RNSG 2204 Integrated Care of the Client with Common Health Care Needs
RNSG XX60 Clinical
RNSG XX61 Clinical
RNSG XX62 Clinical
RNSG XX63 Clinical

VIET

VIET 1311 Beginning Vietnamese I *(1st semester Vietnamese, 3 SCH version)*
VIET 1411 Beginning Vietnamese I *(1st semester Vietnamese, 4 SCH version)*
VIET 1511 Beginning Vietnamese I *(1st semester Vietnamese, 5 SCH version)*
VIET 1312 Beginning Vietnamese II *(2nd semester Vietnamese, 3 SCH version)*
VIET 1412 Beginning Vietnamese II *(2nd semester Vietnamese, 4 SCH version)*
VIET 1512 Beginning Vietnamese II *(2nd semester Vietnamese, 5 SCH version)*
VIET 2311 Intermediate Vietnamese I *(3rd semester Vietnamese)*
VIET 2312 Intermediate Vietnamese II *(4th semester Vietnamese)*

Developmental Courses

The following courses are developmental and do not result in degree or transferable credit. These courses may be offered for funding reimbursement.

Study Skills

Techniques of study such as time management, listening and note taking, text marking, library and research skills, preparing for examinations, and utilizing learning resources. 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 3
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 ..... Computation Skills
maximum SCH per student 12
maximum SCH per course 4
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 ..... Computation Skills
maximum SCH per student 3
maximum SCH per course 3
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.....9
maximum SCH per course.....3
maximum contact hours per course.....96

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.....Reading, Literacy, and Communication
maximum SCH per student.....9
maximum SCH per course.....3
maximum contact hours per course.....96

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.....3
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.....32.0108.55 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.....Reading, Literacy, and Communication
maximum SCH per student 9
maximum SCH per course 3
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.....32.0108.57 12
CIP Area.....Reading, Literacy, and Communication
maximum SCH per student 9
maximum SCH per course 3
maximum contact hours per course.....96

Deleted Courses

(*These courses may be used through summer of 2003.)*

ARTS

ARTS 2331 Graphic Design I
ARTS 2332 Graphic Design II
ARTS 2351 Advertising Art I
ARTS 2352 Advertising Art II

COSC

COSC 1335 PASCAL Programming II (*3 SCH version*)
COSC 1435 PASCAL Programming II (*4 SCH version*)
COSC 1334 Assembly Language Programming II (*3 SCH version*)
COSC 1434 Assembly Language Programming II (*4 SCH version*)

ENGR

ENGR 2105 Fundamentals of Electrical Engineering (*lab*)
ENGR 2405 Fundamentals of Electrical Engineering (*lecture* + *lab*)
ENGR 2406 Fundamentals of Electrical Engineering II (*lecture* + *lab*)

HECO

HECO 1323 Nutrition & Diet Therapy II (*2nd of 2 semesters*)

Courses Lacking TCCN Designations

ART

ARTS 0000 Studies in Contemporary Art

In-depth study of current concerns and practices in the visual arts.

Approval Number 50.0703.53 30
CIP Area ..... Visual and Performing Arts
maximum SCH per student 4
maximum SCH per course 3
maximum contact hours per course 80

BIOLOGY

BIOL 0000 Biological Entomology (lecture + lab)
BIOL 0000 Biological Entomology (lecture)
BIOL 0000 Biological Entomology (lab)

Study of insects, including life cycle, morphology, physiology, ecology, taxonomy, population dynamics, genetics, and ecosystem relations. Includes instruction in the biological and chemical control of insects.

Approval Number 26.0702.51 24
CIP Area ..... Life Sciences
Maximum SCH per student 4
maximum SCH per course 4
maximum contact hours per course 96

ENGLISH

ENGL 0000 Advanced Literature Analysis (single-semester course)
ENGL 0000 Advanced Literature Analysis I
ENGL 0000 Advanced Literature Analysis II

Intensive analysis of literary works. May be unified by theme, period, or subject matter.

Approval Number 16.0104.53 35
CIP Area ..... Letters
maximum SCH per student 6
maximum SCH per course 3
maximum contact hours per course 48

HOME ECONOMICS

HECO 0000 Applied Design

Basic design principles and application of aesthetic elements in all areas of home economics.

Approval Number.....19.0101.53 33
CIP Area..... Home Economics
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....96

HECO 0000 Consumer Science

Study of concepts pertaining to consumer behavior in relation to the social, political, and economic components of market environments.

Approval Number.....19.0402.51 33
CIP Area..... Home Economics
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

HISTORY

HIST 0000 Advanced Historical Analysis

In-depth study of selected minority, local, regional, national, or international topics. Prerequisite: 6 hours of history.

Approval Number.....54.0101.56 25
CIP Area..... History, General
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

MUSIC

MUSI 0000 Individual Instruction

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

Approval Number.....50.0903.54.30
CIP Area..... Visual & Performing Arts
maximum SCH per student 20
maximum SCH per course 1
maximum contact hours per course.....32

PHYSICAL EDUCATION

PHED 0000 Recreational Dance

Instruction and participation in folk, social, tap, or other dance forms.

NOTE: The KINE/PHED prefix, not the DANC prefix, should be used for courses reported under this number.

Approval Number 36.0114.51 23
CIP Area ..... Leisure & Recreational Activities
maximum SCH per student 8
maximum SCH per course 2
maximum contact hours per course 64

Courses Not Eligible For Funding

New Testament Greek
Biblical Hebrew
Old Testament Survey
New Testament Survey

Appendix A: 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/ctc/ip/core11_00/index.htm** Field of study curricula are being developed continuously. Please check this web site regularly.

Field Of Study Transfer Curriculum For Child Development/ Early Childhood Education

Leading to the:
Bachelor of Science in Human Sciences
OR
Bachelor of Science in Interdisciplinary Studies

Concentration: Child and Family Studies/Child Development including a Proposed Certification in Early Childhood Education

<table>
<tr><td colspan="2">36-48 Hour Academic Major-21 hours must be upper-division
The lower-division degree requirements must include:</td></tr>
<tr><td>12 hours of Early Childhood “delivery system: which will include the following:

Families and the Community – TECA 1303

Intro. To Early Childhood – TECA 1311

Nutrition, Health & Safety – TECA 1318

Child Growth & Development – TECA 1354

(These courses may be taught in any appropriate department.)</td><td>An additional three hours of lower-division course work may be transferred by local agreement from the following topics:

Infant and Toddler

Child Guidance

Early Childhood Creative Arts

Children with Special Needs

The School Age Child

Motor Development</td></tr>
</table>

[1]Field of Study Curriculum for Grade 4-8 Certification

Leading to the:
[1]Bachelor of Science Degree with Major in Mathematics or
[1]Bachelor of Science Degree with Major in Science or
[1]Bachelor of Science Degree with Major in Mathematics/Science Composite or
[1]Bachelor of Science Degree with Major in Social Sciences/Language Arts Composite or
[1]Bachelor of Science in Interdisciplinary Studies (Generalist and Bilingual Generalist)

<table>
<tr><td colspan="2">Field of Study: The following 12 semester credit hours (SCH) Field of Study courses must be accepted for transfer with the optional 3 SCH according to local agreement:</td></tr>
<tr><td>[2]Schools and Society (3 SCH)
- May be one 3 SCH course or three 1 SCH courses designed as recruitment or outreach course
- May be cross-listed in several disciplines
- Will allow special emphasis for regional needs

[2]MATH 1350, Fundamentals of Math I (3 SCH)
- With College Algebra prerequisite or equivalent competencies
- First of two math courses
- Incorporates SBEC proposed math standards
- [4]Will satisfy 6-9 SCH math requirement as per Board policy

[2]MATH 1351, Fundamentals of Math II (3 SCH)
- With College Algebra prerequisite or equivalent competencies
- Second of two math courses
- Incorporates SBEC proposed math standards
- [4]Will satisfy 6-9 SCH math requirement as per Board policy

Child and Lifespan Development or TECA 1354, Child Growth and Development (3 SCH)
- If Child and Lifespan Development, limited to child and adolescent emphasis</td><td>An additional 3 SCH of lower-division course work from the following may be transferred by local agreement:

Beginning or Intermediate Spanish
- Current [3]ACGM courses

Physical Science
- Current [3]ACGM course

Principles of Geography
- Current [3]ACGM course

[2]Children with Special Needs
- [3]WECM course to be adapted and included in ACGM

[2]Principles and Practices of Multicultural Education
- [3]WECM course to be adapted and included in ACGM</td></tr>
</table>

[1]Each baccalaureate degree offered in conjunction with the 4th through 8th grade certification has three required components: General Education (42-48 SCH), an Academic Composite Major (48) SCH, and Pedagogy (18-24 SCH). Elements of the Field of Study curriculum must transfer into one of these three components as determined by the receiving institution.
[2]The actual course title and course number will be determined by the Lower-Division Academic Course Guide Manual (ACGM) Advisory Committee-math courses completed May 2000.
[3]Workforce Education Course Manual (WECM) courses are technical in nature: ACGM courses are transferable lower-level, academic courses.
[4]In January 1997, the Coordinating Board adopted a policy requiring all teacher certification programs to include 6-9)

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 annotated set of courses (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[1]
Computer Literacy	1 course: New course, with a TCCNS BCIS prefix to be assigned[2]	BCIS 13XX or 14XX 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

[1]Individual institutions should determine any prerequisite requirements for MATH 1325.
[2]This course is a computer-literacy-based course with business applications, for which a description and desirable student outcomes have been developed by the advisory committee. The description of the course was approved for inclusion in the newly revised Lower-Division Academic Course Guide Manual on March 3, 2000.

The following Notes are also part of the field of study curriculum. They address special circumstances.

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 non-business discipline. If no field of study exists for the non-business discipline, the lower-division 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 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	ACGM	3 or 4
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 set of courses (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

*Texas Common Course Numbering System

NOTE: Up to a total of 6 additional semester credit hours of criminal justice-related lower-division course work 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;"

or

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[1]	All
Differential Equations/ Linear Algebra	Differential Equations (3 or 4 SCH version)	MATH 2320 MATH 2420	3 – 8	Only those programs requiring these course(s) – See matrix #1
	Linear Algebra (3 or 4 SCH version)	MATH 2318 MATH 2418		
	Differential Equations and Linear Algebra (3 or 4 SCH version)	MATH 2321 MATH 2421		
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)	PHYS 2325 PHYS 2425 PHYS 2326 PHYS 2426	6 – 8[1]	Lecture component required by all – See matrix # 2
	University Physics Laboratory I AND University Physics Laboratory II	PHYS 2125 PHYS 2126		
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)	ENGR 2301 ENGR 2401	3 - 8	Only those programs requiring these course(s) – See matrix #3
	Engineering Mechanics II – Dynamics (3 or 4 SCH version)	ENGR 2302 ENGR 2402		
	Statics and Dynamics (3 or 4 SCH version)	ENGR 2303 ENGR 2403		

TOTAL SCH 27 - 43

[1] 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.

✓ = transfers; x = does not transfer; other is explained by text.

Matrix 1. Differential Equations and Linear Algebra

Receiving Institution

Sending Institution: Course	Differential Equations	Linear Algebra	Differential Equations and Linear Algebra (combined)
Differential Equations	✓	x	The Differential Equations course and the Linear Algebra course <u>together</u> transfer as the combined course
Linear Algebra	x	✓	
Diff. Eq. and Linear Alg. (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.

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

Sending Institution: Course	Physics – lecture only (3 SCH)	Physics – lab only (1 SCH)	Physics – lecture and lab combined (4 SCH)
Physics lecture	✓	x	The lecture course and the lab course <u>together</u> transfer as the combined lecture and lab course
Physics lab	x	✓	
Physics lect. and lab (combined)	**Transfers as the lecture only or as both the lecture 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 <u>if</u> the program of the receiving institution requires it.

Matrix 3. Engineering Mechanics—Statics and Dynamics

Receiving Institution

Sending Institution: Course	Statics	Dynamics	Statics and Dynamics (combined)
Statics	✓	x	The Statics course and the Dynamics course <u>together</u> transfer as the combined course
Dynamics	x	✓	
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
There are thirteen universities in Texas that 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	Lamar University
MSU	Midwestern State University
PVAMU	Prairie View A&M University
SHSU	Sam Houston State University
SRSU	Sul Ross State University
SWTSU	Southwest Texas State University
TAMU	Texas A&M University
TAMUC	Texas A&M University-Commerce
TAMU-CC	Texas A&M University-Corpus Christi
TASU	Tarleton State University
TSU	Texas Southern University
TTU	Texas Tech University
UH	University of Houston
UH-D	University of Houston-Downtown
UNT	University of North Texas
UT-B	The University of Texas at Brownsville
UT-T	The University of Texas at Tyler
WTAMU	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 precalculus, 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 precalculus. 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 sub-tracks.

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	Engineering Design Graphics (ENGR 1304)		3
Engineering	Surveying (ENGR 1407)		4
Technology	[1]AC/DC Circuits (ENGT 1409)		4
Technology	[2]Materials and Methods (ENGT 2304)		3
English	[3]Technical and Business Writing (ENGL 2311)		3
			37 Total SCH

*Sub-Track 1 allows transfer to the following institutions: UH-D and TSU.
**Sub-Track 2 allows transfer to UNT and all of the institutions listed in sub-track 1.

[1]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.
[1] 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.
[3] 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.

Computer Engineering Technology

Content Area	*Sub-Track 1	Semester Credit Hours (SCH)
Mathematics	Calculus I (MATH 2413)	4
	Calculus II (MATH 2414)	4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401)	4
	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	[1]Technical and Business Writing (ENGL 2311)	3
		35 Total SCH

*Sub-Track 1 allows transfer to all institutions offering a degree in this area including: UH, PVAMU, and UH-D.

[1] 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)
Mathematics	College Algebra (MATH 1314) Plane Trigonometry (MATH 1316) OR PreCalculus) (MATH 2412)	Calculus I (MATH 2413) Calculus II (MATH 2414)	Calculus I (MATH 2413) Calculus II (MATH 2414)	3-4 3-4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401) Physics II (Algebra-based) (PHYS 1402)	Physics I (Algebra-based) (PHYS 1401) Physics II (Algebra-based) (PHYS 1402)	Physics I (Calculus-based) (PHYS 2425) Physics II (Calculus-based) (PHYS 2426)	4 4
Physical Sciences	Chemistry I (CHEM 1411)			4
Engineering	Engineering Design Graphics (ENGR 1304)			3
Engineering	Surveying (ENGR 1407)			4
Technology	[1]AC/DC Circuits (ENGT 1409)			4
Technology	[2]Materials and Methods (ENGT 2304)			3
English	[3]Technical and Business Writing (ENGL 2311)			3
				35-37 Total SCH

*Sub-Track 1 allows transfer to the following institutions: SHSU, SWTSU, and TAMUC.
**Sub-Track 2 allows transfers to TAMU, TTU, UH and all of the institutions listed in sub-track 1.
***Sub-Track 3 allows transfer to UNT and all of the institutions listed in sub-tracks 1 and 2.

[1]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.
[2] 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.
[3] 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
	Calculus II (MATH 2414)	4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401)	4
	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	[1]Technical and Business Writing (ENGL 2311)	3
		35 Total SCH

*Sub-Track 1 allows transfer to the following institutions: UH and PVAMU.

[1] 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)
Mathematics	College Algebra (MATH 1314) Plane Trigonometry (MATH 1316) OR PreCalculus) (MATH 2412)	Calculus I (MATH 2413) Calculus II (MATH 2414)	Calculus I (MATH 2413) Calculus II (MATH 2414)	3-4 3-4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401) Physics II (Algebra-based) (PHYS 1402)	Physics I (Algebra-based) (PHYS 1401) Physics II (Algebra-based) (PHYS 1402)	Physics I (Calculus-based) (PHYS 2425) Physics II (Calculus-based) (PHYS 2426)	4 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	[1]Technical and Business Writing (ENGL 2311)			3
				33-35 Total SCH

*Sub-Track 1 allows transfer to the following institution: SHSU.
**Sub-Track 2 allows transfer to the following institutions: TTU, TSU, UT-B and the institution listed in sub-track 1.
***Sub-Track 3 allows transfer to all institutions in sub-tracks 1 and 2 and also to TAMU, UNT, and TAMU-CC.

[1] 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-Track 2	***Sub-Track 3	Semester Credit Hours (SCH)
Mathematics	College Algebra (MATH 1314) Plane Trigonometry (MATH 1316) OR PreCalculus) (MATH 2412)	Calculus I (MATH 2413) Calculus II (MATH 2414)	Calculus I (MATH 2413) Calculus II (MATH 2414)	3-4 3-4
Physical Sciences	Physics I (Algebra-based) (PHYS 1401) Physics II (Algebra-based) (PHYS 1402)	Physics I (Algebra-based) (PHYS 1401) Physics II (Algebra-based) (PHYS 1402)	Physics I (Calculus-based) (PHYS 2425) Physics II (Calculus-based) (PHYS 2426)	4 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	[1]Technical and Business Writing (ENGL 2311)			3
				Total 30-32 SCH

*Sub-Track 1 allows transfer to the following institutions: UT-T, WTAMU, SRSU, TSU, and SHSU.
**Sub-Track 2 allows transfer to the following institutions: UH, MSU, SWTSU, and UT-B and all institutions listed in sub-track 1.
***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.

[1] 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.

Mechanical 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	Engineering Design Graphics (ENGR 1304)		3
Technology	Engineering Materials I (ENGT 2307)		3
Technology	Introduction to Manufacturing Processes (ENGT 2310)		3
English	[1]Technical and Business Writing (ENGL 2311)		3
			Total 32 SCH

*Sub-Track 1 allows transfer to the following institutions: UH, UH-D, TTU, and UT-B.
**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.

[1] 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 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 course work 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 System Equivalents
Anatomy & Physiology	2 courses: A&P I with lab and A&P II with lab	BIOL 2401 and BIOL 2402 only[5]
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 Lifespan Growth & Development	PSYC 2301 AND PSYC 2314
Mathematics	1 course: Elementary Statistical Methods	MATH 1342

[1] 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	WECM Course Rubric & Number	SCH Range (Required Clinical Co-requisite)
Fundamentals (including Basic Skills)	RNSG 1413/RNSG 1513 (basic skills incorporated) **OR** RNSG 1413/1513 **PLUS** RNSG 1105/1205 **OR** RNSG 1209/1309 **PLUS** RNSG 1105/1205 **OR** Any equivalent theory/lab combination	2 to 6 SCH
Mental Health	RNSG 2113/2213	1 **OR** 2 SCH
Obstetrics/Pediatrics	RNSG 1412/1512 **OR** RNSG 1251 **PLUS** RNSG 2201 **OR** RNSG 2208/2308 **PLUS** RNSG 2201	4 **OR** 5 SCH
Medical/Surgical Nursing	RNSG 1331/1431 or 1231 **PLUS** 1232 PLUS RNSG 1347/1447 or 1247 **PLUS** 1248 **OR** RNSG 1341/1441 **PLUS** RNSG 1343/1443 **OR** **EQUIVALENT with OR** without RNSG 1144/ RNSG 1244	2 to 6 SCH

OR

INTEGRATED CURRICULUM

Content Area	WECM Course Rubric & Number	SCH Range (Required Clinical Co-requisite)
Introduction to Professional Nursing for Integrated Programs	RNSG 1423/RNSG 1523 (basic skills incorporated) **OR** RNSG 1423/1523 **PLUS** RNSG 1119/1219 OR RNSG 1222 **PLUS** RNSG 1223 **PLUS** RNSG 1119/1219	2 to 6 SCH
Integrated Care of the Client with Common Health Care Needs	RNSG 2404/2504 (basic skills incorporated) **OR** RNSG 2404/2504 **PLUS** RNSG 11XX/12XX OR RNSG 2203 **PLUS** RNSG 2204 PLUS RNSG 11XX/12XX	2 to 6 SCH

The following notes address special circumstances and are also 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 Maintenance 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 B: Forms

TEXAS HIGHER EDUCATION COORDINATING BOARD
COMMUNITY AND TECHNICAL COLLEGES DIVISION
P.O. BOX 12788 Austin, Texas 78711
512-427-6250— Fax 512-427-6444

Academic Course Inventory Update

Unique Need Course: Request For Approval Form

1. _____ **2.** _____ **3.** _____
Institution **College Official** **Effective Date**

4. Complete Course Title:

5. Course Description:

6. Unique Course Criteria: Unique courses must meet the criteria as identified by CB Rule 5.172

(Check appropriate criteria.)

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

_____ _____
Date Submitted **Chief Academic Officer**

_____ _____ _____
Phone number **Fax number** **E-Mail Address**

7. Data:

a. Update Code	b. FICE Code	c. Approval Number	d. Subject Prefix	e. Course Number	f. SCH

g. Course Short Title:	h. Contact Hours		i. Total Contact Hours
	Lecture	Lab	

_____ _____
Coordinating Board Official **Date**

Return this form to: Director, Instructional Programs **THECB Rev. 2/2001**

Instructions For Requesting A Unique Need Course

General Academic Course Inventory Update

The proposed course 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 Director of Instructional Programs.

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 courses must meet the criteria identified in Coordinating Board Rule 5.172. 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 one academic year only 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 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.

i. 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.

TEXAS HIGHER EDUCATION COORDINATING BOARD

Distance Learning Standards

- The signature below certifies that this institution has met all applicable requirements of Coordinating Board rules (Section 5.153) for Distance Learning resident credit courses to be offered during academic year. This certification indicates specifically that:
- No degree or certificate program will be offered via distance learning instruction without prior approval of the Board. In addition, this institution will not offer through distance learning instruction at any site an array of courses that would constitute a degree or certificate program without prior approval by the Board.
- Distance learning instruction offered by any live or telecommunications delivery system will be comparable to on-campus instruction. It will meet the same quality standards offered on-campus to regularly enrolled students.
- A distance learning course which offers either regular college credit or Continuing Education Units will meet the standards of the Commission on Colleges of the Southern Association of Colleges and Schools.
- Students enrolled in distance learning will satisfy the same requirements for admission to the institution, the program of which the course is a part, and to the class/section itself, as are required of on-campus students.
- Faculty providing distance learning instruction will be selected and evaluated by the same standards, review, and approval procedures used by the institution to select and evaluate faculty responsible for on-campus instruction. Institution will provide training and support to enhance the added skills required of faculty to teach classes via instructional telecommunications.
- The instructor of record will participate in the delivery of instruction and evaluation of student progress.
- Providers of graduate-level distance learning instruction will be approved by the graduate faculty of the institution.
- All distance learning instruction will be administered under the authority of the same office or person administering the corresponding on-campus instruction. The supervision, monitoring, and evaluation processes for instructors must be comparable to those for on-campus instruction.
- Students will be provided academic support services, including academic advising, counseling, library and other learning resources, tutoring services, and financial aid, that are comparable to those available for on-campus students.
- Facilities for distance learning instruction (other than homes as instructional telecommunications reception sites) will be adequate for the purpose of delivering instruction which is comparable in quality to on-campus instruction.
- No master's degree program will be offered via distance learning instruction without express prior notification to the Southern Association of Colleges and Schools. No distance learning doctoral degree program will be authorized except through the approval of joint or cooperative degree programs.

Signature of Chief Academic Officer | **Printed Name of Chief Academic Officer**

Institution | **Date**

THECB Rev. 2/200

TEXAS HIGHER EDUCATION COORDINATING BOARD
Community and Technical Colleges Division
P.O. Box 12788, Austin, TX 78711 1200 East Anderson Lane, Austin, TX 78752
TEL (512) 427-6250 FAX (512) 427-6444

Out-Of-State Credit Course Request

1. Institution

2. Type Name and Title of Official Completing This Form

3. Effective Date

4. Complete Course Title:

5. Course Description:

Please submit a separate application for each state or country in which this course will be offered.

6. Location of Course

7. State or Country

8. Describe how this course will utilize academic, cultural, or physical resources not reasonably available in Texas:

9. If this course is taught by adjunct faculty, describe the unique qualifications of personnel to be employed at the out-of-state site:

I certify that this course meets all criteria from §5.157 of the Coordinating Board's rules for courses offered outside the state of Texas.

Date **Signature of Chief Academic Program Officer**

10. Course Data

a. Update Code	b. State or Country Code	c. FICE Code	d. Approval Number Assigned	e. Subject Prefix	f. Course Number	g. SCH

h. Short Course Title	i. Semester Contact Hours		j. Total Semester Contact Hours
	Lecture	Lab	

Return this form to: Director of Instructional Programs **THECB Rev. 3/2001**

Appendix C: Distance Education and Off-Campus Instruction

TEXAS ADMINISTRATIVE CODE

TITLE 19 EDUCATION

PART 1 TEXAS HIGHER EDUCATION COORDINATING BOARD

CHAPTER 4 RULES APPLYING TO ALL PUBLIC INSTITUTIONS OF HIGHER EDUCATION IN TEXAS

SUBCHAPTER E APPROVAL OF DISTANCE EDUCATION AND OFF-CAMPUS INSTRUCTION FOR PUBLIC COLLEGES AND UNIVERSITIES

RULE §4.101 Purpose

This subchapter provides guidance to all public institutions of higher education in Texas regarding the delivery of distance education and off-campus courses and programs. The Board's goals are to ensure the quality of Texas-based distance education and off-campus courses and programs and to provide residents with access to distance education and off-campus courses and programs that meet their needs. The rules are designed to assure the adequacy of the technical and managerial infrastructures necessary to support those courses and programs.

RULE §4.102 Authority

The authority for this subchapter is Texas Education Code, §61.051(j).

RULE §4.103 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) Distance education--Instruction in which the majority of the instruction occurs when the student and instructor are not in the same physical setting. A class is considered a distance education class if students receive more than one-half of the instruction at a distance. Distance education can be delivered synchronously or

asynchronously to any single or multiple location(s):

(A) Other than the "main campus" of a senior institution (or "on campus"), where the primary office of the chief executive officer of the campus is located;

(B) Outside the boundaries of the taxing authority of a public community/junior college district; or

(C) Via instructional telecommunications to any other distant location, including electronic delivery of all types.

(4) Institutional Plan--A long-term plan describing how an institution seeking authority to offer distance education and off-campus instruction will ensure quality and resources in providing such instruction, based on Board-adopted Guidelines for Institutional Plans.

(5) Instructional Telecommunications--Electronic telecommunication technology systems employed to deliver distance education instruction.

(6) Off-Campus--Instruction in which one-half or more of the instruction is delivered with the instructor and student in the same physical location and which meets one of the following criteria: for senior institutions, Lamar state colleges, or public technical colleges, off-campus locations are locations away from the main campus; for public community/junior colleges, off-campus locations are locations outside the taxing district.

(7) Program--Any certificate or degree program offered by a public institution of higher education.

(8) Regional Council--A cooperative arrangement among representatives of all public and independent higher education institutions within a Uniform State Service Region.

(9) Senior institution--Public universities, health science centers and health-related institutions. All provisions of this subchapter relating to universities or to "senior institutions" also apply to health science centers and health-related institutions.

(10) Service area--The territory served by a public community/junior college district as defined in Texas Education Code, Subchapter J (relating to Junior College District Service Area).

(11) Special professional--First professional degree programs, such as law, pharmacy, optometry, dentistry, medicine and veterinary medicine.

RULE §4.104 General Provisions

(a) This subchapter governs the following types of instruction:

(1) Academic credit instruction and formula-funded workforce continuing education provided by a public community/junior college outside of the boundaries of its taxing district;

(2) Academic credit instruction provided by a public technical college, Lamar state college, university, or health-related institution at a site other than the main campus where the primary office of the chief executive officer of the campus is located; or

(3) Academic credit instruction provided at out-of-state or foreign locations by public institutions of higher education;

(b) This subchapter does not apply to the following types of instruction:

(1) Non-credit adult and continuing education courses provided at a distance by universities and health science centers;

(2) Continuing education, except formula-funded workforce continuing education, provided by public community/junior colleges, Lamar state colleges, and public technical colleges; or

(3) Correspondence and extension classes that are not submitted for formula funding.

(c) The Board retains final authority for the offering of all classes, courses, programs, and degrees, and may take whatever action it deems appropriate to comply with the law or to maintain a high-quality and cost-effective system of distance education and off-campus instruction for the state.

(1) Each course and program offered under the provisions of this subchapter must be within the role and mission of the institution responsible for offering the instruction. Each course must be on the offering institution's inventory of approved courses, and each program must be on the offering institution's inventory of approved programs.

(2) Prior approval may be required before an institution may offer courses and programs under the provisions of this subchapter in certain subject area disciplines or under other conditions specified by the Board.

(3) No doctoral or special professional degree programs may be offered via distance education or off-campus instruction without specific prior approval by the Board. The Commissioner may approve for delivery to other off-campus sites or via other delivery modes doctoral or special professional degree programs that have previously been approved by the Board for electronic or off-campus delivery.

(d) An institution offering a full degree or certificate program under the provisions of this subchapter shall comply with relevant procedures and rules of the appropriate regulatory or accrediting agency, or professional certification

board.

(e) No graduate degree program may be offered via distance education or off-campus instruction without prior notification by the institution to the appropriate regulatory or accrediting agency or professional certification board.

(f) A program is considered to be offered via distance education or off-campus instruction if a student may complete a substantial majority of the program without taking any courses on the main campus of the public university, public technical college, or health-related institution providing the instruction, or without physically attending classes within the boundaries of the taxing district of the public community/junior college district providing the instruction.

(g) Notice of each course offered via off-campus instruction under the provisions of this subchapter shall be submitted to the Board. Notice of each program offered via distance education, including Internet delivery, or off-campus instruction shall be submitted to the Board. Notice shall be provided in accordance with provisions and schedules determined by the Commissioner.

(h) State-funded distance education and off-campus instruction shall be reported in accordance with the Board's uniform reporting system and the reporting provisions of this subchapter.

(i) Institutions may be required to provide special reports on distance education and off-campus courses and programs for inclusion in institutional and statewide reports.

(j) Institutions shall not submit for formula funding semester credit hours generated through distance education by any student who is not a Texas resident or is not physically located in Texas. In limited cases, exceptions can be approved by the Commissioner.

(k) Instruction delivered out-of-state through distance education to non-Texas residents should be treated as extension courses; institutions shall charge appropriate fees to cover the cost of instruction.

RULE §4.105 Standards and Criteria for Distance Education and Off-Campus Instruction

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The following standards and criteria shall apply to distance education and off-campus instruction.

(1) Instruction shall meet the quality standards applicable to on-campus instruction.

(2) Courses which offer either semester credit hours or Continuing Education Units shall do so in accordance with the standards of the Commission on Colleges of the Southern Association of Colleges and Schools.

(3) Students shall satisfy the same requirements for admission to the institution, to the program of which the course is a part, and to the class/section itself, as are required of on-campus students. Students in programs to be offered collaboratively must meet the admission standards of their home institutions.

(4) Faculty shall be selected and evaluated by the same standards, review, and approval procedures used by the institution to select and evaluate faculty responsible for on-campus instruction.

(5) Institutions shall provide training and support to enhance the added skills required of faculty teaching classes via instructional telecommunications.

(6) The instructor of record shall bear responsibility for the delivery of instruction and for evaluation student progress.

(7) Providers of graduate-level instruction shall be approved in the same manner as graduate faculty for on-campus instruction.

(8) All instruction shall be administered by the same entity administering the corresponding on-campus instruction. The supervision, monitoring, and evaluation processes for instructors shall be comparable to those for on-campus instruction.

(9) Students shall be provided academic support services - including academic advising, counseling, library and other learning resources, and financial aid - appropriate for distance education and off-campus learners.

(10) Facilities (other than homes as distance education reception sites) shall be comparable in quality to those for on-campus instruction.

(11) Institutions shall adhere to additional criteria outlined in the Guidelines for Institutional Plans for Distance Education and Off-Campus Instruction.

RULE §4.106 Institutional Plan for Distance Education and Off-Campus Instruction

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(a) Prior to offering any distance education or off-campus courses or programs for the first time, a public community/junior or Lamar state college, technical college, or senior institution shall submit an Institutional Plan for Distance Education and Off-Campus Instruction to the Board for approval. The Commissioner shall provide guidelines for development of such plans.

(b) Institutional academic and administrative policies shall reflect a commitment to maintain the quality of distance education and off-campus programs in accordance with the provisions of this subchapter. An Institutional Plan 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 Plan'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.

(c) Prior to Board consideration of an Institutional Plan, the Commissioner may approve an offering by an institution of a limited number of distance education courses for experimental purposes.

(d) Each institution with an approved Institutional Plan for Distance Education and Off-Campus Instruction shall submit an updated Plan on a schedule to be determined by the Commissioner. Thereafter, Institutional Plans shall be reviewed periodically on a schedule to be determined by the Commissioner.

RULE §4.107 Distance Education and Off-Campus Course and Program General Provisions

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(a) The Commissioner shall develop procedures governing the review and approval of distance education and off-campus courses and programs.

(b) Regional Councils in each of the ten Uniform State Service Regions are hereby authorized to make recommendations to the Commissioner and to resolve disputes regarding plans for lower-division courses and programs proposed by public institutions.

(1) The presidents, or designated representatives, of each public and independent institution of higher education with its main campus in each Region comprise the Council membership.

(2) The Commissioner shall develop procedures to govern Regional Council responsibilities.

RULE §4.108 Out-of-State and Foreign Course and Program General Provisions

---

(a) State-funded out-of-state and foreign off-campus courses offered by Texas public institutions of higher education, or by an approved consortium composed of Texas public institutions, shall be approved by the Commissioner in order for the semester credit hours or contact hours generated in those courses to be used

for formula reimbursement and shall adhere to procedures and standards developed by the Commissioner for out-of-state and foreign offerings.

(b) Non-state-funded credit courses shall not be included in submissions to Regional Councils. Non-credit adult and continuing education courses offered at a distance by universities and health science centers are exempt from this subchapter.

(c) Institutions may not submit for formula funding distance education courses delivered outside the state without specific prior approval by the Commissioner.

Appendix D: Rules for Academic Associate Degrees

TEXAS ADMINISTRATIVE CODE

TITLE 19	EDUCATION
PART 1	TEXAS HIGHER EDUCATION COORDINATING BOARD
CHAPTER 9	PROGRAM DEVELOPMENT IN PUBLIC COMMUNITY/JUNIOR COLLEGE DISTRICTS AND TECHNICAL COLLEGES
SUBCHAPTER J	ACADEMIC ASSOCIATE DEGREE PROGRAMS

RULE §9.181 Purpose

This subchapter provides rules for the structure of academic associate degree programs in public community/junior and technical colleges eligible for state appropriations.

RULE §9.182 Authority

The Texas Education Code, Section 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.

RULE §9.183 Degree Titles, Program Length, and Program Content

(A) An academic associate degree may be called either an associate of arts (AA) or an associate of science (AS) 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.

(B) Academic associate degree programs must consist of a minimum of 60 SCH and a maximum of 66 SCH.

(C) Except as provided in paragraph (1) of this subsection, academic associate degree programs must incorporate the institution's approved core curriculum as prescribed by Section 4.28 of this title (relating to core curriculum and Sections 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 Section 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.

(2) A college that has a signed articulation agreement with a General Academic Teaching Institution to transfer a specified curriculum may offer a specialized associate degree program that incorporates that curriculum.

RULE §9.184 Approval

Community colleges and state colleges authorized to offer transfer programs may offer academic associate degree programs that conform to these guidelines without requesting approval from the Board.

RULE §9.185 Reporting to the Board

(a) Contact hours for courses in approved academic certificate and associate degree programs at public postsecondary institutions must be determined and reported in compliance with Board policy as outlined in the *Lower-Division Academic Course Guide Manual* and state law.

RULE §9.186 Disapproval of Programs; Noncompliance

No funds appropriated to any public postsecondary institution shall be expended for any academic associate degree program that is not in compliance with these rules. Existing academic degree programs must be brought into compliance by August 1, 2004.

Appendix E: Core Curriculum

Texas Administrative Code

TITLE 19	EDUCATION
PART 1	TEXAS HIGHER EDUCATION COORDINATING BOARD
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

RULE §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.

RULE §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 §§61.821-831.

RULE §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) 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 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.

(6) 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.

(7) 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.

(8) 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 of assistant provost, or dean.

RULE §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.

RULE §4.25 Requirements and Limitations

(a) Each institution of higher education shall identify in its undergraduate catalog each lower-division course that is substantially equivalent to an academic course listed in the current edition of the Lower Division Academic Course Guide Manual.

(b) Each university 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 public colleges and universities 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 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 senior 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 university shall be required to accept in transfer or toward a degree program, more than sixty-six (66) semester credit hours of lower-division academic credit. Universities, however, may choose to accept additional credit hours.

RULE §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.

RULE §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.

RULE §4.28 Core Curriculum

(a) In accordance with Texas Education Code, §§61.821-831, 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) 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 (logic, college-level algebra equivalent, or above)	3
030** Natural Sciences	6
Humanities & Visual and Performing Arts Must include: 050** Visual/Performing Arts 040** Other (literature, philosophy, modern or classical language/literature and cultural studies*)	6 (3) (3)
Social/Behavioral Sciences Must include: 060** U.S. History (legislatively mandated) 070** Political Science (legislatively mandated) 080** Social/Behavioral Science	15 (6) (6) (3)
Total Minimum Requirements	36

* **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.

** 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 (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

* **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.

** **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.

*** 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) 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) 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.

(e) 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) 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) 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) Each institution must note core courses on student transcripts as recommended by the Texas Association of Collegiate Registrars and Admissions Officers (TACRAO).

(i) 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."

RULE §4.29 Core Curricula Larger than 42 Semester Credit Hours

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(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."

RULE §4.30 Criteria for Evaluation of Core Curricula

(a) Each public institution of higher education shall review and evaluate its core curriculum every five years 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.

RULE §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 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.

RULE §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.

RULE §4.33 Criteria for Evaluation of Field of Study Curricula

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(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 Board-approved 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.

RULE §4.34 Revision of Existing Approved Field of Study Curricula

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(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 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.

Core Curriculum: Assumptions and Defining Characteristics

APRIL 1998

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

ASSUMPTIONS

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

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

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

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

3. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the core curriculum of the sending institution, with certain exceptions noted in the rules [Chapter 5, Subchapter S, Section 5.403 (h)].

4. The basic intellectual competencies discussed in this document -- reading, writing, speaking, listening, critical thinking, and computer literacy -- should inform the components of any core curriculum. Moreover, a core curriculum should contain courses that provide multiple perspectives about the individual and the world in which he or she lives; that stimulate a capacity to discuss and reflect upon individual, political, and social aspects of life so students understand ways in which to exercise responsible citizenship; and that enable students to integrate knowledge and understand the interrelationships of the disciplines.

5. There should be no attempt by the state to prescribe a specific set of core courses or a single core curriculum that would be uniform across all Texas colleges and universities.

6. A core curriculum should be described and assessed by faculty and institutions in terms of basic intellectual competencies and perspectives, and of specified student outcomes, rather than simply in terms of specific courses and course content.

DEFINING CHARACTERISTICS OF BASIC INTELLECTUAL COMPETENCIES IN THE CORE CURRICULUM

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

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

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

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

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

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

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

Some of theses intellectual competencies have traditionally been tied to specific courses required of all students during their first two years of college. For example, courses in college composition, together with mathematics have long been the cornerstone experience of the freshman year. But a single course or two-course sequence in college composition can do little more than introduce students to the principles and practices of good writing. Within the boundary of three to six semester credit hours of course work, neither of theses 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

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

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

1. Establish broad and multiple perspectives on the individual in relationship to the larger society and world in which he or she lives, and to understand the responsibilities of living in a culturally and ethnically diversified world;

2. Stimulate a capacity to discuss and reflect upon individual, political, economic, and social aspects of life in order to understand ways in which to be a responsible member of society;

3. Recognize the importance of maintaining health and wellness;

4. Develop a capacity to use knowledge of how technology and science affect their lives;

5. Develop personal values for ethical behavior;

6. Develop the ability to make aesthetic judgments;

7. Use logical reasoning in problem solving; and

8. Integrate knowledge and understand the interrelationships of the scholarly disciplines.

INSTRUCTION AND CONTENT IN THE CORE CURRICULUM

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

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

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

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

CORE COMPONENTS AND RELATED EXEMPLARY EDUCATIONAL OBJECTIVES

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

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

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

I. Communication (composition, speech, modern language)

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

Exemplary Educational Objectives

1. To understand and demonstrate writing and speaking processes through invention, organization, drafting, revision, editing, and presentation.

2. To understand the importance of specifying audience and purpose and to select appropriate communication choices.

3. To understand and appropriately apply modes of expression, i.e., descriptive, expositive, narrative, scientific, and self-expressive, in written, visual, and oral communication.

4. To participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding.

5. To understand and apply basic principles of critical thinking, problem solving, and technical proficiency in the development of exposition and argument.

6. To develop the ability to research and write a documented paper and/or to give an oral presentation.

II. Mathematics

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

Exemplary Educational Objectives

1. To apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations.

2. To represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.

3. To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.

4. To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results.

5. To interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.

6. To recognize the limitations of mathematical and statistical models.

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

III. Natural Sciences

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

Exemplary Educational Objectives

1. To understand and apply method and appropriate technology to the study of natural sciences.

2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.

3. To identify and recognize the differences among competing scientific theories.

4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.

5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

IV. Humanities And Visual And Performing Arts

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

Exemplary Educational Objectives

1. To demonstrate awareness of the scope and variety of works in the arts and humanities.

2. To understand those works as expressions of individual and human values within an historical and social context.

3. To respond critically to works in the arts and humanities.

4. To engage in the creative process or interpretive performance and comprehend the physical and intellectual demands required of the author or visual or performing artist.

5. To articulate an informed personal reaction to works in the arts and humanities.

6. To develop an appreciation for the aesthetic principles that guide or govern the humanities and arts.

7. To demonstrate knowledge of the influence of literature, philosophy, and/or the arts on intercultural experiences.

V. Social And Behavioral Sciences

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

Exemplary Educational Objectives

1. To employ the appropriate methods, technologies, and data that social and behavioral scientists use to investigate the human condition.

2. To examine social institutions and processes across a range of historical periods, social structures, and cultures.

3. To use and critique alternative explanatory systems or theories.

4. To develop and communicate alternative explanations or solutions for contemporary social issues.

5. To analyze the effects of historical, social, political, economic, cultural, and global forces on the area under study.

6. To comprehend the origins and evolution of U.S. and Texas political systems, with a focus on the growth of political institutions, the constitutions of the U.S. and Texas, federalism, civil liberties, and civil and human rights.

7. To understand the evolution and current role of the U.S. in the world.

8. To differentiate and analyze historical evidence (documentary and statistical) and differing points of view.

9. To recognize and apply reasonable criteria for the acceptability of historical evidence and social research.

10. To analyze, critically assess, and develop creative solutions to public policy problems.

11. To recognize and assume one's responsibility as a citizen in a democratic society by learning to think for oneself, by engaging in public discourse, and by obtaining information through the news media and other appropriate information sources about politics and public policy.

12. To identify and understand differences and commonalities within diverse cultures.

VI. INSTITUTIONALLY DESIGNATED OPTION

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

Appendix F: Funding Categories

Funding Category Names and Funding Codes

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	42, 45,54	25
Visual and Performing Arts	50	26
Non-State Funded	02, 05, 08, 20, 21, 28, 29, 33, 34, 35, 36*, 37, 39, 99	

*The four and six-digit CIP codes, when listed separately, are not included in their corresponding two-digit CIP code funding area.