

## MATHEMATICS

### MATH 1A Single-Variable Calculus and Analytic Geometry

**Units:** 4.0 **Hours:** 4.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

A first course in differential and integral calculus of a single variable covering limits and continuity, analyzing the behavior and graphs of functions, derivatives, implicit differentiation, higher order derivatives, related rates and optimization problems, Newton's Method, Fundamental Theorem of Calculus, and definite and indefinite integrals. (C-ID: MATH 210, MATH 900S: Math 1A + Math 1B) PREREQUISITE: Mathematics 8B with a grade of 'C' or better.

### MATH 1B Single-Variable Calculus and Analytic Geometry

**Units:** 4.0 **Hours:** 4.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

A second course in differential and integral calculus of a single variable covering methods of integration, applications of the integral, differential equations, parametric and polar equations, and sequences and series. (C-ID: MATH 220, MATH 900S: Math 1A + Math 1B) PREREQUISITE: Mathematics 1A with a grade of 'C' or better.

### MATH 1C Multivariable Calculus

**Units:** 4.0 **Hours:** 4.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

A standard third semester Calculus course covering functions of several variables, vectors, surfaces, vector-valued functions, partial derivatives, multiple and line integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. PREREQUISITE: Mathematics 1B with a grade of 'C' or better.

### MATH 2C Differential Equations

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

An introductory course in differential equations that covers: first order differential equations including separable, linear, exact, homogeneous, Bernoulli and Euler's Method; second order differential equations including homogeneous, nonhomogeneous, variation of parameters, method of undetermined coefficients and reduction of order; series solutions to differential equations; Laplace Transforms; linear systems; and if time, Fourier Analysis; and applications thereof. (C-ID: MATH 240) PREREQUISITE: Mathematics 1C with a grade of 'C' or better.

### MATH 2 Linear Algebra

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

A standard one semester Linear Algebra course covering systems of linear equations, vectors and matrices, determinants, vector spaces, linear transformations, eigenvalues, and eigenvectors. Graphing calculators and computers will be used. (C-ID: MATH 250) PREREQUISITE: Mathematics 1C with a grade of 'C' or better.

### MATH 5 Introduction to Statistics

**Units:** 3.0 **Hours:** 3.0 Lecture and 1.0 Laboratory  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

Descriptive analysis and presentation of either single-variable data or bivariate data, probability, probability distributions, normal probability distributions, sample variability, statistical inferences involving one and two populations, analysis of variance, linear correlation and regression analysis. Statistical computer software will be extensively integrated as a tool in the description and analysis of data. The instructor will be using and supporting a TI-83 Plus graphing calculator in all classroom demonstrations. (C-ID: MATH 110) PREREQUISITE: MATH 233, or MATH 240, or MATH 233A and MATH 233B, or MATH 242 with a grade of 'C' or better.

### MATH 6 Calculus for Business and Social Science

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

This course applies the fundamental principles and techniques of calculus to problems in business, economics, the life sciences and the social sciences. Topics will include limits, and differentiation and integration of linear, quadratic, polynomial, exponential and logarithmic functions. This course is not intended for students majoring in engineering, the physical sciences or math. Using a calculator is required. Graphing calculator is recommended. (C-ID: MATH 140) PREREQUISITE: Mathematics 235 or Mathematics 240 with a grade of 'C' or better.

### MATH 7 Finite Mathematics

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

Systems of linear equations and matrices, introduction to linear programming, finance, counting techniques and probability, properties of probability and applications of probability. PREREQUISITE: Mathematics 235 OR Mathematics 240 OR equivalent with a grade of "C" or better.

### MATH 8A First Half of Precalculus

**Units:** 4.0 **Hours:** 4.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

Math 8A prepares the student for the study of calculus by providing important skills in algebraic manipulation, interpretation, and problem solving at the college level. Topics will include basic algebraic concepts, complex numbers, equations and inequalities of the first and second degree, functions, and graphs, linear and quadratic equations, polynomial functions, exponential and logarithmic functions, systems of equations, matrices and determinants, right triangle trigonometry, and the Law of Sines and Cosines. PREREQUISITE: Mathematics 233 with a grade of 'C' or better. The instructor will be using and supporting TI-83 Plus graphing calculator in all classroom demonstrations.

### MATH 8B Second Half of Precalculus

**Units:** 4.0 **Hours:** 4.0 Lecture  
**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

Math 8B prepares students for the study of calculus by providing important skills in algebraic manipulation, interpretation, and problem solving at the college level. Topics will include trigonometric functions, identities, inverse trigonometric functions, and equations; applications of trigonometry, vectors, complex numbers, polar and parametric equations; conic sections; sequences, series, counting principles, permutations, mathematical induction; analytic geometry, and an introduction to limits. PREREQUISITE: Mathematics 8A with a grade of 'C' or better. ADVISORY: Math 208 Survey of Practical Geometry.

### MATH 12 Mathematics for Elementary Teachers

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:B4, GAV-GE:B4

This course is intended for students preparing for a career in elementary school teaching. Emphasis will be on the structure of the real number system, numeration systems, elementary number theory, and problem solving techniques. Technology will be integrated throughout the course. PREREQUISITE: High School Geometry and Math 233 (Intermediate Algebra), or, Math 208 (Plane Geometry) and Math 233 (Intermediate Algebra). All courses must be completed with a grade of 'C' or better.

### MATH 208 Plane Geometry

**Units:** 3.0 **Hours:** 3.0 Lecture

This course introduces the vocabulary and principles of Euclidean Geometry. Methods of proof including inductive and deductive reasoning will be developed. Concepts of congruence and similarity, angles, lines, polygons, and circles will be covered. Additional topics such as solid geometry, analytical geometry, transformations, and basic trigonometry may be included as time allows. PREREQUISITE: Math 430 or equivalent with a grade of "C" or better.

**MATH 235 Integrated Algebra****Units:** 10.0 **Hours:** 10.0 Lecture**Transferable:** GAV-GE:B4

This course is a blend of standard elementary and intermediate algebra courses with a focus on linear equations and inequalities, graphs and functions, systems of equations, polynomials and polynomial functions/ equations, factoring, rational expressions and equations, roots, radicals, and complex numbers, exponential and logarithmic functions, and problem solving strategies. **PREREQUISITE:** MATH 402 with a grade of "Pass" or assessment test recommendation.

**MATH 240 Algebra II****Units:** 5.0 **Hours:** 5.0 Lecture**Transferable:** GAV-GE:B4

This is a second course of algebra and is designed for STEM and other math based majors. It will cover solving systems of equations with matrices, graphs and functions, absolute value equations and inequalities, radical, quadratic, exponential and logarithmic expressions and functions, complex numbers, conic sections, and problem solving strategies. **PREREQUISITE:** Math 430 with a grade of C or better, or Math 205, Math 205B, or Math 233A with a grade of C or better, or assessment test recommendation.

**MATH 242 Algebra II for Statistics****Units:** 5.0 **Hours:** 5.0 Lecture**Transferable:** GAV-GE:B4

Math 242 is for students whose educational plan includes ONLY Math 5 (Freshman-level Statistics). If your major is math, science, engineering, computer science, business, etc., and/or your educational plan includes any college-level math class other than Math 5, or you are unsure about your major, you should take Math 240. Math 240 and Math 242 are not equivalent. Math 242 prepares students for Freshman-level Statistics (Math 5) by covering core concepts from Algebra II and statistics that are needed to understand the basics of college level statistics. Topics include functions, inequalities, radicals, exponential and logarithmic functions, exploratory analysis of categorical, quantitative, single variable and bivariate data, and probability. **PREREQUISITE:** Math 430 with a C or better, or Math 205 with a C or better, or Math 205A and Math 205B with a C or better, or by placement recommendation.

**MATH 400 Elements of Arithmetic****Units:** 3.0 **Hours:** 3.0 Lecture and 1.0 Laboratory

This course covers essential arithmetic operations, whole numbers, integers, fractions, decimals, ratio, proportion, percent, applications of arithmetic, and critical thinking, as well as math-specific study skills. This is a pass/no pass course, with pass being given for mastery of the content. Units earned in this course do not count toward the associate degree and/or other certain certificate requirements.

**MATH 402 Pre-Algebra****Units:** 3.0 **Hours:** 3.0 Lecture and 2.0 Laboratory

This course covers operations with integers, fractions, decimals and associated applications, ratio, proportion, geometry, and measurements with the emphasis on critical thinking and applications. Elementary algebra topics such as variables, expressions, and solving equations are introduced. This is a pass/no pass course where pass is given for mastery of the above topics. The mastery level is set by the department. **PREREQUISITE:** Completion of Math 400 with a grade of 'C' or better OR completion of Math 400 with a grade of 'P' OR appropriate assessment test score.

**MATH 411 Integrated Pre-Algebra****Units:** 7.0 **Hours:** 7.0 Lecture

This course is a blend of standard Elements of Arithmetic and Pre-Algebra courses with the focus on operations with whole numbers, fractions, percentages, proportions, and signed numbers. Algebraic topics such as variables, expressions, and solving basic linear equations and applications are introduced. This is a pass/no pass course where pass is given for mastery of the above topics. The mastery level is set by the department. **ADVISORY:** MATH 414

**MATH 412 Math Refresher****Units:** .5 **Hours:** .5 Lecture

A remedial intensive math course designed to be a refresher for students who wish to review basic math concepts before taking the Assessment Placement test or to prepare prior to retaking the Assessment test. The primary focus is on operations with whole numbers, fractions, decimals and percentages. This is a pass/no pass course. Units earned in this class do not count toward the associate degree and/or certain certificate requirements.

**MATH 413 Math Immersion Review - Basic Concepts Level 1****Units:** 1.0 TO 2.0 **Hours:** 1.0 TO 2.0 Lecture

A remedial mathematics course designed for those students who need to learn, or re-learn, the fundamental concepts of math. The primary focus is on operations with whole numbers, fractions, decimals, percentage and real life problems. This is a pass/no pass course. Units earned in this course do not count toward the associate degree and/or certain certificate requirements. This class is an intense preparation for Math 402, Math 430 or Math 411 and Math 235.

**MATH 414 Math Immersion Review - Basic Concepts Level 2****Units:** 1.0 TO 3.0 **Hours:** 1.0 TO 3.0 Lecture

A remedial Immersion math course designed for those students who need to learn, re-learn, or re-fresh the fundamental concepts of Math. The primary emphasis is on fractions, signed numbers, linear equations, algebraic structures and word problems. This class is an intense preparation for Math 402, Math 411, Math 430 and Math 235. This is a pass/no pass course. Units earned in this course do not count toward the associate degree or certain certificate requirements.

**MATH 415 Math Immersion Review - Algebraic Concepts****Units:** 1.0 TO 3.0 **Hours:** 1.0 TO 3.0 Lecture

A remedial mathematics course designed for those students who need to learn, or re-learn the fundamental concepts of math. The primary emphasis is on algebraic expressions, linear/quadratic equations and applications, polynomials, graphing, and functions. This is a pass/no pass course. Units earned in this course do not count toward the associate degree and/or certain certificate requirements. This class is an intense preparation for Math 240, Math 242, Math 8A.

**MATH 416 Math for Summer Bridge****Units:** 1.0 TO 3.0 **Hours:** 1.0 TO 3.0 Lecture

This class is a remedial mathematics course for students new to Gavilan College who are participating in the Summer Bridge Program or other special cohorts. Students enrolled in this class must have taken the math placement exam prior to the first day of class. The purpose of the class is to review and hone basic math skills, acclimate the student to the rigors of college level work, and improve other student skills needed for learning and academic achievement. Upon completion of the course, students will be allowed to retake the placement exam. The primary mathematical focus is on prealgebra topics such as operations with whole numbers, fractions, decimals, percentage and real life problems. Students can also get practice with other topics in Algebra I such as solving linear equations, graphing linear functions, and factoring. This is a pass/no pass course. Units earned in this course do not count toward the associate degree and/or certain certificate requirements.

**MATH 430 Algebra I****Units:** 5.0 **Hours:** 5.0 Lecture

This is the first course of algebra. It will cover simplifying algebraic expressions, linear equations and inequalities, linear functions and their graphs, systems of equations, polynomials, factoring, rational expressions, and applications of all of the above. **PREREQUISITE:** Math 402 with a grade of "Pass", or Math 411 or Math 205A with a grade of C or better, or assessment test recommendation.

All courses listed here are part of Gavilan College's approved curriculum. All courses are not offered every semester. Check the Class Schedule for current offerings.

# MUSIC

## MUS 1A Music History and Literature

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:C1, IGETC:3A, GAV-GE:C1

A survey of the development of music in western civilization including representative composers from the Medieval to the present. Music 1A will study the music and styles from the Medieval to the Romantic period. **ADVISORY:** Eligible for English 250 and English 260.

## MUS 1B Music History and Literature

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:C1, IGETC:3A, GAV-GE:C1

A survey of the development of music in western civilization including representative composers from the Medieval period to the present. Music 1B will study the music and styles from late Romanticism to the present. **ADVISORY:** Eligible for English 250 and English 260.

## MUS 2 History of Jazz and Rock

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:C1, IGETC:3A, GAV-GE:C1, GAV-GE:F

This course covers the introduction and history of jazz and rock music from traditional, ragtime, boogie-woogie, swing, bebop, and cool, to various contemporary jazz, rock and fusion art forms. It includes a study of the forces that have shaped the art from European, African, Latin, and African-American influences. The class explores the contributions and conflicts of African-American influences throughout the history and development of this American music.

## MUS 3A Harmony, Theory, Musicianship I

**Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory  
**Transferable:** CSU-GE:C1, GAV-GE:C1

Fundamentals of music, beginning harmony. (C-ID: MUS 120) MUS 3A, 3B, 3C and 3D must be taken in sequence.

## MUS 3B Harmony, Theory, Musicianship II

**Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory  
**Transferable:** GAV-GE:C1

Continuation of Music 3A. Fundamentals of music, intermediate harmony, and musicianship. Introduction to counterpoint. (C-ID: MUS 130) MUS 3A, 3B, 3C and 3D must be taken in sequence. **PREREQUISITE:** MUS 3A.

## MUS 3C Harmony, Theory, Musicianship III

**Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory  
**Transferable:** GAV-GE:C1

Continuation of Music 3AB. Chromatic harmony, analysis and composition. MUS 3A, 3B, 3C and 3D must be taken in sequence. (C-ID: MUS 140) **PREREQUISITE:** Music 3B

## MUS 3D Harmony, Theory, Musicianship IV

**Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory  
**Transferable:** GAV-GE:C1

Continuation of Music 3C. Analysis and composition. MUS 3A, 3B, 3C and 3D must be taken in sequence. (C-ID: MUS 150) **PREREQUISITE:** Music 3C

## MUS 4A Beginning Piano

**Units:** 3.0 **Hours:** 2.0 Lecture and 3.0 Laboratory  
**Transferable:** CSU-GE:C1, GAV-GE:C1

Introduction to music fundamentals and keyboard technique. Development of beginning keyboard skills including note reading in bass and treble clef, fingering, rhythm, key signatures, primary chords and inversions. **ADVISORY:** Must be taken in sequence.

## MUS 4B Beginning Piano

**Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory  
**Transferable:** GAV-GE:C1

Continuation of Music 4A. Introduction to music fundamentals and keyboard technique. Development of beginning keyboard skills including note reading in bass and treble clef, fingering, rhythm, key signatures, primary chords and inversions. **ADVISORY:** Music 4A

## MUS 5A Intermediate Piano

**Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory  
**Transferable:** GAV-GE:C1

Development of intermediate keyboard skills through means of scales, chords, and technical studies. Continuation of music fundamentals and beginning keyboard harmony; introduction of easier classical and standard piano literature. **ADVISORY:** Music 4B

## MUS 5B Intermediate Piano

**Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory  
**Transferable:** GAV-GE:C1

Development of intermediate keyboard skills through means of scales, chords and technical studies. Continuation of music fundamentals and beginning keyboard harmony; introduction of easier classical and standard piano literature. **ADVISORY:** Music 5A

## MUS 5C Advanced Piano

**Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory  
**Transferable:** GAV-GE:C1

Development of advanced keyboard skills through means of scales, chords and technical studies. Continuation of music fundamentals and keyboard harmony; introduction of moderately difficult classical and standard piano literature. **ADVISORY:** Music 5B

## MUS 5D Advanced Piano

**Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory  
**Transferable:** GAV-GE:C1

Development of advanced keyboard skills through means of scales, chords and technical studies. Continuation of music fundamentals and keyboard harmony; introduction of moderately difficult classical and standard piano literature. **ADVISORY:** Music 5C

## MUS 6 Introduction to World Music

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU-GE:C1, IGETC:3A, GAV-GE:C1, GAV-GE:F

This course explores a broad and diverse survey of different non Western music cultures, helping students develop listening skills to identify, distinguish and appreciate the elements and richness of each culture's music. The course will cover a rich diversity of styles through informed listening, analysis and discernment of musical elements, form and repertoire. Music of various cultures will be explored, for example: India, China, Japan, the Middle East, Indonesia, Africa, Europe and the Americas.

**MUS 7 Songwriting and Composition****Units:** 3.0 **Hours:** 3.0 Lecture

This course is an introduction to modern song writing techniques. Students will learn to create their own musical compositions. Approaches to contemporary issues in song writing including development of melodic, lyrical, and rhythmic ideas will be studied. In addition, students will learn strategies for promoting their songs in the contemporary music marketplace as well as basic concepts of intellectual property right protection. While recommended, no prior formal musical education is required.

**MUS 8A Beginning Voice****Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory**Transferable:** GAV-GE:C1

Development of techniques in the art of singing and interpreting serious music in various styles. Study of the basic techniques of tone production, breathing and related skills. Basic repertoire development. **ADVISORY:** Continues in sequence or by demonstrated proficiency.

**MUS 8B Beginning Voice****Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory**Transferable:** GAV-GE:C1

Development of techniques in the art of singing and interpreting serious music in various styles. Study of the basic techniques of tone production, breathing and related skills. Basic repertoire development. **ADVISORY:** Music 8A or demonstrated proficiency.

**MUS 8C Intermediate Voice****Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory**Transferable:** GAV-GE:C1

Development of techniques in the art of singing and interpreting serious music in various styles. Study of the basic techniques of tone production, breathing and related skills. Basic repertoire development. **ADVISORY:** Music 8B or demonstrated proficiency.

**MUS 8D Intermediate Voice****Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory**Transferable:** GAV-GE:C1

Development of techniques in the art of singing and interpreting serious music in various styles. Study of the basic techniques of tone production, breathing and related skills. Basic repertoire development. **ADVISORY:** Music 8C or demonstrated proficiency.

**MUS 9A Guitar****Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory**Transferable:** GAV-GE:C1

An introduction to playing the guitar. Basic staff notation, correct fingering and chord arpeggios are covered. Emphasis is also placed on developing musical listening skills. Students must provide their own guitars. **ADVISORY:** Students must provide their own guitars.

**MUS 9B Guitar****Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory**Transferable:** GAV-GE:C1

An introduction to playing the guitar. Basic staff notation, correct fingering and chord arpeggios are covered. Emphasis is also placed on developing musical listening skills. Students must provide their own guitars. **ADVISORY:** Music 9A; students must provide their own guitars.

**MUS 11A Applied Music, Piano****Units:** .5 TO 2.0 **Hours:** 1.5 TO 6.0 Laboratory

Individual studio instruction in piano for the development of performance skills. Each week students will take individual lessons and complete an on-campus practice appropriate for the number of units taken. Additionally, each semester students will perform at least once for a juried performance for a faculty committee as a final exam. Designed for Music majors who are able to perform at college level. May be taken for a maximum total of 2 units. (C-ID: MUS 160) **ADVISORY:** Concurrent enrollment in MUS 3A, MUS 3B, MUS 3C or MUS 3D.

**MUS 11B Applied Music, Guitar****Units:** .5 TO 2.0 **Hours:** 1.5 TO 6.0 Laboratory

Individual studio instruction in Guitar for the development of performance skills. Each week students will take individual lessons and complete an on-campus practice appropriate for the number of units taken. Additionally, each semester students will perform at least once for a juried performance for a faculty committee as a final exam. Designed for Music majors who are able to perform at college level. May be taken for a maximum total of 2 units. (C-ID: MUS 160) **ADVISORY:** Concurrent enrollment in MUS 3A, MUS 3B, MUS 3C or MUS 3D.

**MUS 12 Vocal Ensemble****Units:** 1.0 TO 4.0 **Hours:** 3.0 TO 12.0 Laboratory**Transferable:** GAV-GE:C1

The day Vocal Ensemble will focus on individual and group performance of popular and alternative commercial music, and will rehearse and perform with a backup band. The evening Vocal Ensemble will study, rehearse and perform choral music in a broad spectrum of musical genre and styles. Included will be the study of vocal and rehearsal techniques as they relate to ensemble performance.

**MUS 14 Instrumental Ensemble****Units:** 1.0 TO 4.0 **Hours:** 3.0 TO 12.0 Laboratory**Transferable:** GAV-GE:C1

Instruction for the experienced musician with emphasis on the study and performance of a wide variety of musical styles from Renaissance to 20th Century music for traditional ensembles, and extensive consideration of contemporary commercial and alternative repertoire, and performance techniques for popular ensembles. This course was previously listed as MUS 14A. (C-ID: MUS 180)

**MUS 15 Music Appreciation****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:C1, IGETC:3A, GAV-GE:C1

This course is designed to acquaint the students with the elements of music and the primary musical periods of traditional Western European classical music. Students will have a brief overview of the major composers and their music through class lectures, listening to musical examples in class, reading the text, listening to musical examples provided on the student CDs or recordings, actively engaging in class discussions, attending live concerts of suggested performances, and completing research papers and/or oral presentations pertinent to the course material.

**MUS 16A Introduction to Audio Recording Techniques****Units:** 3.0 **Hours:** 3.0 Lecture

Survey of basic audio recording techniques and materials including acoustics, signal flow, block diagrams, cue systems, punch-ins, microphones and mic placement, frequency response, reverb, delay and outboard effects, stereo mixing, pre-mixing and actual recording.

**MUS 21 Electronic Music, Sound Design****Units:** 3.0 **Hours:** 2.0 Lecture and 3.0 Laboratory**Transferable:** GAV-GE:C1

Fundamentals of electronic music synthesis using computers. Midi sequencing, digital sound processing, sampling, digital multi-track recording utilizing the college's state of the art midi studio. **ADVISORY:** Eligible for English 250, 260 and Mathematics 205.

**MUS 98 Special Topics****Units:** .5 TO 3.0 **Hours:** .5 TO 3.0 Lecture**Transferable:** GAV-GE:C1

Special topics courses examine current problems or issues of interest to students within a specific discipline area. For topical content information, consult with appropriate department chairperson. For transfer status, check with a counselor. This course may have the option of a letter grade or pass/no pass.

**MUS 190 Occupational Work Experience, Commercial Music****Units:** 1.0 TO 4.0 **Hours:** 3.3 TO 16.7 Laboratory

Occupational work experience for students who have a job related to their major. A training plan is developed cooperatively between the employer, college and student. (P/NP grading) 75 hours per semester paid work = 1 unit. 60 hours non-paid (volunteer) work per semester = 1 unit. Student repetition is allowed per Title 5 Section 55253. Minimum 2.00 GPA. **REQUIRED:** Declared vocational major.

**PHILOSOPHY****PHIL 1 Introduction to Philosophy****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:C2, IGETC:3B, GAV-GE:C2

Philosophy 1 is intended as a survey of the major areas and traditions of philosophy. The course examines central and significant questions about the meaning of life, who determines what is morally right or wrong, the ideal society, the various notions social justice, what is reality, and many other ideas. In pursuing these questions, students will be asked to read texts from writers around the world, both contemporary and ancient, discuss current events, and apply "theory" to movies such as "The Matrix" trilogy, novels, and any other relevant application of the student's own choice. (C-ID: PHIL 100) **ADVISORY:** Eligible for English 1A.

**PHIL 2 Introduction to Logic****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:A3, GAV-GE:C2

Logic is the study of good reasoning. This course will explore two important modes of reasoning: deduction and induction. We will use formal methods from sentential logic, including truth tables and proofs, to test for correct or 'valid' inferences. Common mistakes in reasoning (i.e., fallacies) will be examined, as well as language and scientific reasoning. Practical application in logic outside the classroom will be emphasized. **ADVISORY:** Eligible for English 1A.

**PHIL 3A Ethics****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:C2, IGETC:3B, GAV-GE:C2

This course examines the central theories and perennial issues in ethics. The ethical systems of Aristotle, Kant, and the utilitarians will be investigated. These systems will be applied to contemporary moral problems. Questions about objective morality, the ideal society, social justice, and moral agency will be pursued. This course is also listed as AJ 3A. (C-ID: PHIL 120) **ADVISORY:** Eligible for English 1A.

**PHIL 3B Contemporary Moral Issues****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:C2, IGETC:3B, GAV-GE:C2, GAV-GE:E2

Contemporary Moral Issues in an applied ethics class that covers major ethical theories and contemporary moral issues in a pluralistic manner. This course will cover such issues as abortion and euthanasia, cloning, experimentation on human subjects, capital punishment, race/ethnicity, sexual orientation and sexual morality, world hunger and poverty, colonialism and post-colonialism, and so forth. **ADVISORY:** Eligible for English 1A.

**PHIL 4 Critical Thinking and Writing****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:A3, IGETC:1B, GAV-GE:C2

This course is designed to introduce the relationship between critical thinking and critical writing in a way that will be both enjoyable to the student and helpful in other aspects of life. The student will learn techniques of critical thinking, paying close attention to the current events, movies and popular media, music lyrics, as well as the textbook. Students will learn to identify deductive and inductive arguments and be able to evaluate their strength, create a strong argument of their own on a given topic, as well become experts in the area of critical analysis. The goal is to enable students to become strong, well informed, articulate members of the community as well as individuals with an empowered sense of self as an agent of change. Students will write a minimum of 6,000 words. **PREREQUISITE:** English 1A

**PHIL 6 Comparative Religions****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:C2, IGETC:3B, GAV-GE:C2, GAV-GE:F

Religion is a topic that ignites controversy -- most societies engage in religious practices, believe strongly in that tradition, and find a sense of identity within it. The controversy arises when differences are misunderstood, misrepresented, or placed in a hierarchy of assumed supremacy of one religion as superior to others. In this class, students explore the underlying commonality of various religious traditions, explore the uniqueness of the religions with which they are unfamiliar, and learn to see that diversity among beliefs doesn't have to create hostility. Students will explore religions from Indigenous Peoples throughout the world, East Asia (e.g. India), China, the Middle East, as well as some more recent trends in religion. Previously known as PHIL 6A. **ADVISORY:** Eligible for English 1A.

**PHIL 7A History of Philosophy: Ancient to Medieval Times****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:C2, IGETC:3B, GAV-GE:C2

This course introduces students to the key themes in ancient philosophy as advanced by the major thinkers and schools of ancient philosophy. Typical themes include the theories of reality, cognition, virtue, and cosmology, whilst the philosophical movements to be covered include the Pre-socratics, Plato, Aristotle, the Stoics, and the Hellenistic philosophers. (C-ID: PHIL 130) **Advisory:** Eligible for English 1A.

**PHIL 7B History of Philosophy: Renaissance to Modern Periods****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:C2, IGETC:3B, GAV-GE:C2

This course is a survey of the history of Western philosophy from the Renaissance to the modern period, i.e., the philosophy of the 16th through the 18th century. Particular attention will be paid to the metaphysics and epistemology of the 'rationalists' (Descartes, Leibniz, and Spinoza), the 'empiricists' (Locke, Berkeley, and Hume), and Kant. (C-ID: PHIL 140) **ADVISORY:** Eligible for English 1A.

**PHIL 9 Philosophy of Religion****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU-GE:C2, IGETC:3B, GAV-GE:C2, GAV-GE:E2

In this course we will systematically explore religious claims. The issues to be investigated include: Does God exist? What is God's nature? Can the existence of God be reconciled with human suffering? Can faith and reason be reconciled? Can conflicting religions simultaneously be true? Other topics include: the afterlife, religious experience, miracles, freedom and divine foreknowledge, and the relationship of religion and science. **ADVISORY:** Eligible for English 1A.