

**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:** 6.0 **Hours:** 6.0 Lecture and 1.0 Laboratory

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 413 Math Boot Camp****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.

**MATH 414 Math Boot Camp 1****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, re-learn, or refresh the fundamental concepts of math. The primary emphasis is on whole numbers, fractions, decimals, signed numbers, linear equations, and algebraic structures. This course is a pass/no pass course. Units earned in this course do not count toward the associate degree and/or certain certificate requirements.

**MATH 415 Math Boot Camp 2****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.

**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.

---

**Medical Terminology: see Business Office Technology**

---

**MUSIC****MUS 1A Music History and Literature****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC; 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, UC; 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; CSU-GE:C1, IGETC:3A, GAV-GE:C1, 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, UC; CSU-GE:C1, GAV-GE:C1

Fundamentals of music, beginning harmony. (C-ID: MUS 120) **ADVISORY:** Must be taken in sequence.

**MUS 3B Harmony / Theory / Musicianship II****Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory**Transferable:** CSU, UC; GAV-GE:C1

Fundamentals of music, intermediate harmony, and musicianship. **ADVISORY:** Must be taken in sequence.

**MUS 3C Harmony / Theory / Musicianship III****Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory**Transferable:** CSU, UC; GAV-GE:C1

Continuation of Music 3AB. Chromatic harmony, analysis and composition. (C-ID: MUS 140) **ADVISORY:** Music 3B

**MUS 3D Harmony / Theory / Musicianship IV****Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory**Transferable:** CSU, UC; GAV-GE:C1

Continuation of Music 3C. Analysis and composition. (C-ID: MUS 150) **ADVISORY:** Music 3C

**MUS 4A Beginning Piano**

**Units:** 3.0 **Hours:** 2.0 Lecture and 3.0 Laboratory  
**Transferable:** CSU, UC; 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:** CSU, UC; 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:** CSU, UC; 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:** CSU, UC; 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:** CSU, UC; 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:** CSU, UC; 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, UC; CSU-GE:C1, IGETC:3A, GAV-GE:C1, 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  
**Transferable:** CSU

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:** CSU, UC; 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:** CSU, UC; 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:** CSU, UC; 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:** CSU, UC; 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:** CSU, UC; 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:** CSU, UC; 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  
**Transferable:** CSU, UC

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  
**Transferable:** CSU, UC

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:** CSU, UC; 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 13 Concert Choir**

**Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory  
**Transferable:** CSU, UC; GAV-GE:C1

The Concert Choir will study, rehearse and perform choral music from the 15th century to the present in a variety of musical styles with emphasis on the larger choral works and their preparation for public concert. **ADVISORY:** Previous choral experience is preferred but not required. The student should have the ability to match a given pitch.

**MUS 14 Instrumental Ensemble**

**Units:** 1.0 TO 4.0 **Hours:** 3.0 TO 12.0 Laboratory  
**Transferable:** CSU; 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 16A Introduction to Audio Recording Techniques**

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU

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:** CSU; 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 26 Symphony**

**Units:** 2.0 **Hours:** 1.0 Lecture and 3.0 Laboratory  
**Transferable:** CSU, UC; GAV-GE:C1

Study and performance of orchestral literature. Individual and sectional skills development. Perform in public concerts each semester. **ADVISORY:** Demonstrated proficiency on individual's instrument and ability to read music.

**MUS 98 Special Topics**

**Units:** .5 TO 3.0 **Hours:** .5 TO 3.0 Lecture  
**Transferable:** CSU; 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:** 5.0 TO 20.0 Laboratory  
**Transferable:** CSU

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. May be taken for a maximum total of 16 units. Minimum 2.00 GPA. **REQUIRED:** Declared vocational major.

**Nursing: see Allied Health**

**Nutrition: see Biological Sciences**

**Performing Arts: see TV / Film / Media or Theatre Arts**

**PHILOSOPHY****PHIL 1 Introduction to Philosophy**

**Units:** 3.0 **Hours:** 3.0 Lecture  
**Transferable:** CSU, UC; 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, UC; 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, UC; 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, UC; CSU-GE:C2, IGETC:3B, GAV-GE:C2, 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, UC; 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