

MATH 131 (1752) Calculus II

Prerequisite: MATH 130 Calculus I

Credit Hours: 5

This second course in the calculus sequence will cover the concepts of limits as applied to transcendental functions. Various substitution techniques for evaluating integrals will be presented. Problems involving areas, volumes of surfaces, and moments will be developed and solved. The course will cover sequences and series and look at properties of convergence and divergence. There will be an introductory look at differential equations and coverage of polar coordinates and parameterized curves. This course is required of any student seeking a degree in physics, mathematics, engineering, chemistry, and other related fields at a four-year institution.

MATH 201 (1753) Calculus III

Prerequisite: MATH 131 Calculus II

Credit Hours: 5

This third course will complete the calculus sequence. The course will cover infinite sequences and series and test of convergence and divergence. The calculus of multivariable functions, partial derivatives, and optimization of higher dimensional surfaces will be covered. The theory and use of vector-valued functions to calculus will be presented. Problems of areas, volumes, and moments will be extended to three-dimensional space and solved using multiple integration techniques (including the line integral, Stoke's Theorem, and Green's Theorem in vector fields). This course is required of any student seeking a degree in physics, mathematics, engineering, chemistry, and other related fields at a four-year institution.

MATH 202 (1740) Differential Equations

Prerequisite: MATH 201 Calculus III

Credit Hours: 3

This course will include solution techniques for the standard ordinary differential equations of the first and second order (with some generalization to higher order equations). Power series solution techniques for linear equations with constant coefficients will be presented. Solution of differential equations using the Laplace Transform will be presented. Applications to geometry and the physical science will be presented and covered. This course is required of any student seeking a degree in physics, mathematics, engineering, chemistry, and other related fields at a four-year institution.

Music

MUSI 101 (1051) Music Appreciation KRSN MUS1010**

Placement Test Level: General Education Course Placement*

Prerequisite: None

Credit Hours: 3

This is a survey course in basic fundamentals of music, and from this foundation moving into a better understanding of styles and music from different periods in history. The main purpose is for students to gain a broader understanding of and appreciation for many types and styles of music. We will also see how music is influenced by social, religious, political, and scientific advancements happening in the world at any given time.

MUSI 104 (1092) History of Jazz and Rock

Placement Test Level: General Education Course Placement*

Prerequisite: None

Credit Hours: 3

This is a survey course that shows the logical musical derivatives and developments of jazz and rock music. At the same time the course will identify and listen to the important elements that compose the individual styles of jazz and rock music as they evolved from era to era.

MUSI 131 (1047) Community Band

Prerequisite: None

Credit Hours: 1

This course provides interested persons with the opportunity to rehearse and perform worthwhile literature for both pleasure and improved musical knowledge. One can either enroll for credit or can simply come and play for the enjoyment of making music.

*Refer to the Placement Testing Procedure 3.22, page 24 ** Refer to Course Transfer, page 18

MUSI 132 (1045) Community Chorus

Prerequisite: None

Credit Hours: 1

The Community Chorus provides interested persons with the opportunity to rehearse and perform worthwhile literature for both pleasure and improved musical knowledge. One can either enroll for credit or can simply come and sing for the enjoyment of joining others in song.

MUSI 133 (1093) Community Orchestra

Prerequisite: None

Credit Hours: 1

The Community Orchestra provides interested persons with the opportunity to rehearse and perform worthwhile literature for both pleasure and improved musical knowledge. One can either enroll for credit or can simply come and play for the enjoyment of making music.

MUSI 137 (1095) Explorations in Music

Private Music Instruction

Private music instruction is provided through Explorations in Music. The offerings include the following: voice, guitar, piano, percussion, brass, strings, and woodwinds.

Prerequisite: None

Credit Hours: 1

Explorations in Music provides interested students with the opportunity to learn more about a musical instrument of their choice. Beginning students will learn basic fundamentals, technique, and develop sight-reading and musicianship skills. More advanced students will gain better understanding of interpretation of the repertoire they are studying and will learn to analyze compositional techniques found in musical literature. All students will be given an opportunity to perform in the semester recital.

MUSI 148 Guitar Ensemble

Prerequisite: None

Credit Hours: 1

Guitar Ensemble provides interested students with the opportunity to perform guitar music in a group environment. Music will be selected from a variety of styles including (but not limited to) Renaissance, Baroque, Classical, Romantic, Contemporary, Folk, Blues, Jazz, Rock, Country, and Popular music. This is not a class for beginners. Beginners are encouraged to take Private Lessons.

MUSI 176 Jazz Band

Prerequisite: None

Credit Hours: 1

The LCC Jazz Band provides interested students and community members with the opportunity to study and perform American jazz music in genres such as Dixieland, Swing, Bebop, Cool Jazz, Fusion, Funk and Latin.

EDUC 152 (0822) Children's Music

Prerequisite: None

Credit Hours: 3

This course is directed toward students in the elementary education program. It is designed to show how music can be taught and integrated into other areas of the elementary classroom curriculum. Traditional areas of music instruction will be covered including fundamentals of music, singing, playing instruments, listening, moving to music, and creative experiences with music. In addition, we will study multicultural approaches to teaching and practice writing lesson plans focusing on the needs and interests of young children.

*Refer to the Placement Testing Procedure 3.22, page 24 ** Refer to Course Transfer, page 18