

MATH 470 MATHEMATICAL AND STATISTICAL MODELING (4)

The process of expressing scientific principles, experiments, and conjectures in mathematical terms. Topics include: gathering reliable data, exposing underlying assumptions, variables, relationships, levels, refining of models, and stochastic models. Deterministic vs. stochastic, discrete vs continuous, and deductive vs statistical models. Applications to biology, physics, chemistry, geology, social science and environmental sciences. Prerequisite: Grade of C or better in MATH 211 or consent of instructor. Not repeatable for credit.

MATH 485 SELECTED TOPICS IN... (1-3)

Subject matter and number of units to be determined by the instructor and may differ from semester to semester. Some of the possible areas of study are multivariable analysis, calculus of variations, convex geometry, differentiable manifolds, graph theory, Galois theory, algebraic topology, and integral equations. This course may be repeated for up to 6 units. The course title will appear on the student's transcript. Prerequisite: consent of instructor.

MATH 490 CAPSTONE SEMINAR: SECONDARY MATHEMATICS TEACHING (1)

Seminar focusing on connections among undergraduate coursework, secondary school curriculum, and learning and teaching mathematics. Students present their completed Mathematics Subject Matter Program portfolios for final evaluation. Students draw upon their portfolios, experiences, and readings in mathematics education to present information and engage fellow students in discussion of relevant issues. Prerequisite: senior-level standing or consent of instructor.

MATH 495 SPECIAL STUDIES (1-4)

Prerequisites: a lower-division math course and consent of instructor. May be repeated for credit.

MATH 496 PROSEMINAR IN MATHEMATICS (1-3)

A mutual exploration of selected current issues in mathematics by members of the Mathematics faculty and Mathematics majors. Non-majors may enroll by permission of the instructors. Prerequisite: upper-division standing.

MATH 499 INTERNSHIP IN MATHEMATICS (1-3)

Field experience in mathematics, computer science, or statistics. Cr/NC only. Prerequisite: prior arrangement with instructor.

MATH 595 SPECIAL STUDIES IN MATHEMATICS (1-4)

Subject matter and number of units to be determined by instructor and may differ from semester to semester. This course may be repeated with different subject matter for up to 12 units. The course title will appear on the student's transcript. Prerequisite: consent of instructor.

Modern Languages and Literatures (MLL)

MLL 101 SPECIAL TOPICS IN FOREIGN LANGUAGE (1-4)

MLL 102 SPECIAL TOPICS IN FOREIGN LANGUAGE (1-4)

MLL 160A HUMANITIES LEARNING COMMUNITY (4)

MLL 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

MLL 160B HUMANITIES LEARNING COMMUNITY (4)

MLL 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

MLL 161A CRITICAL & CREATIVE: GLOBAL CULTURE ReMix (2)

MLL 161 A/B is a year long course, which, combined with FR 101, GER 101, or SPAN 201, features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE categories.

MLL 161B CRITICAL & CREATIVE: GLOBAL CULTURE ReMix (2)

MLL 161 A/B is a year long course, which, combined with FR 101, GER 101, or SPAN 201, features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

MLL 195 ELEMENTARY SPECIAL STUDIES (1-4)

Directed, individual, lower-division study in a modern language.

MLL 214 WORLD LITERATURES IN ENGLISH (4)

Introduction to selected works of world literature from Asia, Africa, Europe, North America, Latin America and Mexico, and from the classic literatures of Greece and Rome. Background lectures on literature, literary genres, and the different cultural histories will be given. Basic techniques of reading, analysis, and composition will be emphasized. Satisfies GE Area C2 (Literatures, Philosophies, and Values). Prerequisite: ENGL 101. May be repeated for credit.

MLL 273 WORLD LITERATURES: CRITICAL AND CREATIVE READINGS (4)

This course explores world literature and its relationship to the history, culture, and society from which it originates. Topics may include western and non-western cultural and religious values, colonialism versus emerging nationalisms, and the quest for personal, cultural, and national identities. Techniques of reading, analysis, research and creativity will be emphasized. Satisfies GE Area C2. Only one course numbered 273 in the Arts & Humanities will be considered for credit. Prerequisite: completion of GE Category A2 (Engl 101 or ENGL 100B) required.

MLL 314 WORLD LITERATURES IN ENGLISH TRANSLATION (4)

Studies in world literatures in English translation. Topics may include non-western cultural and religious values, colonialism versus emerging nationalisms, and the quest for identity, personal, cultural, and national. Satisfies GE Area C2 (Literatures, Philosophies, and Values). Prerequisite: ENGL 101. May be repeated for credit.

MLL 450 FOREIGN LANGUAGE TEACHING SEMINAR (2-4)

This course is designed as a seminar and Practicum to teach students to facilitate intensive language learning in a small-group setting. Students study the theory and practice of language learning and teaching while serving as a Peer Language Facilitator (PLF) for language learners enrolled in lower division classes. Prerequisite: instructor consent.

MLL 495 SPECIAL STUDIES (1-4)

Directed and individual study on subject(s) of special interest. Students must prepare a proposal which is subject to the approval of the department chair. May be repeated once for credit for a total of 4 units.

Music (MUS)

MUS 101 INTRODUCTION TO MUSIC (3-4)

What does music mean? Why does music matter? These questions will shape the development of listening tools and cultural perspectives appropriate to the diverse and changing roles music plays in different times and places. No prior background in music is required. Satisfies GE Area C3 (Comparative Perspectives and/or Foreign Languages).

MUS 105 MUSIC THEORY FOR NON-MAJORS (4)

Through writing and analysis, this course incorporates the following concepts: rhythm and meter, basic properties of sound, intervals, diatonic scales and triads, diatonic chord progressions, basic cadential formulas, melodic and phrase structure, dominant seventh, and the use of music notation software. Not open to Music majors. Satisfies GE Area C1 (Applied Arts Combining Studio and Theory).

MUS 106 FUNDAMENTALS OF MUSIC THEORY (3)

Intensive practice in developing skill and fluency reading music notation. Aural and written practice recognizing, writing, and using intervals, scales, and key signatures. Beginning sight-singing and dictation using simple pitch and rhythmic materials. Should be taken concurrently with MUS 109. Restricted to Music majors and minors; open to non-majors only with consent of instructor.

MUS 109 INTENSIVE KEYBOARD LAB I (2)

Beginning class piano studies for Music Majors. Prerequisites: open to Music majors and minors only and recommendation of a music advisor.

MUS 110 THEORY I: DIATONICISM (3)

This course incorporates the concepts from MUS 105. In addition, through writing and analysis, the course will include: introduction to sequence, secondary dominants, modulation to closely related keys, secondary leading tones, diminished seventh and non-dominant 7th chords, and borrowed chords will be addressed. Figured bass, non-harmonic tones, melodic and phrase structure, and voice leading involving 4 part choral writing. Use of music notation software. A concurrent laboratory experience in ear training and sight-singing including melodic, harmonic, and rhythmic dictation is required. See Ear Training I. Prerequisite: MUS 105 or 106, or consent of instructor.

MUS 115 VOCAL METHODS (1)

Group and individual explorations of the fundamental techniques of singing. Develop strategies to address tone production, breath control, diction, repertory, and interpretation. Music Education students learn basic vocal pedagogy. Offered for upper-division credit as MUS 415 with additional course requirements. May be repeated for credit with consent of instructor.

MUS 118 GUITAR METHODS (1)

An exploration of basic performance techniques, and pedagogy and teaching strategies for guitar. Offered for upper-division credit as MUS 418. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 120 MUSICIANSHIP I (2)

Development of sight-singing and dictation skills using pentatonic and diatonic materials. Techniques include moveable-do solfa, drills in intervals, triads, and dictation, augmented by computer software and group work. Also emphasizes development of broad listening skills, using examples of great works based upon simple diatonic melodies. Prerequisite: MUS 106 or equivalent.

MUS 122 STRINGS METHODS I (VIOLIN/VIOLA) (1)

An exploration of basic performance techniques, instrumental pedagogy and teaching strategies associated with teaching violin and viola in the public schools. Prerequisite: MUS 106 or the equivalent and/or consent of the Instructor and Director of Music Education. May be repeated for credit with consent of instructor.