University of Arkansas - Fort Smith
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General Syllabus

MATH 400V Special Topics in Mathematics

Credit Hours: 1 to 4 Variable Lecture Hours: 0~4 Variable Laboratory Hours: 0~8 Variable

Prerequisites: junior standing and consent of instructor

Effective Catalog: 2018~2019

I. Course Information

A. Catalog Description

Specific subject areas or current topics of interest in pure or applied mathematics, mathematics education, history of mathematics, or statistics. Topics are designed to meet the interest of students, to take advantage of the areas of expertise of the department faculty or a visiting professor, or to investigate a current problem or latest development in a mathematical application. May be repeated, when topics differ, for a total of six hours.

B. Additional Information - None

II. Student Learning Outcomes

A. Subject Matter

Upon successful completion of this course, the student will be able to:

1. Read and/or listen to documents and discussions having mathematical content, with an appropriate level of understanding.
2. Apply mathematical concepts, principles and methods to analyze and evaluate problems (theoretical or practical), and produce strategies for their solution.
3. Articulate mathematical information accurately and effectively using a form, structure and style that fit the purpose (oral presentation or in writing).
4. Use technological tools such as computers, calculators, or other interactive programs to learn concepts, explore new theories, conduct investigations, make conjectures, or solve problems.
5. Work collaboratively with others or independently on projects requiring mathematical knowledge and input.

B. University Learning Outcomes (ULO)

Communication Skills (written and oral)
Students will compose coherent documents that effectively communicate solutions and applications of mathematical topics.

Analytical Skills
Critical Thinking Skills: The student identify a problem, isolate its components, organize information for decision making, establish criteria for evaluation, and draw appropriate and creative conclusions through participation in problem-solving and troubleshooting activities.

III. Major Course Topics

Topics covered is dependent on each offering because faculty with different specialties will rotate through the teaching of this course. A faculty member who is teaching determines the topic and the points of emphasis of that given offering.