MATH 1332: MATHEMATICS FOR LIBERAL ARTS I

In Workflow

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Changes proposed by: harag

Catalog Year

2019-2020

Justification Or Comments for proposal

Previous request to identify MATH 1332 as a TAMIU Mathematics CORE course needs to be completed. Accordingly, THECB's approval will also be sought to consider MATH 1332 as CORE curriculum course in Mathematics at TAMIU.

Course Prefix:

MATH - Mathematics

Course Number

1332

Department

Mathematics & Physics

College

College of Arts and Science

Course Title

Mathematics for Liberal Arts I

Is this a core curriculum course?

Yes

Credits:

3

Course Description

This course is intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered.

Course Prerequisites:

Completion of Texas Success Initiative (TSI) Mathematics requirements or appropriate level developmental course sequence

Course Co-Requisites:

None

Can course be repeated for credit?

No

Default Grade Mode

Normal Grade (A-F)

WIN?

No

Course Type

Lecture

Instructional Method:

FTF

Additional Information

Request for Courses in the Core Curriculum and Current Course Syllabus are attached as needed.

Attach Additional Documentation

Request Form for Courses in the Core Curriculum (Math 1332).docx
MATH 1332-101_Syllabus_Fall18_Whitfield_CA.pdf

Core Curriculum

Core Curriculum Component Area (Optional)

020 - Mathematics

Has this been approved by the THECB?

No

Student Learning Outcomes (SLOs): Upon completion of this course, students will be able to:

Learning Outcome
Upon successful completion of this course, the student will be able to: 1. Identify, graph and solve problems involving functions. (EQ) 2. Understand the basic concepts of sets and logic. (CT & CS) 3. Demonstrate knowledge of basic concepts in financial management. (CS & EQ) 4. Use basic concepts of statistical reasoning to summarize data and form conclusions. (CS & CT) 5. Find the probability of an event and formulate mathematical or management decisions from the information. (CS & EQ)

Core Curriculum Learning Objectives (CCLOs):

Learning Outcomes
CORE-CURRICULUM LEARNING OUTCOMES: 1. Critical Thinking (CT): includes creative thinking, innovation, inquiry and analysis, evaluation, and synthesis of information. (SLOs: 2 & 4) 2. Communication Skills (CS): Students will demonstrate their ability to communicate effectively by using written communication. (SLOs: 2, 3, 4, & 5) 3. Empirical and Quantitative Skills (EQ): includes the manipulation and analysis of numerical data or observable facts resulting in informed conclusions. (SLOs: 1, 3, & 5)

Competency areas addressed by the course (refer to the appended chart for competencies that are required and optional in each component area):

Critical Thinking
Empirical & Quantitative Skills
Written Communication

Because we will be assessing student learning outcomes across multiple core courses, assessment assigned in your course must include assessment of the core competencies. For each competency checked above, indicate the specific course assignment(s) which, when completed by students, will provide evidence of the competency. Provide detailed information, such as copies of the paper or project assignment, copies of individual test items, etc. A single assignment may be used to provide data for multiple competencies.

Competency	Assignment
Written Communication	Communication Skills: includes effective written communication. (SLOs: 2, 3, 4, & 5) Written communication will be emphasized under this category which includes a final paper. This final paper could be digitally submitted for core-curriculum assessment. Students will be required to write this paper on their experiences in the course by citing various concepts they learned through their regular class attendance. The paper is to be 5 pages (not including a works cited page), double spaced, 12 Times New Roman font size, and APA formatted. As this final paper is in progress, the students will be required to make frequent visits (at least 3) to the University Writing Center to get assistance on local and global writing issues. Each visit will need to be documented using the referral form. A concise summary of the analysis is presented in the paper. The final paper will be submitted to the course instructor during the last week of the semester. These papers will be graded using a communication skills rubric with a focus on writing for core-curriculum evaluation.
Critical Thinking	Critical Thinking: includes creativity, innovation, inquiry and analysis, evaluation, and synthesis of information. (SLOs: 2 & 4) Critical thinking is defined as an intellectually disciplined process of actively and skillfully conceptualizing, applying, and/or analyzing information gathered from observation, reflection, reasoning, or communication. Students will take five quizzes throughout the semester. These quizzes will include problems that require critical thinking skills. Students will also be provided an opportunity to develop a final paper. Although topics vary by student interest, all students must compose a thesis-driven final paper based on a mathematical concept discussed in class. The paper must demonstrate overall knowledge and a real-world application of the topic. The paper must be effectively structured and supported with examples and data as needed. The rubric domains that will be utilized are: focus, organization & development, and research. Emphasis will be on the critical thinking aspects of “creativity, innovation, inquiry, and analysis, evaluation, and synthesis of information.”
Empirical & Quantitative Skills	Empirical and Quantitative Skills: includes the manipulation and analysis of numerical data or observable facts resulting in informed conclusions. (SLOs: 1, 3, & 5) The quizzes will also have the focus on quantitative literacy in logic, patterns, and relationships that involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experiences. By doing so, informed conclusions can be drawn from the manipulation and analysis of numerical data or observable facts. Students will be evaluated on their ability to consider different perspectives and to work effectively to support the argument and purpose. The information found in the quizzes is required for an analysis of all components and should be clearly understood by students. If applicable, values are correctly translated into variables and all necessary formulas are presented. The steps followed must be logical and relevant to the intended result. Any notation for its consistency will be ascertained. The investigation should lead to an accurate, complete, subject-specific and relevant conclusion related to the initial inquiry.

Will the syllabus vary across multiple sections of the course?

No

Attach Syllabus/Other Documents

MATH 1332-101_Syllabus_Fall18_Whitfield_CA.pdf

Key: 1600