Angelina College
Division of Science and Mathematics
MATH 1332 – Contemporary Mathematics
Instructional Syllabus – Spring 2019 (INTERNET – 8 WEEK)

I. BASIC COURSE INFORMATION:

A. Contemporary Mathematics (Quantitative Reasoning) – MATH 1332 – 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. Students are encouraged to have a graphing calculator. Three lecture hours each week.

B. The intended audience is any student with A.A. or A.A.S. degree plans which require 3 hours of mathematics. Generally, these degrees are in liberal arts, fine arts, some health care, and some business fields. MATH 1332 is not a prerequisite for any other mathematics courses and therefore is not appropriate for elementary education, science, or mathematics majors.

C. Instructor: Julie Mays
Office Location: S123
Office Hours: Tuesday 7:30 – 8:00 and 9:20 – 10:20
Wednesday 7:30 – 9:30
Thursday 7:30 – 8:00 and 9:20 – 10:20
Others by appointment
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II. INTENDED STUDENT OUTCOMES:

A. Core Objectives Required for this Course

1. **Critical Thinking:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. **Communication:** to include effective development, interpretation and expression of ideas through written, oral and visual communication
3. **Empirical and Quantitative Skills:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

B. Course Learning Outcomes for all Sections

1. Apply the language and notation of sets.
2. Determine the validity of an argument or statement and provide mathematical evidence.
3. Solve problems in mathematics of finance.
4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
5. Interpret and analyze various representations of data.
6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

III. ASSESSMENT MEASURES

A. Assessments for the Core Objectives

1. **Critical thinking:** Students will answer multiple choice questions in a project to show creative thinking, innovation, and analyze and evaluate arguments. The AC Critical Thinking Rubric will be used to assess critical thinking skills and correctness of conclusions.

2. **Communication:** Students will answer multiple choice questions on project. The AC Communication Rubric will be used to assess written, oral, and visual communication skills.
3. **Empirical and Quantitative Skills:** Students will answer multiple choice questions in a project to calculate, analyze, and summarize data. The AC Empirical and Quantitative Skills Rubric will be used.

B. Assessments for Course Learning Outcomes

1. Students will apply the language and notation of sets on embedded test questions.
2. Students will determine the validity of an argument or statement and provide mathematical evidence.
3. Students will solve problems in mathematics of finance.
4. Students will demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
5. Students will interpret and analyze various representations of data.
6. Students will demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

IV. INSTRUCTIONAL PROCEDURES:

The course is taught using a combination of lectures, discussions, and practice exercises. The amount of time spent using any one technique will vary from class to class and from lesson to lesson as determined to be most appropriate by the instructor.

V. COURSE REQUIREMENTS AND POLICIES:

A. Required Textbooks and Recommended Readings, Materials and Equipment

1. Using and Understanding Mathematics: A Quantitative Reasoning Approach, 7th ed. by Bennett & Briggs (Pearson).
2. Access to MyLabsPlus (included with new book bought at AC bookstore)
3. Use of a graphing calculator is encouraged – The TI-84 graphing calculator will be used by the instructor in classroom demonstrations.

B. Course Policies – This course conforms to the policies of Angelina College as stated in the Angelina College Handbook.

1. **Academic Assistance** – If you have a disability (as cited in Section 504 of the Rehabilitation Act of 1973 or Title II of the Americans with Disabilities Act of 1990) that may affect your participation in this class, you may fill out the Educational Accommodations application within your AC portal, under the “Student Services” tab. A Student Success team member will contact you once the application is received. At a post-secondary institution, you must self-identify as a person with a disability in order to receive services; for questions regarding the application process you can visit the Office of Student Success and Inclusion in the Student Center (Room 200) or email access@angelina.edu. To report any complaints related to accommodations, you should contact Annie Allen, Director of Student Success & Inclusion, in Room 200 of the Student Center. You may also contact Ms. Allen by calling (936)633-4509 or by emailing aallen@angelina.edu. To report discrimination of any type, contact Steve Hudman, Dean of Student Affairs, at (936)633-5292 or shudman@angelina.edu.

2. **Attendance –** This course conforms to the Angelina College attendance policy as stated in the Angelina College Policies and Procedures Manual. Records will be turned in to the academic dean at the end of the semester. Do not assume that non-attendance in class will always result in an instructor drop. **You must officially drop a class or risk receiving an F**. This is official Angelina College Policy.

3. Additional Policies Established by the Instructor

MAKE-UP EXAMS
No make-up exams will be offered. The grade on the final exam can replace the lowest exam grade, including the grade from a missed exam.

INTERNET COURSE
Internet classes require a greater degree of independence and responsibility than traditional classes. You must find time in your schedule to work on the class as much as you would in a traditional class. Do not allow yourself to fall behind on your assignments. **Computer problems are NOT an acceptable excuse for not completing assignments.** If you do not have a reliable computer, you should not be taking an Internet course.

Cheating on tests is not tolerated as per Angelina College policy and may result in expulsion from the course. Plagiarism is not tolerated and will result in a zero for any assignment in which it is detected.

CELL PHONES
Students may not have access to cell phones, iPads, etc. during tests.

VI. COURSE OUTLINE:

See attached COURSE SCHEDULE

VII. EVALUATION AND GRADING:

1. Your grade will be assessed by:
   a. Three tests valued at 100 points each for a total of 300 points.
   b. Homework on MyLabsPlus and other assignments valued at 100 points.
   c. Three projects valued for a total of 100 points.
   d. A comprehensive final examination valued at 100 points.

2. Homework will be completed on MyLabsPlus and **is required.**
   a. MyLabsPlus comes with new books from the AC bookstore. It may also be purchased with a major credit card on the website www.angelina.mylabsplus.com
   b. Homework will have due dates and penalties for late work. Each homework grade will be a zero if it is not done within the allotted time.

3. **Exams will be taken at a college testing center or with a proctor approved by the Office of Distance Learning and must be taken by the due date – absolutely no exceptions will be made.** Proctor-U cannot be used at this time with this course due to scratch paper and formula sheets provided for some exams. Exams may only be reviewed in person with the instructor.

4. No makeup tests will be allowed. It is your responsibility to take each exam by the due date. The final exam will replace any one missed test or the lowest test grade during the semester.

5. Those who drop the course on or before January 30th will not receive a grade for the course. April 1st is the last day for dropping a course.

The instructor may modify the provisions of the syllabus to meet individual class needs by informing the class in advance as to the changes being made.

ASSIGNMENTS

MATH 1332 – *Contemporary Mathematics*

Week	Due Date	Sections	Description
1	03/24/2019	1A 1C 1E 2A	Recognizing Fallacies Sets and Venn Diagrams Critical Thinking in Everyday Life Working with Units
2	03/31/2019	3A 3E **Exam #1** 8A	Uses and Abuses of Percentages How Numbers Can Deceive: Polygraphs, Mammograms, and More **Exam #1 (Sections 1A, 1C, 1E, 2A, 3A, & 3E)** **Project #1 Due** Growth: Linear versus Exponential
3	04/07/2019	4B 4C 4D 4E	The Power of Compounding Savings Plan and Investments Loan Payments, Credit Cards, & Mortgages Income Taxes
4	04/14/2019	4F **Exam #2** 5A 5B	Understanding the Federal Budget **Exam #2 (Sections 8A, 4B – 4F)** **Project #2 Due** Fundamentals of Statistics Should You Believe a Statistical Study?
5	04/21/2019	5C 5D 5E 6A	Statistical Tables and Graphs Graphics in the Media Correlation and Causality Characterizing Data
6	04/28/2019	6B 6C 6D **Exam #3**	Measures of Variation The Normal Distribution Statistical Inference **Exam #3 (Sections 5A – 5E, 6A – 6D)** **Project #3 Due**
7	05/05/2019	7A 7B 7C 11C	Fundamentals of Probability Combining Probabilities The Law of Large Numbers Proportion and the Golden Ratio **Project #4 Due**
8	**05/08/2019**	**Final**	**Comprehensive Final Exam**