MTH 110 Syllabus Sullivan 182

MTH 099/110 Mathematics in Society Co-requisite
Syllabus and Course Policy Sheet
Spring, 2018

Instructor: John Sullivan
Email: sullivanjb1@sfasu.edu
Office: MATH 345
Phone: 936-468-1547 (office)
936-468-3805 (Math Dept.)

Class meeting time and room: Section .025: MW: 1:00 PM – 2:15 PM, MATH 203
TR: 12:30 PM – 1:45 PM, MATH 203

Office Hours: MW: 11:00 AM – 12:00 PM
TR: 2:00 PM – 3:30 PM

Required Materials
There are two approved versions of the text:
• Custom SFASU Soft-cover edition (bundled with MyMathLab Access): ISBN 9781323608470
• eBook (bundled with MyMathLabAccess): ISBN 032119991X

MyMathLab Account: Online homework is done through www.mymathlab.com.
To create a MML account, students will need:
1. a valid email address (use your SFA email)
2. an access code (bundled with new textbooks, or may be purchased separately online)
3. course id (make sure to use the correct code for your class)
   MTH 110.007 course id: sullivan53892

Calculator: You may use a graphing calculator for this course, but you may not use a calculator equivalent to a Ti-89 or higher. At Ti-30XS is recommended (retails for under $20)

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

Attendance Policy and Attendance/Participation Grade
• Attendance will be recorded each class day. Students will be marked absent for leaving class early without prior notification. Students will be marked absent if, though physically present, the student refuses to participate in class activities (for example, sleeping, using phone, etc). All students receive two free grace day absences before their attendance grade is affected. Students must provide documentation in order to have an absence excused; however, excused or not, all students are responsible for any material missed.

Tutoring
• Visit the AARC (on the first floor of the library) to inquire about tutor support for MTH 110. For the Spring 2018 semester, the hours of operations for the walk-in tutoring tables are 1:00 PM – 8:00 PM, Monday through Thursday, and 4:00 PM – 8:00 PM on Sunday.
• Weekly Appointments and Learning Teams: For more focused, course-specific tutoring, the AARC offers weekly one-on-one appointments and Learning Teams. A Learning Team is a group of 3-4 students from the same course who are coached by a peer tutor (a fellow student). These are student-led groups, so the students choose the
topics covered. If you are interested in either one-on-one weekly appointments, or in forming a Learning Team, visit the AARC during the first Open Enrollment period, January 17th and 18th.

Student Learning Outcomes (SLO): At the end of MTH 110, a student who has studied and learned the material should be able to:

1. Demonstrate understanding of elementary logic in order to make persuasive arguments, understand conflicting reports, identify faulty reasoning, detect bias, assess risk, suggest alternatives, and draw solid conclusions. [CO: 1,2,3]
2. Use sets as a tool for organizing information, recognize that relationships between and among sets provide the foundation for many valid arguments. [CO: 1,2,3]
3. Use counting techniques, estimation, proportional reasoning, percents, and unit conversions to more ably interpret numerical quantities that occur in everyday life. [CO: 1,2,3]
4. Demonstrate understanding of basic probability and how it is involved in virtually every decision we make – either explicitly or implicitly. [CO: 1,2,3]
5. Use statistics to critically evaluate and interpret statistical studies and corresponding reports. [CO: 1,2,3]
6. Use functions to model various relationships with enough precision to gain insight into how things work and to make reasonable predictions about the future. [CO: 1,2,3]

Grading Policy

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Component</th>
<th>Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>Group Work Grade</td>
<td>90% - 100% A</td>
</tr>
<tr>
<td>5%</td>
<td>D2L Reading Quizzes</td>
<td>80% - 90% B</td>
</tr>
<tr>
<td>10%</td>
<td>MyMathLab (Homework and Summary Assignments)</td>
<td>70% - 80% C</td>
</tr>
<tr>
<td>60%</td>
<td>Exams (3 at 20% each)</td>
<td>60% - 70% D</td>
</tr>
<tr>
<td>20%</td>
<td>Final Exam (Comprehensive)</td>
<td>&lt; 60% F</td>
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</table>

Exams
- Three exams will be given over the course of the semester (approximate dates listed in calendar). Each exam grade comprises 20% of a student’s overall course grade. A student’s final exam grade will replace their lowest regular exam grade (provided that the final exam grade is higher)
- The final exam for this course will be given as scheduled on the university calendar, in our normal classroom. No alternate arrangements will be allowed.

Group Work
- During the first week of class, you will be assigned to a group. Throughout the semester, your group will be assigned various projects and activities, which you work together. At the end of the semester, your groupmates will assign you a grade based on your effort on the group assignments, so make sure to do your part!

Reading Quizzes (D2L)
- Each textbook section covered in the course has a corresponding reading quiz, found under the “Quizzes” tab on the D2L course homepage. The reading quiz for each section consists of 5 – 10 short questions designed to encourage students to read the textbook material. The reading quizzes have a time limit of 15 minutes, and students have two attempts per quiz (the highest grade is recorded). Important: the reading quiz for each section is due at the beginning of class on the day the section is covered in lecture. Check the course calendar on D2L frequently for due dates. You are responsible for completing these quizzes on time.

MyMathLab Homework and Summary & Review Assignments
- Each textbook section covered in the course has a corresponding homework assignment on MyMathLab. Each assignment consists of 10 – 20 questions, and students have three attempts at the correct answer per question. Generally, the due date for all homework assignments covered in a particular week will be Monday of the following week, at 11:59 PM, but there are some exceptions to this rule. Check the course calendar on D2L frequently for due dates.
In addition to MML homework, there will be five Chapter Summary and Review assignments. The Chapter Summary and Review assignments are intended to serve as a review for the exam. As such, they will not include the various help resources that are available on the normal homework. Note: though different, these Chapter Summary and Review assignments are found under the "Homework" tab on MyMathLab, will become available one week before the exam day, and will be due at 11:59 PM the night before each exam.

To calculate your overall MyMathLab grade (10% of course grade), first find your average homework grade (drop the 3 lowest grades), and your average summary assignment grade (drop lowest grade), then find the average of those values.

General Policies and Information

- You earn your grade by communicating your understanding of the material through the homework, and tests. Clearly communicating mathematics will be essential in this course.
- I will send e-mails to the entire class during the semester, often through D2L. Make sure you have your personal D2L settings set to forward email notifications. Watch for important class announcements on the D2L newsfeed.
- Students are expected to respect the learning environment of their fellow students. Behavior that disrupts this environment will not be tolerated. Please silence your phone and remove it from the table.

General Education Core Curriculum/LiveText

This course has been selected to be part of Stephen F. Austin State University’s core curriculum. The Texas Higher Education Coordinating Board has identified six objectives for all core courses: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives.

Assessment of these objectives at SFA will be based on student work from all core curriculum courses. This student work will be collected in D2L through LiveText, the assessment management system selected by SFA to collect student work for core assessment. LiveText accounts will be provided to all students enrolled in core courses through the university technology fee. You will be required to register your LiveText account, and you will be notified how to register your account through your SFA e-mail account. If you forward your SFA e-mail to another account and do not receive an e-mail concerning LiveText registration, please be sure to check your junk mail folder and your spam filter for these e-mails. If you have questions about LiveText call Ext. 1267 or e-mail SFALiveText@sfasu.edu.

There is no LiveText assignment for the Spring 2018 semester.

Testing, Grading, and Make-up Policies

- If you miss an exam for any reason, your zero exam grade will be replaced by your final exam grade. If more than one exam is missed, the final exam grade will replace only one of the missed exams.
- You must bring and display either your SFASU Student ID or a valid driver’s license before you will be permitted to take each test and the final exam. I must be able to recognize you from the photo on the ID.
- You may use your (approved) calculator on exams, but you must present it to me so that I may clear the memory, if so equipped.
- Students may not share calculators during an exam. Students may not use cell phone calculators, etc during an exam.
- Since you have a full semester to arrange any travel plans, they are not an excuse for missing the final.
- You may get help on work that is assigned to be done outside of class, unless otherwise instructed, but I expect any work that you turn in to reflect your understanding of the material. On in-class graded work, I expect you to only use your brain, pencil, paper, and, sometimes, a calculator.
Tips for a successful math class

- Measure success as understanding and being able to do new problems, not as having completed the assignment. Trying to memorize all the material is not the same as understanding the material.
- Take the time to read the book and review your notes before and after class.
- Practice homework problems until you can do it without referring to examples or help from your notes.
- Practice explaining big ideas and problem solving procedures in your own words, using complete sentences.
- Treat mistakes as a learning experience.
- Some people take longer to understand things than others. Evaluate how you study and seek to study smarter, not necessarily longer. If you are still stuck, get some help. The AARC and I are here for you!

University Policies

Academic Integrity (Policy A-9.1)
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

The penalty for a student found cheating on any part of an assignment, quiz, or exam in this class will range from a grade of zero on the work to a grade of F in the course, and may result in additional, more severe disciplinary measures. A student who allows another to copy his work and the student copying the work are both guilty of cheating. Do your own work. Do not show your completed work to others. Do not allow others to copy your work.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp.

Withheld Grades Semester Grades Policy (A-54)
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average. The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

Students with Disabilities
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices.
Acceptable Student Behavior
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1 http://www.sfasu.edu/policies/student_conduct_code.asp). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

<table>
<thead>
<tr>
<th>Tentative Course Schedule (MTH 110C 182)</th>
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<tbody>
<tr>
<td><strong>Week of . . .</strong></td>
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</tbody>
</table>
| 1/15 – 1/19 | Course Introduction  
2.1 Sets  
2.2 Subsets  
2.3 Venn Diagrams |
| 1/22 – 1/26 | 2.4 Set Equality  
2.5 Applications of Sets  
3.1 Statements and Logical Connectives  
3.2 Truth Tables I |
| 1/29 – 2/2 | 3.3 Truth Tables II  
3.4 Equivalent Statements  
3.5 Symbolic Arguments  
3.6 Euler Diagrams/Syllogistic Arguments |
| 2/5 – 2/9 | 3.6 (cont.)  
Review/Extra Instruction  
Exam I (Ch 2 and 3) |
| 2/12 – 2/16 | 10.1 Percent  
10.2 Personal Loans and Simple Interest  
10.3 Compound Interest  
10.4 Installment Buying  
10.5 Mortgages  
10.6 Annuities and Sinking Funds  
10.7 The Counting Principle/Permutations  
11.1 Empirical and Theoretical Probability  
11.2 OR and AND Probability  
11.3 Expected Value  
11.4 Tree Diagrams  
11.5 Conditional Probability  
11.6 Probability and Combinations |
| 2/19 – 2/23 | 10.8 Frequency Distributions and Graphs  
11.7 The Normal Curve  
11.8 Measures of Central Tendency  
11.9 Measures of Dispersion |
| 2/26 – 3/2 | 10.9 Sampling and Misuses of Statistics  
11.10 Problem Solving  
11.11 Probability and Combinations |
| 3/5 – 3/9 | Review/Extra Instruction  
Exam 2 (Ch 10)  
11.12 Hypothesis Testing  
11.13 Problem Solving  
11.14 Tree Diagrams |
| 3/12 – 3/16 | Spring Break  
Exam III (Ch 11 and 12)  
11.15 The Normal Curve  
11.16 Problem Solving  
11.17 Tree Diagrams |
| 3/19 – 3/23 | Spring Break  
Finals Week  
MTH 110.025 Final Exam: Wednesday, May 9th  
1:00 Pm – 3:00 pm |
| 3/26 – 3/30 | Spring Break  
Finals Week  
MTH 110.025 Final Exam: Wednesday, May 9th  
1:00 Pm – 3:00 pm |
| 4/2 – 4/6 | Spring Break  
Finals Week  
MTH 110.025 Final Exam: Wednesday, May 9th  
1:00 Pm – 3:00 pm |
| 4/9 – 4/13 | Spring Break  
Finals Week  
MTH 110.025 Final Exam: Wednesday, May 9th  
1:00 Pm – 3:00 pm |
| 4/16 – 4/20 | Spring Break  
Finals Week  
MTH 110.025 Final Exam: Wednesday, May 9th  
1:00 Pm – 3:00 pm |
| 4/23 – 4/27 | Spring Break  
Finals Week  
MTH 110.025 Final Exam: Wednesday, May 9th  
1:00 Pm – 3:00 pm |
| 4/30 – 5/4 | Spring Break  
Finals Week  
MTH 110.025 Final Exam: Wednesday, May 9th  
1:00 Pm – 3:00 pm |