Instructor: Todd Zoroya

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Chapters/Sections Covered in the online Textbook:

Chapter #2: Functions (2.1 Relations and Functions, 2.2 Properties of functions, 2.3 Graphs of basic functions, 2.4 Transformations, 2.5 Algebra and composite functions, 2.6 One-to-one and inverse functions)

Chapter #3: Polynomial and Rational functions (3.1 Quadratic functions, 3.2 Applications, 3.3 Graphs of polynomials, 3.6 Graphs of rationals)

Chapter #4: Exponential and Logarithmic Functions (4.1 Exponential, 4.2 Natural exponent, 4.3 Logarithmic, 4.4 Properties of logs, 4.5 Equations, 4.6 Applications)

Chapter #5: Intro to Trig (5.1 Angles, 5.3 Unit circle, 5.4 Right triangles)

Chapter #6: Graphs of Trig functions (6.1 Sine and Cos, 6.2 Phase shifts, 6.3 Tan, Cos, Sec, Cot graphs, 6.4 Inverse Trig I, 6.5 Inverse Trig II)

Chapter #7: Analytic Trig (7.1 Identities, 7.5, Trig equations)

Chapter #8: Applications of Trig (8.1 Right triangles, 8.2 Law of sine, 8.3 Law of cosine)

Books/Supplies/Technology:

Software (required): MyMathLab (MML) for Trigsted Precalculus: A Unit Circle Approach -- Access Card  Kirk Trigsted, University of Idaho, with Guided Notebook. DO NOT purchase a generic MML code. You must purchase the specific code for the Trigsted e-text. The textbook is an e-textbook only. There is a 14 day temporary code you can use if you want to get started right away. The course ID for this course is zoroya97332.

Technology: You will find a scientific or graphing calculator helpful for homework and quizzes. Calculators are not allowed on any exams.

Additional equipment: You will need a set of personal headphones in order to watch the online videos and animations.

Communication: Announcements and communications between the instructor and the entire class will take place on the MML announcement page. Please check frequently for announcements. If you have a question for me directly, please email me. If you email me, please make it clear that you are in the "ONLINE" section of MAT122.

Course Description

Designed as a transitional course between high school algebra and college mathematics, particularly MAT126 (Calculus). It includes a detailed study of functions including polynomial, rational, exponential, logarithmic, and trigonometric functions.

This course satisfies the Quantitative Literacy General Education requirement. Quantitative literacy is the ability to formulate, evaluate, and communicate conclusions and inferences from quantitative information.

Students will demonstrate proficiency in Quantitative Literacy, as defined on the Quantitative Literacy Student Learning Outcomes Rubric (see attached), for the following:
1. Translate problems from everyday spoken and written language to appropriate quantitative questions by taking real world situations and translating them into mathematical models through in class work, homework, quizzes, and tests.
2. Interpret quantitative information from formulas, graphs, tables, schematics, simulations, and/or visualizations, and draw inferences from that information through in class work, homework, quizzes, and tests.
3. Solve problems using arithmetical, algebraic, analytic, geometrical, statistical, and/or computational methods through in class work, homework, quizzes, and tests.
4. Analyze answers to quantitative problems in order to determine reasonableness and suggest alternative approaches if necessary through in class work, homework, quizzes, and tests.
5. Represent quantitative information symbolically, visually, and/or numerically through in class work, homework, quizzes, and tests.
6. Present quantitative results in context using everyday spoken and written language as well as using formulas, graphs, tables, schematics, simulations, and/or visualizations through in class work, homework, quizzes, and tests.

Course Structure

Weekly homework assignments, quizzes, and tests. will be tied to the student learning outcomes, and will give students the opportunity to translate problems, interpret quantitative information, solve problems, analyze answers, represent quantitative information, and present quantitative results using written language.

Homework: There will be a graded homework assignment for each section covered (usually 3 per week). The homework must be completed before each expiration date and time (usually Monday's at 11:59pm). You can re-do the homework as many times as you like. To redo a question, hit the similar problem button after getting a problem incorrect. Each time you click on the “Check answer” your work is saved on the MML server. Your goal with MML is to get to the point where you can complete the problems without any tools. Then you are then ready for a quiz or test.

Quizzes: There will be a graded quiz each week, covering the homework sections for that week. The quiz must be submitted prior to the deadline (usually Monday's at 11:59pm). You only have 2 tries for the quizzes. You don’t, however, have to complete the quiz in one sitting. The software saves your work as you go, and you only push “Submit” when you are completely done and ready for your grade.

Exams & Final: There are two, two-hour, written, proctored exams and a comprehensive final exam. Students who take a make-up exam without an excused absence may have their grade for that test be based on a maximum score of 70%.

For ORONO's students: You do not need to sign up for an exam if you plan on taking the exam on campus during the normal exam times.

For Off-campus students in Maine: Tests are taken at one of the off campus sites during the open testing window. You must sign up with an off campus site using the link I provide you in MML during the first 2 weeks of the semester. Please see schedule for dates. A week prior to each test you will call your testing site to register to take the test.

Out-of-state students: It is your responsibility to secure a proctor in your area the first 2 weeks of classes. Often a local library, adult education center, or community college will agree to proctor for you. You must email the proctor’s name, title, address, phone, and email address for verification to UMA, using the link I provide you at the beginning of the semester. A week prior to each test you will schedule a time with your proctor to take your test.

Academ-e: You will take your exams with a proctor at your school, usually your guidance counselor.
For each exam you may have one, double sided reference sheet, hand written. There will be a set of ungraded review problems in MML to help focus your studying.

Course Grades
Your grade for the course will be based on two exams (20% for each exam and 25% for the final exam, for a total of 65%), online homework (30%), weekly online quizzes (5%). Final letter grades are determined as follows: <60 (F), 60-69 (D), 70-79 (C), 80-89 (B), 90-100 (A). Plus grades are added for A, B, and Cs.

Make-Up Policy: Your lowest quiz grade and three lowest homework grades will be dropped to account for any missed assignments due to illness or any other circumstances.

Extensions: Sometimes unforeseen things happen in a semester. For this reason, everyone is allowed one extension. You must email me within a week of the missed assignments and then complete the assignments within a timely manner, usually one week. All assignments must be completed by the Friday before finals week.

Extra credit: There is no extra credit for this course.

Help Options
For all students, using the “Ask instructor” button is a great way to get a quick question answered on a homework problem!

For Orono students, the Math lab is located in 116 Neville Hall. Math faculty, graduate students, and math majors staff it Monday-Friday from 10-4. It’s a great place to go with homework questions. Take advantage of it! You can also stop by during my office hours or set up an appointment with me.

For Off-campus students, please set up an appointment to meet online with Zoom in Blackboard to go over questions or problem areas.

Academic Honesty
Academic honesty is very important. It is dishonest to cheat on exams, to copy term papers, to submit papers written by another person, to fake experimental results, or to copy or reword parts of books or articles into your own papers without appropriately citing the source. Students committing or aiding in any of these violations may be given failing grades for an assignment or for an entire course, at the discretion of the instructor. In addition to any academic action taken by an instructor, these violations are also subject to action under the University of Maine Student Conduct Code. The maximum possible sanction under the student conduct code is dismissal from the University.

Course Schedule Disclaimer
In the event of an extended disruption of normal classroom activities, the format for this course may be modified to enable its completion within its programmed time frame. In that event, you will be provided an addendum to the syllabus that will supersede this version.

Students with Disabilities
If you have a disability for which you may be requesting an accommodation, please contact Sara Henry, Director of Disabilities Services, 121 East Annex, 581-2319, as early as possible in the term.
Sexual Discrimination Reporting:
The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination involving members of the campus, your teacher is required to report this information to the campus Office of Sexual Assault & Violence Prevention or the Office of Equal Opportunity.

If you want to talk in confidence to someone about an experience of sexual discrimination, please contact these resources:

For confidential resources on campus: Counseling Center: 207-581-1392 or Cutler Health Center: at 207-581-4000.
For confidential resources off campus: Rape Response Services: 1-800-310-0000 or Spruce Run: 1-800-863-9909.

Other resources: The resources listed below can offer support but may have to report the incident to others who can help:

For support services on campus: Office of Sexual Assault & Violence Prevention: 207-581-1406, Office of Community Standards: 207-581-1409, University of Maine Police: 207-581-4040 or 911. Or see the OSAVP website for a complete list of services at http://ww.umaine.edu/osavp/