

Note: Student work submitted as part of this course may be reviewed by Oxford College and Emory College faculty and staff for the purposes of improving instruction and enhancing Emory education.

Fall 2016
MATH 100
Oxford College of Emory University

GENERAL INFORMATION

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| Instructor | Christina Lee |
| Email | christina.lee@emory.edu |
| Office | Pierce Hall 122A |
| Phone | 4-4563 |
| Office Hours | TBA Students are also welcome to stop by if my office door is open. Individual help is also available (for all math courses) in the Math Center from Christina Lee (as well as some student tutors), Mondays through Thursdays from 3:00 PM to 6:00 PM. |
| Textbook | Precalculus, 2nd edition, Paul Sisson, 2015 |
| Class Website | Canvas: http://classes.emory.edu Hawkes: http://learn.hawkeslearning.com Math Center Website: http://www.oxfordmathcenter.com/drupal7/node/510 |
| Course Content | Math 100 is designed to review algebra, trigonometry, exponential and logarithmic functions in order to prepare students for Math 110A. |

COURSE GOALS AND OBJECTIVES

The purpose of MATH 100 is to prepare students for calculus by focusing on technical skills and conceptual understanding. Calculus combines various aspects of mathematical thinking. Having technical skills at one's fingertips will allow students to more easily focus on the important concepts of calculus without being distracted by algebraic calculations and other similar details. With this in mind, students should at the conclusion of the course be able to demonstrate proficiency with the following:

- Simplifying algebraic expressions
- Solving equations reducible to linear, quadratic, higher-degree polynomial equations
- Solving equations involving trigonometric, logarithmic, or exponential expressions
- Solving inequalities
- Graphing lines, parabolas, absolute value functions, circles and semi-circles, trigonometric and inverse trigonometric functions, logarithmic functions, and exponential functions
- Proving trigonometric identities

COURSE COMPONENTS

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| Online Readings & Videos | Notes, tutorial videos and problem sets can be found on the Hawkes Website (see link above). Students are expected to read the assigned notes, watch the relevant videos, and complete certification BEFORE the topics are discussed in class. The goal of reading ahead is for students to gain an understanding of the questions and the problems to be solved and to become familiar with new vocabulary. It will also allow the time spent in class to be more focused on student questions about the material and on actively reinforcing the concepts learned. |
| Homework | <p>Homework will be assigned weekly. Students should expect to spend at least 2 productive hours of study for each class session, or about 6 to 8 hours per week. Students are encouraged to keep a thorough and organized set of notes and worked homework problems for the course.</p> <p>Students are also encouraged to ask questions of the instructor about any problems with which they struggled in these assignments – either at appropriate times during class or during the instructor’s office hours. Homework exercises usually will not be collected but are for the benefit of the student. That said, students should expect quizzes and in-class contributions that count towards their final grade that are based on the homework.</p> |
| Quizzes | <p>There will be weekly quizzes typically on problems similar to those seen in homework previously assigned. These quizzes may be announced or unannounced, although the latter is more likely. Students will not be allowed to make up quizzes missed due to ANY absence.</p> <p>Students have the opportunity to drop the lowest 4 quiz grades if they complete the coursera course, https://www.coursera.org/learn/learning-how-to-learn. The coursera course is free (select the free option) and contains 4 modules. For each module completed, students can drop a low quiz grade if they send me a screen shot of their quiz grade for each module.</p> |
| In-Class Contributions | <p>Students will occasionally be randomly called upon to present (for credit) solutions to problems from the Hawkes website, to the rest of the class. Students should be aware – given the unique nature of these presentations, students that are selected to present, but happen to be absent that day, will not be given the opportunity to make up this work.</p> <p>The famous mathematician Carl Friedrich Gauss said the purpose of calculation is insight. Insight is an understanding into why things work the way they do. This should be the goal of both working out problems and explaining their solutions.</p> <p>To that end, whenever they are working a problem, <u>students should know why each step is correct and why each step was the right step to take.</u> Note, this is more than knowing that each step is correct. Students should expect that the instructor or peers will occasionally ask them during their presentations how they know a particular step in their solution was both a legitimate and good step to take, and be prepared to answer these questions.</p> |

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| Exams | There will be three closed book, in-class exams. Examinations will be based on material presented in-class and problems done in class or on homework. All exams are cumulative in nature in so much as previous skills are often used in combination with new material. These exams will be announced a week in advance. |
| Final Exam | There will be a comprehensive final exam. The final exam will be required for everyone. |

GRADING

Students' grades will be computed by one of the two schema presented below. The **final grade** will be determined in whichever of the following two ways produces the highest grade:

| | Option A | Option B |
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| Quizzes | 10% | 10% |
| In-Class Contributions & Certification | 10% | 10% |
| Lowest Exam | 18% | 10% |
| 2 Exams | 36% | 36% |
| Final Exam | 26% | 34% |

Grade Assignment

Letter grades will be given in accordance with the following: A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%; F: 0-60%. Letter grades of A-, B+, B-, C+, C-, D+, and D- may be given for percentages near these cutoffs at the discretion of the instructor.

COURSE POLICIES

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| Websites & Email | Announcements, homework assignments, corrections, hints for problems, and other material will be posted on Canvas. Students are also expected to check their Emory email address, canvas, and hawkes websites regularly to obtain course related information. |
| Calculators & other Devices | NO calculators or other devices (e.g., cell phones, iPads, etc.) will be allowed on exams or quizzes. All written solutions must be legibly written and sufficiently justified to receive full credit. |
| Attendance | <p>Students are responsible for any information given out in class. If a student knows ahead of time they will not be in class, please make arrangements to find out what you missed. Again, exams will be based on material presented in-class, in text, and in homework, and there are no make-up quizzes or in-class contributions (which constitute a significant portion of students' grades). Therefore it is in students' best interest to attend every class and take detailed notes.</p> <p>The instructor will request to dismiss students from the course with 6 or more absences. Three tardies will count as an absence. A removal from the course due to excessive absences will result in a WF (withdraw failing) for the semester, which will be calculated into the GPA as an F. A student removed from a course for excessive absences may impact their ability to graduate on-time, keep their F-1 visa, keep housing privileges, and/or keep their financial aid.</p> |

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| Written Style | <p>Expressing complete thoughts and arguments require complete sentences. In mathematics, where clarity of thought is paramount, this is no less true. Granted, with mathematical symbols one can write these sentences very efficiently – but they are sentences nonetheless. Consider “$1 + 1 = 2$”. This is a complete sentence. (It has a subject “$1 + 1$”, verb “$=$” and predicate “2”)</p> <p>To this end, written work in this class should be in complete sentences. One should use mathematical symbols wherever appropriate. Student work should also be neat and orderly to be intelligible. With all honesty, “clean style helps to clean up messy thinking.”</p> <p>To emphasize the importance the instructors attach to good style when writing mathematics, written work in this class (exams & quizzes) will be graded not only on the correctness of the calculations shown, but also on the quality of their presentation.</p> |
| Make Up Tests & Homework | <p>Students are expected to be present for all scheduled tests. Any conflicts should be brought to the instructor’s attention as soon as possible. If a legitimate reason exists for missing a test – as determined by the instructor – then the test must be taken prior to the regularly scheduled date. In the unusual circumstance where taking the test early is not possible, students should be aware that any make-up tests given will be designed to be more difficult to offset the additional time given for study. The final exam cannot be rescheduled.</p> <p>Late homework will be excepted for a penalty.</p> <p>Students must provide written documentation in advance of any special accommodations required for testing (or for any other activities). This includes additional time or other needs.</p> |
| Appealing grade | <p>a If you wish to appeal a grade, you must submit the reasons in writing explaining why you feel your grade is incorrect along with the original work in dispute so that the request may be reviewed carefully. All appeals must be submitted to the instructor within ONE week of the date the items are first returned to the CLASS. After the deadline, all grades are final. Failure to pick up items before the deadline is an automatic forfeit of your rights to contest the grade.</p> |
| Academic Integrity | <p>THE HONOR CODE OF OXFORD COLLEGE APPLIES TO ALL WORK SUBMITTED FOR CREDIT IN THIS COURSE. TO RECEIVE CREDIT FOR WORK SUBMITTED YOU MUST PLACE YOUR NAME ON IT. BY PLACING YOUR NAME ON SUCH WORK, YOU PLEDGE THAT THE WORK HAS BEEN DONE IN ACCORDANCE WITH THE GIVEN INSTRUCTIONS AND THAT YOU HAVE WITNESSED NO HONOR CODE VIOLATIONS IN THE CONDUCT OF THE ASSIGNMENT.</p> |
| Religious Holidays Arrangements | <p>Instructors are encouraged, not required, to accommodate students’ academic needs related to religious holidays. Please make every effort to negotiate your religious holiday needs within the first two weeks of the semester; waiting longer may compromise your instructor’s ability to extend satisfactory arrangements. If you need guidance negotiating your needs related to a religious holiday, the College Chaplain, Rev. Lyn Pace, ppace@emory.edu, Candler Hall 202, is willing and available to help. ★★ Please be aware that Rev. Pace is not tasked with excusing students from classes or writing excuses for students to take to their professors. Emory’s official list of religious holidays may be found at www.religiouslife.emory.edu/faith_traditions/holidays/html.</p> |

Students Differing Abilities **with** If you have a documented disability and have anticipated barriers related to the format or requirements of this course, or presume having a disability (e.g. mental health, attention, learning, vision, hearing, physical or systemic), and are in need of accommodations for this semester, we encourage you to contact the Office of Access, Disability Services, and Resources (ADSR) to learn more about the registration process and steps for requesting accommodations.

If you are a student that is currently registered with ADSR and have not received a copy of your accommodation notification letter within the first week of class, please notify ADSR immediately by emailing Megan Bohinc at ADSR0xford@emory.edu. Students who have accommodations in place are encouraged to coordinate a face to face meeting with your professor, during the first week of the semester, to communicate your specific needs for the course as it relates to your approved accommodations. All discussions with ADSR and faculty concerning the nature of your disability remain confidential.

For additional information regarding ADSR, please visit the website: equity.emory.edu/access.

TIPS FOR SUCCESS

- While collaboration in learning the material is encouraged, each student should be sure that ultimately he or she can solve problems unaided by notes, the textbook, a calculator, or other people.
- In general the student should expect to study at least six good hours per week in addition to time spent reviewing for tests.
- Tests are performances, similar to those by athletes, musicians, and dancers. Students should prepare for them in similar ways – starting with practicing for them weeks in advance.
- Success in this course will require diligence and hard work. Students should be sure to keep up with the assignments and to attend class. Students encountering difficulties with the material should talk to the instructor as soon as possible. They should not wait to do so until the week of a test.
- Students may always ask the instructor any question about an assignment. The instructor will answer at his or her discretion.