

# MAC 2233: Survey of Calculus

## COURSE GUIDE

### Spring 2017

## Contact Information

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Course information is updated in CANVAS,

<http://elearning.ufl.edu/>.

When emailing Mrs. Smith, Dr. Harrington or Ms. Trainor, BE SURE to include your section number in the body of your email.

**MAC 2233**  
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## MAC 2233 Calendar, Spring 2017

Monday	Tuesday	Wednesday	Thursday	Friday
		Jan 4 Lecture 1	5	6 Lecture 2
9 Lecture 3	10 MyMathLab Precalculus Assignment*	11 Lecture 4	12 MyMathLab Homework 1*	13 Lecture 5
16 <b>MLK Day No Class</b>	17 MyMathLab Quiz 1*	18 Lecture 6	19 MyMathLab Homework 2*	20 <b>Deadline to drop back to MAC 1140</b> Lecture 7
23 Lecture 8	24 <b>Quiz 2*</b>	25 Lecture 9	26 MyMathLab Homework 3*	27 Lecture 10
30 Lecture 11	31 <b>Quiz 3*</b>	Feb 1 Lecture 12	2 MyMathLab Homework 4*	3 Lecture 13
6 <b>Quiz 4* REVIEW</b>	7 <b>EXAM 1**</b>	8 Lecture 14	9 MyMathLab Homework 5*	10 Lecture 15
13 Lecture 16	14 <b>Quiz 5*</b>	15 Lecture 17	16 MyMathLab Homework 6*	17 Lecture 18
20 Lecture 19	21 <b>Quiz 6*</b>	22 Lecture 20	23 MyMathLab Homework 7*	24 Lecture 21
27 Lecture 22	28 <b>Quiz 7*</b>	Mar 1 Lecture 23	2 MyMathLab Homework 8*	3 Lecture 23, part II
March 6 – 10 <b>Spring Break: No Class</b>				
13 Lecture 24	14 <b>Quiz 8*</b>	15 <b>REVIEW</b>	16 <b>EXAM 2**</b>	17 Lecture 25
20 Lecture 26	21 MyMathLab Homework 9*	22 L26, Part II	23 <b>Quiz 9*</b>	24 Lecture 27
27 Lecture 28	28 MyMathLab Homework 10*	29 Lecture 29	30 <b>Quiz 10*</b>	31 Lecture 30
April 3 Lecture 31	4 <b>HW, Quiz11*</b>	5 <b>REVIEW</b>	6 <b>EXAM 3**</b>	7 <b>UF Drop Deadline</b> Lecture 32
10 Lecture 33	11 MyMathLab Homework 12*	12 Lecture 34	13 <b>Quiz 12*</b>	14 L34/L35
17 L35/REVIEW	18 MyMathLab Homework 13*	19 <b>Quiz 13* REVIEW</b>	20 <b>Reading Day No Class</b>	21 <b>My Math Lab Homework Due*</b>
<b>FINAL EXAM: Tuesday, April 25, 3:00 – 5:00PM</b>				

**\*My Math Lab Assignments and Quizzes must be done by 11:59PM.**

**\*\*Testing Times: 8:30-10:00 PM. Locations posted in CANVAS.**

## 2. INTRODUCTION

**2a. COURSE CONTENT.** MAC 2233 is the first in the two semester sequence MAC 2233 and MAC 2234 surveying the important ideas of calculus but emphasizing its applications to business, economics, life and social sciences. The course reviews important precalculus topics: basics of functions and graphing, specific functions and their applications as models (linear, quadratic, rational, exponential and logarithmic) as well as calculus: limits, differentiation, applications of the derivative, introduction to integration and its applications including area.

A minimum grade of C (**not**  $C^-$ ) in MAC 2233 satisfies three credits of the university General Education quantitative requirement.

**2b. PREREQUISITES.** MAC 2233 assumes that you have essential precalculus skills necessary to succeed in calculus. This course does not cover trigonometry.

To enroll in MAC 2233, you must have earned a grade of C or better in MAC 1140, precalculus algebra, or MAC 1147, precalculus; earned calculus credit through an exam or earlier coursework; or have taken the ALEKS placement assessment and attained the required minimum score. You may take the ALEKS assessment through the Student Self Service homepage <https://student.ufl.edu>; click on Placement under My Online Services. For more complete information, check the page <https://student.ufl.edu/aleksinfo.html>. Note the following paragraph: “The Department of Mathematics encourages you to take the assessment even if you have met one of the prerequisites for MAC 2233. You may need to review your algebra skills and your placement assessment can provide information and specific areas for additional study.”

You can check with either an advisor in your college, the MAC 2233 course coordinator, or an advisor in the math department (the main office is Little 358) to be sure that you are eligible for MAC 2233.

The textbook for MAC 2233 begins with a short review of precalculus topics. **You should already be competent in working this material.** We **strongly recommend** that students who are having difficulty with this review material consider first taking MAC 1140, a three credit review of Precalculus Algebra. You may switch courses on Student Self Service during the drop-add period. In an agreement with the registrar’s office, you have one additional week to drop back to MAC 1140. **After the drop-add period, the paperwork to move back to precalculus MAC 1140 must be completed through the math department. The deadline is Friday, January 20 at 4PM.** See the course coordinator, Jane Smith, in Little 378 for details.

### 2c. REQUIRED MATERIALS.

**Textbook: Calculus with Applications, Eleventh Edition** by Lial, Greenwall and Richey. The text may be accessed as an ebook when you purchase the access code for **MyMathLab**, which is the publisher’s online homework system. **MyMathLab is required in order to do online homework and quizzes.**

There are two ways to purchase MyMathLab, which will be available January 4.

- You have the choice to “opt-in” to MyMathLab and the ebook through CANVAS once classes begin. This gives you MyMathLab access for a reduced price of \$100 which is added as a charge to your student account. This is the lowest priced option for purchasing MyMathLab and the ebook. **The link to opt-in will be provided through CANVAS once classes begin.**
- Students who do not “opt-in” through CANVAS by January 24 can purchase an access code to MyMathLab and the ebook through the UF bookstore. This is not the best option since the cost is \$128.50.

It is not required, but some students prefer a hard copy of the text. If so, you may purchase from the UF bookstore a loose leaf “print upgrade” version of the ebook for \$41.25. You may also be able to find a new or used copy of the text online. But note the following:

**DO NOT TRY to purchase your MyMathLab code online or directly from Pearson.** Those codes will not provide access to our MyMathLab course which is accessed through CANVAS.

If you are having problems accessing MyMathLab through CANVAS or if your access code is showing as invalid, please contact the publisher at: [allaccess@bsd.ufl.edu](mailto:allaccess@bsd.ufl.edu).

#### **Other Required Materials:**

- **Access to a working computer:** Online assignments and quizzes should be done on a computer, not your phone or tablet since there may be compatibility issues with MyMathLab. When you access MyMathLab, you will find a link to a browser check to make sure you have the correct settings to work in the system without technical issues.

You may contact the publisher using the following link if you are having difficulties:

<https://support.pearson.com/getsupport/s/contactsupport>

- **H-ITT Clicker:** We use the **H-ITT** class responder system (“clicker”) to allow students to participate in lecture. This system may also be accessed as an app on your smartphone. Information will be provided in class and on the MAC 2233 homepage in CANVAS.
- **Calculators:** For text and homework problems, a scientific calculator doing basic statistics is required. A graphing calculator or computer program such as Wolfram Alpha can be useful study and learning tools when used appropriately, but are not essential.

**Remember that calculus is a collection of concepts and ideas that are not mastered through calculator skills. No calculators are permitted on exams.**

**2d. COURSE CALENDAR.** Check the course calendar for evening exam dates and plan your schedule accordingly. You must be notify the course coordinator immediately if you have a conflict. See Section 4f.

**2e. E-LEARNING IN CANVAS.** UF's course management system CANVAS is accessed at <http://elearning.ufl.edu/>. Use your Gatorlink username and password to log in. All course information including course assignments, lecture notes, lecture videos, test locations and reviews are posted on this site. CANVAS provides a mail tool and discussion forum for communication.

All grades are posted in the CANVAS gradebook (except individual MyMathLab and Hitt points, which are accessed through those programs). You are responsible to verify that those grades are accurate. **You have one week after a score has been posted to resolve any grade concerns. You may contact Mrs. Smith, Dr. Harrington or the course TA. We will not consider any grading disputes nor make grade adjustments at the end of the semester. Be sure to save all original documents in case of grading questions.**

**Please note:** Important course information is clearly communicated through this syllabus, and the MAC 2233 CANVAS homepage. We will update with announcements both in lecture and through CANVAS. **Check regularly for announcements! These are also sent to your email so you can access on your smartphone.** Due to the volume of email your instructors receive, we cannot reply to each request for information that is already posted online. Always check those resources first!

There is a **discussion forum** in CANVAS. Please use this to post questions and to supply answers to your fellow students. Your instructors will check the discussion forum regularly and respond to questions as a way to communicate to the whole class.

**2f. LECTURES.** The lecture provides the main presentation of course material, and will follow as closely as possible the calendar and lecture outline provided in this guide. **Attendance in lecture is required.** You are responsible for learning lecture material missed due to an excused absence. Please be on time to class, and if you must leave early, sit in the back of the lecture hall. When your lecturer or a fellow student is talking to the class, please do not talk to your neighbor. Even in a large lecture hall this can disturb students around you so they cannot concentrate.

Students can print out the lecture noteshells from CANVAS. You may also purchase a hard copy from Target Copy Center. This will make it easier to take notes and to participate in lecture. Within a day after class, completed lecture notes will be available on CANVAS. Taped versions of the lectures will also be available in CANVAS.

**Important:** To make more time available in lecture for in depth problem solving and practice, some lecture notes will be presented in a video format which you will watch and take notes on before class. These prelecture videos will be available in CANVAS.

**Note:** The lecture notes and other documents posted on Canvas are in PDF format which requires the Acrobat Reader. You may download the latest version through <http://get.adobe.com/reader/>.

## 2g. FREE HELP and UF RESOURCES!

- **OFFICE HOURS.** Both the lecturers and the course teaching assistants have regular weekly office hours which will be announced in class and posted on the MAC 2233 homepage on Canvas. These are open hours; you do not need to make an appointment. If you have a class conflict with scheduled hours, you may make a separate appointment with your lecturer or TA. Office hours are NOT a time to reteach course material. If you must miss class, first review the lecture material from your text and class notes (available on Canvas as indicated above) and then bring specific questions to office hours.

- **TEACHING CENTER**, located in SE Broward Hall, is a tutorial service staffed by trained math and science students to provide help with your calculus questions and homework. Tutors will be glad to provide guidance on specific problems after you have attempted them on your own. You may want to attend different hours to find the tutors with whom you feel most comfortable. You can also request free one-on-one tutoring.

The math lab also offers a more structured tutoring program for MAC 2233, called **supplemental instruction**. A tutor, assigned specifically to MAC 2233, leads weekly help sessions and reviews. More details will be provided in lecture.

Your supplemental instructor through the Broward Teaching Center holds reviews on the evenings before each exam. The center also provides videos of review and sample test problems. Check the webpage, <https://teachingcenter.ufl.edu/>, for a map of the location, tutoring hours and test review dates and locations.

- The Little Hall Math Lab, located in LIT 215, provides free drop-in tutoring for math courses. More details will be posted on the MAC 2233 homepage in CANVAS.

**All students are encouraged to use the free help available through the Broward Teaching Center and the Little Hall Math Lab. Do not wait to get questions answered—we are here to help!**

- **OFFICE OF ACADEMIC SUPPORT** offers free one-on-one and small group tutoring to UF students. See <http://oas.aa.ufl.edu/programs/tutoring/> for details.

- **UF COUNSELING CENTER** provides information and workshops on developing Math Confidence. The center also offers counseling support in case of issues with academics, adjusting to the stress of college life, or personal challenges. Please use this resource before you get overwhelmed! You may also speak to Mrs. Smith, Dr. Harrington or an advisor in your college if you are having difficulties. You may contact the center at [www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/).

- **Private tutors:** If you feel that you need more individual help, you may obtain a list of qualified tutors for hire at <https://math.ufl.edu/>. Search for “tutors”.

**2h. SUCCESS.** Other than having a strong precalculus background, success in MAC 2233 depends largely on your attitude and effort. Attendance and participation in class is critical. It is not effective to sit and copy notes without following the thought processes involved in the lecture. For example, you should try to answer the questions posed by your lecturer. Students who do not actively participate have much more difficulty.

However, be aware that much of the learning of mathematics at the university takes place outside of the classroom. You need to spend time reviewing the concepts of each lecture **before** you attempt homework problems. It is also important to look over the textbook sections to be covered in the next lecture to become familiar with the vocabulary and main ideas before class. That way you will better be able to grasp the material presented by your lecturer. As with most college courses, you should expect to spend a **minimum** of 2 hours working on your own for every hour of classroom instruction (at least 6 hours per week).

It can also be very helpful to study with a group. This type of cooperative learning is encouraged, but be sure it leads to a better conceptual understanding. **You must be able to work through the problems on your own.** Even if you work together, **each student must turn in his or her own work, not a copied solution, on any collected assignments.**

**In studying calculus, you must be careful not to let a tutor, friend, or calculator “think” for you. Be sure that you can work problems completely on your own, without help, by the time of a quiz or exam.**

**USE THE RESOURCES AVAILABLE AS YOU STUDY!** We encourage you to seek help from your lecturer and course Teaching Assistants during office hours or by appointment in the case of a conflict or emergency. Each week our Supplemental Instructor will offer workshops for MAC 2233 students. We also encourage you to use the Broward Teaching Center and OAS for group and private tutoring. MyMathLab offers videos and other teaching aids.

**If you are having difficulty with calculus, do not get discouraged! See your lecturer or course TA right away when you have questions.**

Our hope is that through focused study and practice you will gain a real appreciation for the important concepts of calculus and their application. We want you to succeed in this class! But you must keep up with the course material and take the initiative to see us and get help in time, before you get too far behind. Students with a positive attitude who are intellectually engaged in learning the material will get the most from the course.

**2i. STUDENTS WITH LEARNING DISABILITIES.** Students requesting class and exam accommodations must first register with the Dean of Students Office Disability Resource Center(DRC), [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/). That office will provide a documentation letter to the student to present to the course coordinator, Mrs. Smith through the online system. This must be done as early as possible in the semester, **at least one week before the first exam**, so there is adequate time to make proper accommodations.



**2j. ACADEMIC HONESTY.** Remember that you committed yourself to academic honesty when you registered at the University of Florida. All students are bound to

### **The Honor Pledge**

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code.

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

**Academic Honesty Guidelines:** “All students are required to abide by the Academic Honesty Guidelines which have been accepted by the University. The academic community of students and faculty at the University of Florida strives to develop, sustain and protect an environment of honesty, trust and respect. Students are expected to pursue knowledge with integrity. Exhibiting honesty in academic pursuits and reporting violations of the Academic Honesty Guidelines will encourage others to act with integrity. Violations of the Academic Honesty Guidelines shall result in judicial action and a student being subject to the sanctions in paragraph XIV of the Student Code of Conduct.”

**The Mathematics Department expects you to follow the Student Honor Code. We are bound by university policy to report any instance of suspected cheating to the proper authorities. This includes clicker points submitted in lecture. Each student must enter his or her own response; clicking for another student is a violation of the Academic Honesty Guidelines and will be reported. Minimum penalty: zero for Class Participation Points.**

You may find the Student Honor Code and read more about student rights and responsibilities concerning academic honesty at the link [www.dso.ufl.edu/sccr/](http://www.dso.ufl.edu/sccr/).

In addition, we remind you that lectures given in this class are the property of the University/faculty member and may not be taped without prior permission from the lecturer nor used for any commercial purpose. Students found to be in violation may be subject to discipline under the Student Conduct Code.

### 3. TESTING

**3a. SEMESTER EXAMS.** During the semester, three tests will be given from 8:30 – 10PM on the dates shown on the calendar in this guide. These will be scored on a scale of 0 to 80 points and will consist of both a multiple-choice section and a free response, partial credit section (tearoff sheet).

**3b. FINAL EXAM.** A mandatory, comprehensive final examination will be given during the regularly scheduled exam time for MAC 2233 as shown on the calendar and the online Schedule of Courses. This two hour exam is scored on a scale of 0 to 100 and consists of multiple choice questions only (no tearoff sheet). The registrar's office determines which exam has priority in the case of a conflict.

**We allow the final exam score to improve your grade on one of the semester exams. That is, if your final exam grade is higher than the lowest of your three semester exam scores, its score, prorated to 80 points, will replace that lowest test.** For example, if your lowest semester exam score is 60/80 (75%), and you earn 80/100 (80%) on the final, the exam score of 60 will be replaced by 64(80% of 80) in the gradebook. If the final exam score is lower, however, the original semester test score will remain. Your final exam grade cannot be adjusted. The percent score for the final exam will not be replaced by any other score in this course.

#### **3c. IMPORTANT EXAM POLICIES.**

- The location of each exam will be announced in lecture and posted on Canvas in the week prior to the test.
- MAC 2233 requires that students take evening exams on the listed dates. There are no exceptions to this. Students with conflicts, including regularly scheduled classes, must make advance arrangements to be present at the test.
- **The following applies to all exams:**

(1) Students are responsible for material covered in lectures, reading assignments, and text problems. Questions will test mastery of concepts and include challenging calculation problems. **A command of related algebraic concepts is assumed** (see the Prerequisites, page 14, in this guide). Sample tests are available from the Teaching Center one week before each exam.

(2) Bring only the following to the exam:

- a. Number 2 pencil (or softer) for bubbling your scantron
- b. Ink Pen (To sign your test)
- c. Knowledge of your SECTION NUMBER and UFID
- d. Picture ID (UF Gator One card or driver's license) with a **legible signature**

**DO NOT BRING ANYTHING OF VALUE TO THE EXAM**, since all backpacks must remain at the front of the exam room during testing. Do not bring books or other aids; scratch paper is provided. Calculators are not permitted. **Cell phones and other electronic devices must be turned off and out of sight. If any such device rings, buzzes, or otherwise causes a distraction during the exam, your test will be considered to be compromised.**

(3) No student will be admitted to the test later than 15 minutes after its starting time, and no one will be permitted to leave the exam room until 30 minutes after the stated start time.

(4) You must take your exam in the test location assigned to you as indicated in CANVAS. The instructions for completing the answer sheet must be carefully followed. **The TEST FORM CODE and SPECIAL CODE, as well as your UFID and SECTION NUMBER must be encoded correctly and the test signed in ink for ID comparison. If not, you will lose 3 points from your exam total score.**

(5) An answer key will be posted on the MAC 2233 homepage in CANVAS within one day following each exam. To check your answers, record them on the test or scratch paper that you keep after turning in your scantron and tear off sheets.

(6) Your exam grade will be posted on CANVAS. You may pick up your graded tearoff sheets from the course Teaching Assistant during office hours. You have **one week** after the test scores are posted to see the course Teaching Assistant or coordinator if you have questions about your exam grading.

**See Section 4f for the Exam Conflict and Makeup Policies.**

## **GRADING AND COURSE REQUIREMENTS**

**4a. COURSE GRADE.** Your course grade is based on 470 points accumulated as follows:

12 MyMathLab assignments (4 points each)	48
10 MyMathLab quizzes (best 10 of 12, 5 points each)	50
Written work	9
Class participation points	33
3 semester exam scores*	240
Final exam	<u>100</u>
	<b>480</b>

\*The lowest exam score will be replaced with the final exam score, prorated to 80 points, if the final percent score is higher.

The total sum of points is your numerical score, which will be converted to a letter grade according to the following scale.

A (90% - 100%)	432 - 480 pts	C (67.1% - 72.08%)	322 - 345.99 pts
A <sup>-</sup> (86.25% - 89.9%)	414 - 431.99 pts	C <sup>-*</sup> (64.16% - 67.08%)	308 - 321.99 pts
B <sup>+</sup> (83.75% - 86.24%)	402 - 413.99 pts	D <sup>+</sup> (61.25% - 64.16%)	294 - 307.99 pts
B (80% - 83.74%)	384 - 401.99 pts	D (57.5% - 61.24%)	276 - 293.99 pts
B <sup>-</sup> (75.83% - 79.9%)	364 - 383.99 pts	D <sup>-</sup> (54.17% - 57.49%)	260 - 275.99 pts
C <sup>+</sup> (72.08% - 75.8%)	346 - 363.99 pts	E (less than 54.16%)	0 - 259.99 pts

**The course grade is determined by the number of points you earn, which the CANVAS gradebook converts to percents. There will be no additional curve in this course, and extra assignments for individual students to improve a grade are NOT possible.**

**\*NOTE** A grade of C<sup>-</sup> DOES NOT give Gordon Rule or General Education credit!

For those taking the S-U option: S [322 – 480 points] U [0 - 321 points]

Approval of the S-U option must be obtained from your instructor. The deadline for filing an application with the Registrar and further restrictions on the S-U option are given in the UF undergraduate catalogue.

A complete explanation of current grade policies, including withdrawals, is found in the catalogue: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**NOTE:** We will not review disputed points at the end of the semester. All grade concerns must be settled within one week of the return of the paper. You must retain all returned papers in case of any discrepancy with your course grade. We cannot correct mistakes in grading or recording of scores without the original document.

**4b. ONLINE HOMEWORK.** The online homework administered in MyMathLab is planned to reinforce learning and to provide practice of course material. Online homework assignments, worth 4 points each, will be posted twelve times during the semester. Your score on each assignment will count up to a maximum 48 points.

There will also be a review assignment in MyMathLab at the end of the semester to allow you to earn points lost due to technical difficulties or a missed assignment. You cannot earn bonus points by doing this assignment: the homework total will be capped at 48.

**You must earn 75% on each assignment before you can access the quiz on that material. However, once the homework due date has passed you may still work on any assignment to improve your grade and to review for exams. There is a 20% grade penalty for those problems completed after the due date. The final date to work on MyMathLab homework for credit is April 21 at 11:59PM.**

**There are no makeups or drops for online homework. Do not try to complete an assignment in one sitting; start early instead of waiting until the due date to avoid missing the deadline.**

**4c. ONLINE QUIZZES.** Twelve quizzes will be posted in MyMathLab to review each online assignment and to test your understanding of course material. **You must score a minimum of 75% on the corresponding MyMathLab assignment before you can take the quiz.** MyMathLab quizzes are open for at least 72 hours and are due as indicated on the course calendar and in CANVAS. You will have three attempts to take the quiz and 90 minutes for each attempt; the clock starts from the time you open your quiz. **Your top ten quiz scores will count for a total of 50 points.** There will be a bonus quiz available for extra credit to cover the last course material.

**DO NOT wait until the last minute to submit your quiz; we will not extend time for computer issues or MyMathLab server problems.**

**You may review your score including specific questions missed on any quiz after its due date. You can do this through the MyMathLab gradebook which is accessed on your MyMathLab homepage. You can also redo the quiz to help prepare for exams (but not for additional points).**

**4d. WRITTEN WORK.** It is important to carefully write out mathematics solutions. This helps you learn the steps involved and clarifies your thinking as you work through a problem. Each of the three semester exams has a tearoff section and is graded on the quality of your worked out solution. To give you practice on this we will collect 4 written assignments in lecture or through CANVAS. Each will be graded on a scale of 0 - 3 points and we will count the top 3 scores for a total of up to 9 points. Details will be given in class.

**NOTE:** An important part of each assignment is reading and understanding the concepts of the lecture and text material. You should study the reading assignment from the text and any prelecture videos **before** the material is presented in lecture. After class, you should review these along with your lecture notes before you begin working problems. Calculus material is cumulative, so you should complete each assignment as thoroughly as possible before your next class.

If you are having difficulty with course concept or assignments, you may seek help from your lecturer or course TA during scheduled office hours as well as the tutors at the Broward Teaching Center (see Sections 2h and i in this guide). Be sure to start problems early so you have time to get your questions answered! The multimedia section of MyMathLab also provides valuable resources, including a solutions manual for the odd problems in the textbook.

You will need a scientific calculator for homework. Some problems may also suggest the use of a graphing calculator to help you visualize important concepts and to reinforce the mathematical processes involved. The use of a calculator is recommended but not required. Remember we do not allow calculators on exams.

**Late work will be accepted only according to the makeup policy in section 4f.**

**4e. CLASS PARTICIPATION POINTS.** Up to 33 points may be earned by attendance in lecture and completing problems in class (without advance notice). Points will be collected through the use of the H-itt course responder system (clicker) as announced in lecture, or you may be asked to work out problems on paper. More details will be available in class and on the course home page. **YOU MAY NOT TURN IN WORK FOR A STUDENT WHO IS NOT IN CLASS** (see section 2k). **There will be extra points available to account for an occasional absence or technical difficulties with your clicker. However, total points will be capped at 33.**

Following university policy, you may expect a grade penalty for attending fewer than 75% of your classes. You may also lose the opportunity to earn bonus points.

**NOTE:** Homework, quizzes and class participation points account for 140 points of the total to be earned in the course. They are a significant part of your grade (29%), to reflect their importance in understanding course concepts.

**4f. MAKEUP POLICIES.** All makeup work must be approved by the course coordinator, Mrs. Smith, during office hours. You must provide documentation of your absence.

• **Exam Time Conflicts:** The **UNIVERSITY OF FLORIDA DURING TERM ASSEMBLY EXAM POLICY** states:

“Exams may be held Monday – Friday from 8:20 – 10:10PM (periods E2–E3) for the fall and spring terms. If other classes are scheduled during an exam time, instructors must provide make-up class work for students who miss class because of an assembly exam. If two exams are scheduled at the same time, assembly exams take priority over time-of-class exams. When two assembly exams conflict, the higher course number takes priority. Instructors giving make-up exams will make the necessary adjustments.” See the complete policy at (<https://catalog.ufl.edu/ugrad/current/regulations/info/exams.aspx>).

If MAC 2233 is the lower course number, students must inform Mrs. Smith in person at least ONE WEEK in advance of the exam date so that appropriate accommodations can be made. Otherwise it may not be possible to reschedule.

You may also take the conflict exam if you are participating in a UF sponsored event during the regular exam time. You must provide documentation of the conflict to the course coordinator in person at least ONE WEEK in advance of the exam date to sign up.

The conflict exam will be offered from 6:40 – 8:25 on the same night as the regular exam. You must sign up with Mrs. Smith as indicated above. You will not be permitted to leave the exam room before 8:25PM.

• **Makeup Exams:** If you are participating in a UF sponsored event or religious observance\*, you may make up an exam only if you make arrangements with Mrs. Smith in LIT 378 at least ONE WEEK PRIOR to the event. You must present documentation of a UF sponsored event.

If illness or other extenuating circumstances cause you to miss an exam, contact the course coordinator immediately (no later than 24 hours after the exam) by email. Then, as soon as possible after you return to campus, bring the appropriate documentation to the course coordinator in her office to schedule a makeup exam. You will be permitted to take this exam if you have received at least half of the class participation points available so far.

- **Makeup Online Homework and Quizzes:** With the extended availability of online homework, and the 72 hour window to take each quiz along with two drops, we do not provide makeups for online work. **Exception:** if you must miss class for an extended period of time due to illness or a family emergency, see Mrs. Smith to discuss an extension of the due date for online assignments.

- **Makeup Homework Collection:** If you have an excused absence, are observing a religious holiday\*, or are participating in a University of Florida sponsored event, you may turn in a written assignment within 48 hours of its due date. Bring your documentation and the assignment to Mrs. Smith in her office, LIT 378.

- **Makeup Class Participation Points:** There are no makeups for class participation points. We collect extra points to allow for technical difficulties with your clicker or occasional absence from lecture.

\*We allow makeup work if you must miss an exam or written homework collection because of a religious holiday. You do not need to provide documentation. However you must notify the course coordinator of the dates you will be out of class **within the first three weeks of the semester** for this accommodation.

**4g. INCOMPLETE GRADE and FINAL EXAM.** A student who has completed a major portion of the course with a passing grade but is unable to complete the final exam or other course requirements due to illness or emergency may be granted an incomplete, indicated by a grade of “I”. This allows the student to complete the course within the first six weeks of the following semester. The student must contact the course coordinator before finals week to sign an incomplete contract, and must provide documentation of the extenuating circumstances preventing him or her from taking the final exam. The form is available at <http://clas.ufl.edu/forms/incomplete-grade-contract.pdf>

**The grade of “I” is never used to avoid an undesirable grade, and does not allow a student to redo work already graded or to retake the course.** See the official policy at <http://www.math.ufl.edu/departement/incomplete-grades/>

**NOTE:** Missing a final exam due to negligence results in a **minimum** 10-point penalty.

**5. COURSE EVALUATION** The university asks students to provide feedback on their courses by completing an online evaluation at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two to three weeks of the semester; you will be notified of exact dates. We value your input to help us improve the quality of instruction.

**Be sure to check the Prerequisite concepts and formulas on the next pages.**

## PREREQUISITES FOR MAC 2233

This course assumes that you have a sound precalculus background. The following is a summary of some important concepts used in solving calculus problems. The textbook provide a more complete review of these essential topics.

### ALGEBRA

1. Basic Geometric Formulas: ( $b$  = base,  $l$  = length,  $h$  = height,  $w$  = width)

Triangle: area =  $\frac{1}{2}bh$

Circle: area =  $\pi r^2$ ; circumference =  $2\pi r$

Parallelogram: area =  $bh$

Rectangular box: volume =  $lwh$

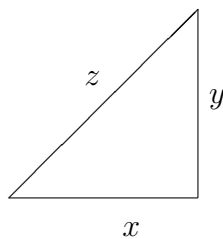
Sphere: volume =  $\frac{4}{3}\pi r^3$ ; surface area =  $4\pi r^2$

Right circular cylinder: volume =  $\pi r^2h$ ; surface area =  $2\pi rh + 2\pi r^2$

Right circular cone: volume =  $\frac{1}{3}\pi r^2h$ ; surface area =  $\pi r\sqrt{r^2 + h^2}$

Facts about similar triangles

Pythagorean theorem: for the right triangle below,  $x^2 + y^2 = z^2$





2. Basic Functions and their graphs:

$$f(x) = x; f(x) = x^2; f(x) = x^3; f(x) = |x|; f(x) = \sqrt{x}; f(x) = 1/x;$$

$$f(x) = b^x, b > 0 \text{ and } b \neq 1, \text{ such as } f(x) = 2^x$$

3. Factoring:

$$x^3 + y^3 = (x + y)(x^2 - xy + y^2); x^3 - y^3 = (x - y)(x^2 + xy + y^2); \text{ etc.}$$

4. Fractions:  $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ , etc.

5. Exponents: For appropriate values of  $x$ ,  $m$  and  $n$ ,

$$x^n y^n = (xy)^n; x^n x^m = x^{n+m}; \frac{x^n}{x^m} = x^{n-m}; (x^n)^m = x^{nm}$$

6. Roots, including rationalizing the denominator or numerator (for appropriate values of  $x$ ,  $m$  and  $n$ ).

$$\sqrt[n]{x} = x^{\frac{1}{n}}; x^{-n} = \frac{1}{x^n}, \text{ etc.}$$

7. Inequalities and absolute values:

$$|x| \leq a \quad -a \leq x \leq a; \quad |x| > a \quad x > a \text{ or } x < -a$$

8. Equation solving: Finding solutions for  $x$  if

$$ax + b = 0; ax^2 + bx + c = 0; \text{ etc.}$$

9. Logarithms: For a given base  $a > 0$ , if  $x > 0$ ,  $\log_a x = y$  if and only if  $x = a^y$

If  $m > 0$  and  $n > 0$ , then

$$\log_a (nm) = \log_a (n) + \log_a (m) \quad \log_a \left( \frac{n}{m} \right) = \log_a (n) - \log_a (m)$$

$$\log_a (n^c) = c \log_a (n)$$