# MAC 2312: Calculus II(Traditional) Fall 2019

COURSE COORDINATOR	INSTRUCTOR	INSTRUCTOR
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Lecture: MWF5 CAR 100	MWF7 AUD 200	MWF8 AUD 200
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**Text:** There are no required texts for this course. For anyone who wishes to study from a textbook, we suggest this online open source <u>textbook</u>. Additionally, you may find any edition of Calculus Early Transcendentals by Stewart, or Rogawski, helpful.

**Lecture Shell:** You may purchase a printed packet from Target Copy on 1412 W. University Ave. (Not the store Target). The cover is 'new life in pebbles'. You may also print it off from Canvas in the Modules tab under <u>Course Resources</u>. There is <u>limited free printing</u> provided by the UF student government.

**Prerequisites:** MAC 2311, Strong algebra, Trigonometry, and Calculus 1 skills. There is a prerequisite homework packet that needs to be completed and submitted by the due date.

**Grade Issues and the One Week Policy:** Once a grade is posted in Canvas, you have one week to contest the grade and resolve any grade disputes with your instructor. Once this one week passes, there are no further disputes. In particular, there is absolutely no grade disputes at the end of the semester.

**Attendance:** Required in both lecture and discussions.

**Required Material:** See 1.2.

**Course Management System: CANVAS** 

Written Homework: See 3.1.

**UF Free Tutoring Service:** Broward Teaching Center

# **Grades**:

Written Homework (8x3=24, +1 if turn in 8 sets)	25 (9.8%)
Quiz (drop 1, 5x5=25)	25 (9.8%)
Class Activity (H-ITT) (capped at 25)	25 (9.8%)
3 Unit Exams(40/ea), 1 Final(60)	180 (70.6%)
Total points:	255 (100%)

<b>A</b> (90% – 100%)	<b>C</b> * (70% – 74%)
A-(87%-90%)	<b>C</b> - (67% – 70%)
<b>B</b> + (84% – 87%)	<b>D</b> + (64% – 67%)
<b>B</b> (80% – 84%)	<b>D</b> (60% – 64%)
<b>B</b> – (77% – 80%)	$\mathbf{D} - (54\% - 60\%)$
<b>C</b> + (74% – 77%)	<b>E</b> (< 54%)

# 2. COURSE DESCRIPTION

MAC 2312 is the 2<sup>nd</sup> semester in the three-semester sequence MAC 2311, MAC 2312, MAC 2313 covering the basic calculus. The course begins where MAC2311 left off at the integration techniques. This is followed by a study of infinite sequences and series, calculus of parametrized curves, polar coordinates, and closed with applications of definite integrals.

#### 2.1 **PREQUISITES**

MAC2311. We assume that you have strong precalculus (both Algebra and Trigonometry) and calculus I skills, which are necessary to succeed in this course. A **review homework set**, designed to help you refresh your knowledge on these topics, is to be submitted. A brief review on Limits and L'Hospital's Rule is also provided. Students are responsible for reviewing this material by the end of the second week. We strongly recommend that students who are having difficulty with these core skills and students whose last math was years ago, consider reviewing them right away before we get deeper into the course (or take MAC2311 if you have not already done so at UF). An AP CalcBC class may not have prepared you adequately for this class. You may switch courses at ONE UF, during the drop-add period.

#### 2.2 COURSE MATERIALS

There are no required texts for this course. If you wish to study from, or reference a textbook, we suggest this open source online <u>textbook</u>. We will use the online 'Guided Learning Calculus 2' (GLC2) created by the course coordinator. Its purpose is to give students the extra resource of worked out examples and the practice through guided learning. More details will be given in Discussion.

Please take time to engage in <u>regular</u> study of the above resource and lecture material. They will form a foundation for you as you begin to synthesize your understanding before you start to tackle challenging homework problems and prepare yourself for exams.

**Lecture Notes Shell:** It is important that you bring a paper copy of the lecture note shell to each lecture. This will make it easier to take notes and to follow the lecture. Students can obtain the printed note shell from the Target Copy Center (NOT the store Target) at 1412 W. Univ. Ave., (cover is a 'new life in pebbles'), or print them out from <u>Course Resources</u> in Canvas along with free printing information.

**H-ITT Clicker:** Attendance is required in lecture and in discussion. Students will answer questions in lecture using the H-ITT clicker. You may find more information about the clicker in Canvas. We want you to engage and challenge yourself in class and ask questions. We have a comfortable class environment and in-class engagement by all is what makes this class awesome! Be ready to participate.

#### 2.3 ONLINE RESOURCES

**E-Learning Canvas**, All students are expected to check <u>E-Learning</u> on a regular basis. Please ensure that you have access to this service and have the alerts turned on in Canvas so that you get timely course updates. Important course information including your grade, syllabus, calendar, assignments, <u>GLC2</u>, office hours, test locations, mail tool, free help information...etc. will be housed in Canvas.

**Please note**: Important course information is clearly communicated in this syllabus, in discussion, inclass, and in Canvas Announcements. Due to the volume of emails received, I cannot reply to each request for this well publicized information. If you cannot find your answer in the resources above, ask your TA first, then your instructor. If you must email, be sure to write down your **TA's name** and **Lecture Period** in the "Subject" to help put your email in the correct context in order to receive a reply.

#### 2.4 ONE WEEK POLICY

Please be aware of the **One Week Policy**: Your performance and success are important to us, so please visit your TA to discuss and resolve any grade concerns. Once a grade is posted in Canvas, you have one week to contest and resolve any grade disputes with your TA. Once this one week passes, there are no further disputes. In particular, there is absolutely no grade disputes at the end of the semester.

#### 2.5 CALCULATORS

A graphing calculator like <u>Desmos</u>, computer program like <u>Wolframalpha</u>, and the app <u>GeoGebra</u> are useful study and learning tools when used appropriately as you learn the material, **but they are not essential**. Calculus is a collection of concepts and ideas that are not mastered through calculator skills. **No calculators are allowed on quizzes or on exams**.

#### 2.6 LECTURES, ATTENDANCE

This class meets for four 50-minutes class periods per week. Lectures will be used to introduce you to the fundamental concepts and theory of calculus and will follow as closely as possible to the lecture outlines and calendar provided in Canvas. **Attendance in all four class periods is required**. Students are responsible for learning lecture material missed due to an absence. Come to class ready to participate. Attend class with readiness and an eagerness to learn and be ready to participate! (see sec. 7)

#### 2.7 **DISCUSSION**

Discussion class gives you a valuable opportunity for open discussion of lecture material and homework problems in a smaller class setting. Your homework will be uploaded in Canvas and graded by your TA. More submission information is given in first discussion. Consult your TA if you have any questions about homework and recorded grades. Your attendance is required and you must notify your TA within the **first three weeks** if you will be missing a discussion due to religious observances or participation in UF activities. See your TA **immediately** if you have court ordered obligations before you miss a discussion. Notify your TA as soon as possible if severe illness or extenuating circumstances prevent you from attending discussion. No other absence arrangement is accepted without following the above policy.

# 2.8 COURSE EVALUATION

Students are expected to provide feedback on the quality of instruction in this course by completing <u>online</u> <u>evaluations</u>. Students will be given university-wide information when the evaluations are available. Summary <u>results</u> of these assessments are available to students.

#### 3. COURSE ASSIGNMENTS AND GRADING

#### 3.1 WRITTEN HOMEWORK:

We assign 8 written homework sets, 3 points each, with an additional point added to your last set if you do not miss any submissions, for a possible total of 25 points. Scan your completed work and upload a single pdf file <u>before</u> the deadline. In your submitted work, we want to see your answer as well as the process that lead to that answer. This is where students get the opportunity to practice writing down <u>complete</u> math solutions thoroughly and logically. Go to the <u>Assignments</u> tab in Canvas to access the homework. Homework questions reside in <u>GLC2</u>.

**GLC2:** What is GLC2 and Why GLC2? Quite often, students can suffer from the lack of opportunity and ability to write mathematics and that they do not have enough resources when it comes to worked-out examples. As a result, I created the **GLC2** in Google in hope to *give students a valuable resource to guide them through the course* successfully. The flow of the structure of GLC2 is as follows: Students will

- **LEARN** from the lecture,
- **REVIEW** the Notes and Annotated Examples in GLC2, (\*1)
- **PRACTICE** by working out more examples in GLC2. (\*2)
- TEST their understanding by taking the Quiz and the Practice Exams in GLC2. (3)

You will find a *brief summary* of each topic covered follow by *examples* with annotated solutions in (\*1) and, more *examples* for you to practice in (\*2). After you have worked out all the examples, you should be ready to test your understanding by taking the *Quiz* and the *Practice Exams in* (3). Practice Exams cover many topics, you can start as early as you complete the first topic in lecture.

Do not skip the important steps in (\*) as this is what helps you to synthesize your understanding first before you do the homework comfortably. It may be helpful to keep a weekly journal entry with deep thought on what skills you have learned on each topic, and how to implement what you learned in class in developing solutions to the challenging questions in homework and exams. Review your entries frequently.

**Xronos**: A UF-made online homework system, is free of charge and will be explained in the first discussion. It provides extra problems if you like to practice more but it's not required for grades. Any Xronos (technical) issues should be directed to Mr. Nowell at <a href="mailto:jnowell@ufl.edu">jnowell@ufl.edu</a>, but copy your TA, your instructor, and the coordinator <a href="mailto:chui@ufl.edu">chui@ufl.edu</a> in your emails.

#### **NOTE:**

- The purpose of homework is to practice problems in order to master the material before your exams. Complete them daily. Completing them after exams is neither helpful to your learning nor your grades.
- The entire calculus 2 curriculum is available to you from day one so you may get ahead by learning the material and working out homework problems before the due dates. Do not try to complete a homework set in one sitting; start early instead of waiting until the due date.
- We encourage study groups, but your submitted work should be *your own work*, not group work. If your work is copied from someone else, a grade of 0 is assigned and may be sent to the honor court

- (this applies to both parties) whether or not you intended to let others copy your work. So, discuss solution strategy, but treat your work privately.
- Due date is not Do date. All homework is due at 11:59pm, but you should not wait until 7 pm or after to submit your work. If you wait and run into any submission/internet issues, you are out of luck. You must also verify your work is submitted successfully before 7 pm. If not successful, then you still have time to resolve any issues and have it submitted successfully in time. Any late submission is subject to a 20% late penalty per day it's late. A 10% grade is possible after 5 days late.

# 3.2 QUIZ: No makeup on the first missed quiz for any excuse. You must have documented, UF acceptable excuses to make up consequent missed quizzes. A maximum of 2 quizzes may be made up.

There will be six quizzes given in Discussion. The lowest quiz is dropped. Each quiz is worth 5 points.

#### 3.3 CLASS PARTICIPATION and YOUR ROLE as AN ENGAGING STUDENT: No makeups

Attendance in lecture is required. Students will be using a H-ITT clicker in lecture. Students must register their clicker by the deadline specified in the course calendar. Failure to do so will result in a grade penalty. If your clicker is not registered by clicker alert day, you will receive a 0 for your H-ITT point for the semester. A weekly clicker grade report will be sent to your UF email <u>after</u> your clicker is registered. *It's students' responsibility to verify the scores and fix any clicker issues immediately.* Up to **25 points** may be earned by *participating* in class using the clicker. There are no makeups, *however there will be a small excess of clicker points* given over the course of the semester to compensate for occasional absence, mechanical failures, forget to bring the clicker,... etc. A student is not allowed to respond in class for anyone else but him/herself; a violation of this policy is considered cheating and will be handled according to the standard university honor code policy. Following university policy, you may expect lost letter grade for attending fewer than 75% in each of the lecture and discussion classes. In addition, you will lose the opportunity to earn additional points (if available) at the end of the semester.

#### 3.4 **EXAMS:** No Drops

There will be 3 unit exams and 1 cumulative final exam, all mandatory, no drops. The unit exams begin at 8:20PM and consist of multiple choice and free response questions; the final exam starts at 12:30PM but consists of multiple choice only. See Calendar for details. Exam location will be posted in Canvas one week prior to the exam. All exams must be taken at the assigned date and time and in the location for your section. Bubble your scantron carefully because there are penalties for incorrect bubbling and/or taking your exam at the wrong location.

#### 3.5 GRADING SCHEME

Your course grade is determined as follows:

Written Homework (8x3=24, +1 if all 8 sets) 25
Quiz (drop 1, 5x5=25) 25
Class Activity/Attendance (25) 25
3 Unit Exams(40/ea)+ 1 Cumulative Final(60) 180
Total points: 255

$\mathbf{A} \ (90\% - 100\%)$	<b>C</b> * (70% – 74%)
A-(87%-90%)	<b>C</b> - (67% – 70%)
<b>B</b> + (84% – 87%)	<b>D</b> + (64% – 67%)
<b>B</b> (80% – 84%)	<b>D</b> (60% – 64%)
<b>B</b> – (77% – 80%)	$\mathbf{D} - (54\% - 60\%)$
<b>C</b> + (74% – 77%)	<b>E</b> (< 54%)

**Note**: A grade of C, not C –, gives University General Education credit!

For those taking the 'S – U' option: S [ > 70%], U [ < 70%].

The 'S-U' option must be approved by the registrar's office. The deadline for filing an 'S-U' option can be found in the undergraduate UF Catalog.

3.6 **EXTRA CREDITS**: TBD, NO makeup, NO extension. No extra opportunities will be granted to any individuals beyond what is available for the entire class.

#### 3.7 MAKEUP POLICIES

• Lecture Participation:

No makeups on missed clicker points. *There will be 10 excess clicker points to take care of any missed points, excused or not, absent or present.* 

• Written Homework:

No makeups. Every day an assignment is turned in late will result in a 20% reduction but a grade of 10% is possible after 5 days late. So you should always turn in your work, even it's late.

- Quiz:
  - 1. No makeup on first missed quiz.
  - 2. Any subsequent missed quiz: You must have documented UF approved excuses for absences to be able to make it up, and notify your TA within 24 hours to make an arrangement. You must initiate a makeup as soon as you are able to come back to school. If you have 3 or more unexcused quiz absences, you can make up no more than 2 excused quizzes.
- Exams:
- 1. If you have class or other exam conflicts, please see <u>UF during term assembly exam policy</u>. You must sign up with <u>your instructor</u> with valid documentation by the deadline to avoid penalty if MAC2312 is the course to give conflict exam. Otherwise, it may be impossible to reschedule. Conflict exams will be offered from 6:40 8:20pm on the same night as the regular exam. You will not be permitted to leave the exam room before 8:20pm.
- 2. If you are participating in a UF sponsored event or religious observance, you may make up an exam, but you must **sign up by deadline** (see calendar) to avoid penalty. Otherwise, it may be impossible to reschedule.
- 3. If a serious, unforeseen, emergency causes you to miss an exam, contact the course coordinator by email immediately. The student is responsible to turn in the appropriate documentation and sign up for a makeup as soon as you are able to return to campus.
- 4. If you are turned away from an exam due to late arrival, contact the instructor immediately to sign up for a makeup with 10% penalty.
- 5. Makeup exams will be around the last week of the term. All makeup exams consist of only multiple choice questions with no partial credit.

#### 3.8 INCOMPLETE POLICY

A grade of I (incomplete) will be considered only if you meet the <u>Math Department criteria</u>. If you meet the criteria, you must see the coordinator before the beginning of finals week to be considered for an I and sign a contract. A grade of I only allows you to make up your incomplete work. You cannot redo any previously completed work.

# 4. ADVISING AND HELP

**Office Hours:** For all course concerns, please talk to your TA who is your first contact in the course. For math questions, you may attend any calculus 2 office hours that best fit your schedule. All office hours will be posted in Canvas by the second week. You do **not** need an appointment to visit during office hours. These hours spread out through the week so, go to the ones that best fit your need.

**Taped Lectures:** Lectures are taped for your convenience so you may re-watch the lecture if needed (links are provided in Canvas under <u>Course Resources</u>). It's not used as an excuse for skipping lectures.

**Other free resources:** In addition, there are other free resources available to you:

- The <u>Teaching Center Math Lab</u>, located at SE Broward Hall, is staffed by trained math and science students offering free tutoring. 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 open source <u>textbook</u>.
- And last but not least, <u>GLC2</u>, the Guided Learning has summaries on each topic and lots of worked out examples to guide you through the course.

**Campus Helping Resources**: Resources are available on campus for students experiencing crises, personal problems, or lacking clear career or academic goals that interfere with their general well-being and their academic performance. Both the <u>Counseling Center</u> and <u>Crisis Services</u> provide confidential counseling services at no cost for currently enrolled students.

- Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.
- University Counseling Center, 301 Peabody Hall, 392-1575; personal and career counseling.
- Student Mental Health, Student Health Care Center, 392-1171, personal counseling:

Alcohol and Substance Abuse Program (ASAP)

Center for Sexual Assault / Abuse Recovery & Education (CARE)

**Eating Disorders Program** 

Suicide Prevention Program

# 5. HONOR CODE

Academic Integrity: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

Students are required to be honest in all of their university class work. Faculty members have a duty to promote ethical behavior and avoid practices and environments that foster cheating. Faculty encourage students to bring incidents of dishonesty to their attention.

**Student Honor Pledge:** On my honor, I have neither given nor received unauthorized aid on quizzes and/or exams. This policy will be vigorously upheld at all times in this course.

# 6. STUDENTS WITH DISABILITIES

Students requesting classroom and exam accommodation must first register with the <u>Dean of Students Office</u> <u>Disability Resource Center (DRC)</u>. This must be done at the earliest possible date so there is adequate time to make proper accommodations.

#### 7. SUCCEEDING MAC 2312

Other than having a strong precalculus and calculus I background, success in MAC 2312 depends largely on your attitude and effort. **Keeping up with the material** is critical. You may find it beneficial to **work daily** on the material as opposed to saving it all for one day. It is not effective to come to class and take notes only to never refer to it.

**EXPECTATION:** This is definitely a challenging course. Treating it as anything less than that is inherently unwise, both for your learning and for your grade. Be aware that much of the learning of mathematics at the university takes place outside of the classroom. Spend a minimum of 3 hours effectively studying outside of class for every hour you spend in class. Be ready to spend 12 hours a week preparing for this class outside of the classroom. If you are not doing as well as you would like in MAC 2312, you may need to put forth more effort. Keep in mind that the goal is to be able to apply the techniques of calculus to problems you will see in the future, not just reproduce the problems you see in the class.

Do you know that it takes roughly 45 lecture hours in colleges vs. roughly 150 lecture hours in high school to complete a calculus course? We do not talk 3<sup>+</sup> times faster at university level, we expect students do work outside the classroom to keep up the learning. So you **probably won't do well if you don't practice problems regularly or wait till the week of the exam to start preparing for the exam.** *Much of the learning is on you.* **Therefore, it is critical that you keep pace with the course material and assignments each week.** Do not fall behind.

Use the resources available as you study! We encourage you to ask questions, participate in class and utilize office hours and the <u>Broward Teaching Center</u>, for free tutoring services. Do not let misunderstandings go unanswered.

Important course information is clearly communicated in this syllabus. Assignments and course materials are available since day 1 and easily accessible through CANVAS.

In studying calculus, you must be careful not to let a tutor, a friend or calculator 'think' for you. Be sure to compare help you get with the class material. Ask questions to make sure that you can work out problems completely on your own before an exam. Be a responsible learner!

**FINALLY,** your TA and your instructors understand that this is a challenging class. We want you to be successful! We are here for you, but you are the person who can walk the path to your success. It's our hope that through focused study and practice you will gain a true appreciation for the important concepts of calculus and their application. You will need to stay on top of what's going on in class, know the syllabus and the class policy, and take the initiative to reach out when you need help 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. Do not let questions pile up and fall behind. Secrets to success do not work unless you do!