MAC 2312: Calculus II(Traditional) Spring 2019

Instructor: KL Chui, LIT 376, <u>chui@ufl.edu</u>, Lecture: MWF 8 (NPB 1001)

Text: There are no required texts for this course. For anyone who wish to study from a text book, we suggest an online open source textbook found at <u>http://bit.ly/2vK7UTB</u>. Calculus Early Transcendental by Stewart or Rogawski are also great reference books, any edition is good.

Lecture Shell: You may purchase a printed packet from Target Copy at 1412 W. University Ave. (cover is a xxxx). You may also print it off from Canvas under the <u>Course Resources</u> tab.

Prerequisites: Strong algebra, Trigonometry and Calculus 1 skills. There is a prerequisite homework packet that needs to be turned in by the due date.

Grade Issues and the One Week Policy: Once a grade is posted in Canvas, you have one week to contact your TA to contest the grade and initiate any grade disputes. 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 the lectures and the discussions.

Required Material: See 1.2.

Course Management System: CANVAS, lss.at.ufl.edu

Written Homework: See 2,1.

Grades: Written Homework (5x5=25)	25 (9.8%)
Quiz (drop 1, 5x5=25)	25 (9.8%)
Class Activity/Attendance (capped at 25)	25 (9.8%)
<u>3 Unit Exams(40/ea)+ 1 Cumulative Final(60)</u>	180 (70.6%)
Total points:	255

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

Office Hours: TBA. Utilize any of these hours best fit your schedule

Extra Credits: See 2.6

UF Free Tutoring Service: www.teachingcenter.ufl.edu

1. COURSE DESCRIPTION

MAC 2312 is the 2nd 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.

1.1 **PREQUISITES**

MAC2312 assumes that you have **strong precalculus** (both **Algebra** and **Trigonometry**) and **calculus I** skills necessary to succeed in this course. A **review homework set**, designed to help you refresh your knowledge in these topics, is to be turned in Discussion. A brief review on Limits and L'Hospital's Rule is also provided, students are responsible for reviewing the material by the end of the second week. We strongly recommend that students who are having difficulty with these core skills and students who have gap years since the last math class to consider reviewing MAC2311 right away before we get deeper into the course (or take MAC2311 if you have not already done so at UF). An AP CalcBC score may not have prepared you adequately for this class. You may switch courses at <u>https://one.uf.edu/</u> during the drop-add period.

1.2 COURSE MATERIALS

There are no required texts for this course. If you wish to study from, or reference a text book, we suggest an online textbook available at <u>Openstax</u>. We will use the online 'Guided Learning Calculus 2'(<u>GLC2</u>). Its purpose is to give students the extra resource of worked out examples and practice their skills with guided learning. We also use an in-house, UF-made online homework system. The platform is called **Xronos** and is accessible through the Canvas site. More details will be given in Discussion.

Please take time to engage in <u>regular</u> study of the above resources 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 for exams.

Lecture Notes Shell: It is important that you should have a paper copy of the lecture note shell. 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 (cover is a ???) at 1412 W. Univ. Ave. or print them out from <u>Course Resources</u> in Canvas.

Hitt Clicker: Attendance is required in lecture and in discussion. We want you to engage and challenge yourself in class and ask questions. We have a comfortable class environment and the in-class engagement by all is what makes this class awesome! Be ready to participate.

1.3 **ONLINE RESOURCES**

E-Learning Canvas, All students are expected to check E-Learning (https://lss.at.ufl.edu) on a regular basis. Please ensure that you have access to this service and have the alerts turned on from Canvas so that you get timely course updates. Important course information including your grade, course homepage, syllabus, calendar, office hour, 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-class announcements, in discussion and/or in Canvas Announcement. Due to the volume of email received, I cannot reply to each request for this well publicized in-content information. If you cannot find your answer in the resources mentioned above, ask your TA first. If you must email, be sure to include your TA's name in the "Subject" to help put your email in the correct context in order to receive a reply.

1.4 **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 your grade concerns. Once a grade is posted in Canvas, you have one week to contact your TA to contest the grade and initiate any grade disputes. Once this one week passes, there are no further disputes. In particular, there is absolutely no grade disputes at the end of the semester.

1.5 CALCULATORS

A graphing calculator like Desmos (<u>www.desmos.com</u>), and computer program like Wolframalpha, and the app GeoGebra (<u>www.geogebra.org</u>) are useful as study and learning tools when used appropriately to help you 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**.

1.6 LECTURES

This class meets for four 50-minutes class periods per week, 3 of which are in lectures. Lectures will be used to introduce you to the fundamental concepts and theory of calculus and will follow as closely as possible the lecture outlines and calendar provided in Canvas. This is definitely a challenging course. Treating it as anything less than that is inherently unwise, both for your learning and for your grade. 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 the classroom. If you are not doing as well as you would like in MAC2312, you may need to put forth more effort. 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. 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 class*. Attend class with readiness and an eagerness to learn and ready to participate!

1.7 DISCUSSION SECTIONS

You meet once a week in discussion, this time gives you a valuable opportunity for open discussion of lecture material and assigned problems in a smaller class setting. Attendance in discussion is required. Your homework is to be turned in to your TA in discussion. If you must be absent, you may arrange to have your work turned in early, not late, with valid documents. Consult with your TA if you have any questions about homework and recorded grades. You must **retain all returned papers** in case of any discrepancy with your course grade. You must notify your TA within the **first three weeks** if you will be missing a discussion due to religious observance or participating in UF activities. See your TA **immediately** if you have court ordered obligation 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 arrangement is accepted without following the above policy.

1.8 COURSE EVALUATION

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <u>https://evaluations.ufl.edu</u>. Evaluations are typically open during the last two or three weeks of the semester. Students will be given specific times when the evaluations are available. Summary results of these assessments are available to students at <u>https://evaluations.ufl.edu/results/</u>.

2. COURSE ASSIGNMENTS AND GRADING

2.1 WRITTEN HOMEWORK: No drops

We assign 5 written homework sets and they are collected in Discussion throughout the semester for **25 points** of the course grade. Each set is worth 5 points with 3 points for completeness and 2 points for accuracy of the 2 randomly selected questions to be graded. Students are asked to write down the <u>complete</u> <u>solution</u> to turn in to your TA in discussion on the due date, we want to see your answer to the question as well as the process how you achieve the answer. Each set may contain questions from these sources: *Quizzes* and *Practice Exams from the guided learning notes for calculus 2 (GLC2), Xronos* and, *assigned past exams*. To access homework, go to <u>Assignments</u> tab in Canvas.

GLC2: Why GLC2 and What is 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 'Guided-Learning Calculus 2' (**GLC2**) in Google in hope to *give students a valuable resources to guide you 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. The questions you do in (3) is your written homework assignment.

Do not skip the important steps in (*) as this is what helps you to synthesize your understanding first before you do all the homework comfortably. It may be helpful to keep a weekly journal entry with deep thought on *what skills you have learned in each topic*, and *how to implement what you learned in class to develop 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. You MUST access Xronos via Canvas every single time you need to access it. Each assignment is represented by tiles in Xronos. There is a 'Try Another One' option. Thus, if a given assignment seems to only have five problems, you actually have access to hundreds of similar problems by clicking this option over and over again. Use this to benefit and practice until you understand the material. Any Xronos technical issues and comments should be directed to Mr. Nowell at <u>inowell@ufl.edu</u>, but copy your TA and your instructor <u>chui@ufl.edu</u> in your emails.

PAST EXAMS: You may access old exams in the <u>Exam Information</u> tab in Canvas. Write down your <u>complete</u> solutions for either exams from SP 17 or SP 18 as part of the homework.

NOTE: The purpose of homework is to practice problems in order to understand and master the material before your exams. Complete them regularly. Complete them after exams is not helpful to your learning nor your grades.

The entire calculus 2 curriculum is available to you from day 1 so you may get ahead by learning the material and working out homework problems before the due dates.

Do not try to complete weekly assignment in one sitting; start early instead of waiting until the due date to avoid missing the deadline.

Your TA will give you more information in first discussion.

2.2 QUIZ: No makeup on the first missed quiz of any excuses.

There will be six quizzes given in Discussion, we drop one quiz. Each quiz is worth 5 points. Students need to be in class in the first 10 minutes and stay the entire period in order to participate in quiz.

2.3 CLASS PARTICIPATION and YOUR ROLE as AN ENGAGED STUDENT: No makeups

Attendance in lecture is required. Students will be using H-ITT clicker in lecture. Student must register their clicker during the 3rd through the 4th week of the semester. Failure to do so will result in grade penalty. If your **clicker is not registered by registration deadline, you will receive a 0 for your H-ITT point for the semester**. A weekly clicker grade report will be sent to students' UF email, you will not be able to receive the grade report if your clicker is not registered. It's students' responsibility to verify the scores and fix any clicker issues *immediately* before they lose more points. Up to 25 **points** of the grades 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 excused absence, mechanical failures, forget to bring the clicker,... etc. A student is not allowed to respond in class for anyone else but himself; 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 points in letter grade for attending fewer than 75% in each of the lecture and discussion classes. In addition, you will lose any possible opportunity to earn extra credits/additional points (if available) at the end of the semester.

2.4 EXAMS: No Drops

There will be 3 unit exams and 1 cumulative final exam, all mandatory, no drops. The unit exams begins at 8:20PM, consist of multiple choice and free response questions; the final exam starts at 12:30PM, consists of multiple choices 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 the location for your section. Bubble your scantron carefully, there are 3 points penalty for incorrect bubbling and 3 points penalty for going to the wrong exam site. You will not be allowed to take the exam if you are 10 minutes late.

2.5 GRADING SCHEME

Your course grade is determined as follows:

Written Homework (5x5=25)	25 (9.8%)
Quiz (drop 1, 5x5=25)	25 (9.8%)
Class Activity (Clicker) (capped at 25)	25 (9.8%)
3 Unit Exams(40/ea)+ 1 Cumulative Final(60)	180 (70.6%)
Total points:	255

A (90% – 100%)	C *(70% – 74%)
A -(87% - 90%)	C -(67% - 70%)
B + (84% – 87%)	D + (64% – 67%)
B (80% – 84%)	D (60% – 64%)
B -(77% - 80%)	D - (54% - 60%)
C + (74% – 77%)	E (< 54%)

*Note: A grade of C, not C –, gives University General Education credit! For those taking the 'S – U' option: S [>70%] U [<70%]. Approval of 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.

2.6 **EXTRA CREDITS** (~ 3% of the course grade. NO makeup, NO Extension)

Engaging with the course material also means active and participatory learning. Students are encouraged to write down your own weekly study guides in the form of journal entries and post them in the Discussions. Instead of mere summaries of the key concepts and formulas you are expected to write down, **in your own words**, how the formula works and under what situations will the formula apply, what are some possible common mistakes to watch out and how is this method different from the others, compare it with other formulas or similar ones you have learned in earlier sections or calculus I. Not all of them are applicable to each week's entry, do your best and make it useful for you. **You will post your summarized entry on the Friday following each unit exam by 11:59pm** and your TA will grade them and post the grade by next week's discussion, 'Like' those outstanding entries if applicable. I will love to see a classroom of strangers grow into an intellectual community over the course of the semester on the Discussions forum. You may earn up to 2.5 point for each of the 3 entries for a possible total of 7.5 points. This is what the end-of-term grade curve is based on. There will be no other curves possible, there is definitely no possibility of individual grade adjustments.

2.7 MAKEUP POLICIES

• Lecture Participation:

It's an expectation that you attend every class session. No makeups on missed clicker points. There will be 10 excess clicker points to take care of <u>any</u> missed points, excused or not, absent or present.

- Graded Assignments: See section 1.7. Written Homework assignments:
 - 1. If you are present in discussion but forget to bring your work, make arrangement with your TA before leaving discussion to have it turned in within 24 hours without penalty.
 - 2. For any other reasons, everyday an assignment is turned in after the due date a reduction of 50% of the total will be taken.

Quiz:

1. No make up on first missed quiz.

- 2. Any subsequent missed quiz (including last minute emergency): You must have documented UF approved excuses for <u>all</u> absences, and notify your TA within 24 hours to make an arrangement. Makeup must be done as soon as you are able to come back to school.
- Exams:
- If you have class or other exam conflict, please see <u>UF during term assembly exam policy</u>. You
 must sign up with your instructor with valid document by the deadline (see calendar) to avoid 10%
 penalty if MAC2312 is the course to give conflict exam. Otherwise, it may not be possible to
 reschedule. Conflict exam will be offered at 6:30 PM 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 10% penalty. Otherwise, it may not be possible to reschedule.
- 3. If a serious unforeseen emergency causes you to miss an exam, contact the instructor by email immediately. Then as soon as possible after you return to campus, turn in the appropriate documentation and sign up for a makeup.
- 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 (makeup final exam will be after the final). All makeup exams consist of only multiple choice questions with no partial credits.

2.8 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 instructor before the beginning of finals week to be considered for an I. A grade of I only allows you to make up your incomplete work. You cannot redo any previously completed work.

3. ADVISING AND HELP

Office Hours: For all course concerns, please talk to your TA who is your first contact in the course. All 8th period lecture's TAs and instructor's hours will be posted in canvas and are regular times when we are available to answer questions, discuss grades, advise students on future classes, help students in any available way. You do **not** need an appointment to visit during office hours. These hours spread out through the week. If you need math help, you may attend any of the hours listed here that best fit your schedule.

Taped Lectures: Lectures are taped for your convenience so you may go back to re-watch the lecture if needed (link is under Course Resources in Canvas). It's not used as an excuse for skipping lectures.

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

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

Campus Helping Resources: Resources are available on campus for students experiencing crises or 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>Student Mental Health 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

4. 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 in doing quiz and exams. This policy will be vigorously upheld at all times in this course.

5. STUDENTS WITH DISABILITIES

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

FINALLY, your TA and your instructor 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. 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. Do not let questions pile up and fall behind. Secrets to success do not work unless you do!