| MAC 2312: Calculus II(Traditional) SPRING 2020 |  |  |  |
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| Instructor<br>Email<br>Office Hours            | KL Chui, LIT 376. Lecture: MWF 8 (3-3:50pm) at NRN I-130 <a href="mailto:chui@ufl.edu">chui@ufl.edu</a> . Note that Math help is given during your discussion section and office hours, not through email.  T (part of) 6-7 (1:15 – 2:45), W TBD   |  |  |
| Discussion<br>Sections                         | See <u>Discussion Sections</u> page for details about lecture and discussion classes meeting time, location, your TA's name and click <u>here</u> for your TA's contact information.   |  |  |
| Text book & Course Material                    | <b>Text book</b> : 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> (ch.3, 5-7, 2). Additionally, you may find any edition of the Calculus Early Transcendentals by Stewart, or Rogawski, helpful.  |  |  |
| Material                                       | Lecture Shell: You would need to bring it to lecture. You may purchase a printed packet from <a href="Target Copy">Target Copy</a> and ask for this <a href="cover">cover</a> . You may also print it off from Canvas in the Modules tab under <a href="Course Resources">Course Resources</a> . There is <a href="limited free printing">limited free printing</a> provided by the UF student government.   |  |  |
|  | <b>Google Notes</b> : The online Google Notes 'Guided Learning Calculus 2' (GLC2), created by instructor, provides more practice problems with worked out solutions along with summary the topics covered through guided learning. Please utilize this valuable resources to get a goograsp of the material to supplement the examples covered in class.   |  |  |
|  | No Calculators allowed in Quiz and Exams.  |  |  |
| iClicker                                       | The course requires the use of iClicker Reef software. You will answer polling questions during class with the use of a wifi enabled mobile device, or an iClicker 2 Remote (remote available for purchase from the bookstore). If you do not have a mobile device, you may check out an iPad from the George Smathers Library circulation desk (7 days, with possibility of renewal).   |  |  |
|  | Students taking MAC 2312 will receive an access code for <u>free</u> access to iClicker Reef during the <u>Spring 2020 term</u> . See details in the <u>iClicker Registration and Support</u> . (classroom wifi info subject to change)  |  |  |
| Prerequisite                                   | We assume that you have strong precalculus (both Algebra and Trigonometry) and calculus I skills. There is a <b>review homework packet</b> , designed to help you refresh your knowledge on these topics, to be completed and submitted by the due date. A brief review lectures on Limits and L'Hospital's Rule are also provided. Students are responsible for the review of these lectures 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 course 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. |  |  |
| Grades<br>&                                    | Unit Exams are held in the evening starting at 8:30pm, final is at 12:30 pm. See <u>Calendar</u> . Written Homework (12x3=36) 36   |  |  |
| Grade Scheme                                   | Quiz (best 5, 5x5=25)       25         iClicker (15 (+5 bonus))       15         3 Unit Exams(40/ea),       B+ (215.04-222.71)       D+ (163.84-171.51)         B (204.8-215.03)       D (153.6-163.83)         B- (197.12-204.79)       D- (145.92-153.5)   |  |  |
| Important<br>Note                              | C+ (189.51–197.11)   E (< 145.92)  |  |  |

|        | format, etc.). You may be able to work with students in another section of the course, but there will be things you'll be doing that they won't be doing, and vice versa.   |
|--------|---|
| E-mail | All communication between student and instructor and between students should be respectful and professional. All official class communications will be sent only to the ufl.edu addresses. Students are responsible for checking their ufl.edu mail <b>regularly</b> , and any class information sent to their ufl.edu account. Please be sure to sign your name to your e-mails and include your TA's name in the email subject. |

# OFFICE HOURS

It can be difficult to grasp all the calculus II material in just 30 lectures. Sometimes all it takes is a timely visit to the office hours to clarify your confusion. I strongly encourage you to visit your TAs and my office hours for free help! We're the ones writing your exams and quizzes and have a pretty good idea about how to help you succeed in the course. You may visit any of the office hours posted in the Canvas homepage. (But you must visit your own TA if you have any grade issue). Please find someone you can go to for help.

### 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 with some 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 (Volumes). Students will need to have strong algebra and trigonometry to keep up with the pace of the course. Please study regularly.

### CANVAS & COURSE WORK

<u>Canvas</u> is a UF course management system. Use your Gatorlink username and password to login. All course information including your grade, syllabus, calendar, lecture outline, assignments, <u>GLC2</u>, office hours, test locations, mail tool, free help information, etc. can be accessed from this site. You are responsible for the ongoing course work which is described in Canvas: Attending lecture, complete and submit assignments before deadline, attending discussion sections, taking quizzes and exams, verifying recorded grades. You have one week after a score has been posted to contact your TA or instructor if you believe there has been a recording error. There is no grade dispute after a week or at the end of the semester.

All students are expected to check <u>Canvas</u> on a **regular basis**. Please ensure that you have access to Canvas and have the alerts turned on in Canvas so that you get timely course updates.

**Please note**: Important course information is clearly communicated in this syllabus, in discussion section, in lecture, and in the Canvas Weekly Announcements. Due to the volume of emails received, your instructor cannot reply to each request for this well publicized information. If you cannot find your answer in the resources above, please ask your TA first, then your instructor if you run into issues getting answers from your TA. We want you to be well informed and to be successful.

# LECTURE & DISCUSSION SECTIONS

Lectures will be used to introduce you to the fundamental concepts and theory through simple examples and will follow as closely as possible to the lecture outlines and calendar provided in Canvas. Attend class with readiness and an eagerness to learn and be ready to participate!

Your TA will lead the discussion class in a small class setting, guide you through the problem solving process necessary to become successful in solving math problems on your own outside of classroom, You will also receive quizzes on your learning in discussion class.

### ATTENDANCE & MISSED WORK & MAKE UP POLICY

Attendance to lectures and discussion sections is required. Students who come to class and participate are more likely to do well in the course. Note the <u>12-day rule</u>. Come to class ready to participate.

**Valid Excuses**: Participation in officially sanctioned UF events, medical excuses (see medical excuse policy <a href="https://www.nee.com/here">here</a>. Note that tele-doctor notes are not acceptable), or family emergencies (a note from the dean of students may be required), court orders, military obligation, religious observance. Absences due to circumstances listed above during scheduled quizzes or exams will necessitate you to request a makeup following the procedures below. Acceptable excuses will require a coach's or conductor's, doctor's, or instructor's note with a verifiable contact phone number and email address, or copy of the court date,. The documentation must be provided to your instructor immediately following the procedures below.

**Missed Homework**: Students have ample opportunity to complete the 12 homework assignments prior to due date. Each homework is worth 3 points. There are *no extension nor makeup* for homework assignments. Every day an assignment is turned in late will result in a 20% reduction. Please plan accordingly.

**Missed Quiz**: 6 quizzes will be administered during the semester, 5 best scores count towards your quiz grade. No makeup for the first missed quiz, regardless of the reasons. For subsequent missed quiz, students must submit a request to the TA, and if approved, make arrangements with the TA. A valid documentation must be provided to your TA within 1 week of the missed quiz or a rational reason that it will be delayed must be emailed along with the projected receipt date of such documentation to your TA within that period. All quizzes must be made up within two weeks. A maximum of 2 quizzes may be made up.

#### **Missed Exams:**

- 1. If you have class or exam conflicts, please see <u>UF during term assembly exam policy</u>. You must request a conflict exam from your instructor with a valid documentation by the 'sign up deadline' to avoid penalty if MAC2312 is the course to give the conflict exam. 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 8:30pm.
- 2. If you are participating in a UF sponsored event or religious observance, you may request a makeup exam from your instructor, but you must sign up by **deadline** to avoid penalty.

- 3. If a serious, unforeseen, emergency (also court orders) causes you to miss an exam, contact the instructor by email **immediately** to sign up for a makeup. The student is responsible to turn in the documentation prior to the exam or as soon as she/he's able to return to campus. Failure to do so may result in 10% penalty.
- 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. Makeup exam will be later in the term. You must have completed at least 80% of the homework and quizzes in order to be qualified for a makeup exam.
- 5. Makeup exam will be later in the term, and consists of only multiple choice questions with no partial credit. Its content is similar to that which was tested on the missed exam: including, but not limited to material covered in class, notes, NYTI, homework and Google Notes GLC2.

It is advised to drive under the speed limit and arrive to campus early on exam nights. Receiving a traffic ticket, or getting stuck in traffic or any traffic related issues is not a university approved justification for making up a missed exam. The same penalty applies when granted a makeup in this situation.

**Missed Discussion Sections**: Students who attend all and are <u>engaged and participate</u> during discussion sections receive 1 bonus point in each of the first 3 exam periods. Students are not permitted to earn bonus participation points if they are not attending OR participating in problem solving during discussion sections. Students absent for excused reasons **are not permitted** to makeup missed bonus points. A 'forgiveness factor' can be built in, up to your TA's discretion. Note, that the bonus is not just for attendance, but also awarded for your active participation during the class. Be prepared to work collaboratively in teams and contribute constructively to the assigned tasks. Students who attend without contributing to problem solving will not earn bonus participation points.

**Missed Cliker Points**: Each polling question earns you 0.15 point for correct response and 0.1 point for responding. 0.2 points are added into each session you participate. Students are not permitted to earn clicker points if they are not successfully submitting responses during the open polling times. Instead of offering makeup clicker sessions, we collect 10 extra points as a 'forgiveness factor' in the calculation of clicker points. Students missing class for excused reasons are not allowed to make up missed clicker points. Please arrive to class with a charged mobile device (or a clicker remote device with good battery). Answering for others is a violation of the Honor Code Policy and will be reported to the UF Honor Court. Requirements for class attendance and valid excuses for makups are consistent with university policies that can be found <a href="here">here</a>.

# GRADES & EXTRA POINTS OPPORTUNITY

Your course grade is determined as follows: (The Canvas gradebook will not accurately reflect your course letter grade before the end of the term).

| Written Homework (12x3=36)                  |     |  |
|---|-----|--|
| Quiz (drop 1, 5x5= 25)                      |     |  |
| Class Activity/Attendance (15 +5bonus)      |     |  |
| 3 Unit Exams(40/ea)+ 1 Cumulative Final(60) |     |  |
| Total points:                               | 256 |  |

| <b>A</b> (230.4 – 256)     | C * (179.2–189.5)           |
|----------------------------|-----------------------------|
| <b>A</b> - (222.72–230.39) | <b>C</b> - (171.52 –179.19) |
| <b>B</b> + (215.04–222.71) | <b>D</b> + (163.84 –171.51) |
| <b>B</b> (204.8-215.03)    | <b>D</b> (153.6 – 163.83)   |
| <b>B</b> – (197.12–204.79) | <b>D</b> – (145.92 – 153.5) |
| C+ (189.51–197.11)         | <b>E</b> (< 145.92)         |

**Note:** Use Canvas gradebook to track your recorded scores and report any discrepancies to your TA (quiz, homework, discussion bonus, exam free-response) and to your instructor (clicker, exam multiple choice) following the one-week policy:

**ONE** – **WEEK POLICY:** Your performance and success are important to us, please discuss and resolve any grade concerns immediately. All grade concerns, except for the final exam, must be settled within one week of the posting of the grade, or by the last Wednesday of the term, whichever comes first. We will not review disputed points after a week or at the end of the semester. See <u>Calendar</u>.

**EXTRA CREDITS**: There will be 3 bonus points from your TA and 5 bonus points from the lecture.

Discussion sections provide you a valuable opportunity for an engaged discussion or group work of lecture material, homework problems and instruction on how to answer calculus problems, To reward your efforts, your TA will keep track and award your weekly participation/engagement in discussion. In each of the first 3 exams period, you may earn up to 1 bonus point based on your participation. This bonus will be added to your free response portion of the exam grade and it contributes to your overall course grade. You can't makeup missed participation bonus points. Remember, this is not a course requirement, but an encouragement to participate in discussion to gain both feedback and confidence in your problem solving ability. Your TA will tell you about the discussion bonus point in the first discussion. If you have any questions regarding how your TA award participation, be sure to ask your TA immediately, preferably within the first 2 weeks of the term.

Lecture bonus point is from the class attendance via clicker.

If you do not get the bonus point because you are not aware of them, you can not make it up. Any other possible bonus will be announced in class and posted in the Weekly Announcement. No extra credits or curves will be granted to individuals beyond what is available for the entire class. Students asking for individual grade consideration will be taken out any extra credits adjustments at the end of the semester.

# 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 and sign a contract. A grade of I only allows you to make up your incomplete work. You cannot redo any previously completed work.

## **EXAMS**

There are 3 unit exams and 1 cumulative final exam, all mandatory, no drops, no replacement. The unit exams begin at 8:30PM and consist of multiple choice and free response questions; the final exam starts at 12:30PM but consists of only multiple choice. The date, time, lecture coverage are stated in the <u>Calendar</u>. Please place these dates and time in your calendar today! Exam location will be posted in <u>Exam</u> Information 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 a wrong location.

Exam questions will be taken from a number of sources, including (but not limited to) the lectures, clicker questions, homework, class notes, NYTI and <u>GLC2</u>. Exam format is multiple choice questions (MCQ using scantrons (provided)) and Free Response questions on unit exams, but only MCQ are on the finals. The answers which you bubble in on the scantron is the ones we grade, with no exceptions.

# **QUIZZES**

Each Quiz in your discussion section is typically based on (though not necessarily identical to) homework, lecture, notes (including NYTI – Now You Try It) and the Google Notes (GLC2). The quizzes serve to assess not only the correct answer to the problems, but also on how you justify your answers with an **in-depth solution.** Calculators are not allowed. It's not permitted to share the contents of a quiz with individuals outside of the discussion section, and doing so is a violation of the university Honor Code.

There are 6 quizzes worth 5 points each with a forgiveness factor' of dropping the lowest quiz to account for bad days. If you miss a quiz, regardless of the reasons, that is the one considered as your bad day.

Approved make-ups for missed quizzes (the first missed quiz cannot be made up) will take place at the first opportunity determined by your TA according to the absence and <u>makeup policy</u> stated in this syllabus. The documentation must be provide to your TA within 1 week of the missed quiz or a rational reason that it will be delayed must be e-mailed along with the projected receipt date of the documentation to your TA within that period. All quizzes must be made up within two weeks. No more than 2 quizzes can be made up.

### **HOMEWORK**

There are 12 homework sets worth a total of 36 points, each set is worth 3 points. We find that students do better with smaller but more frequent homework sets. They force students to engage with the content more on a daily basis. There are 2 kinds of homework: UPHWx and HWx. Scan and upload UPHWx as a single pdf file in Canvas to be graded by your TA, but submit the HWx in Canvas without the need to upload your written work. In your submitted pdf 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 complete math solutions thoroughly and logically. HWx are to be auto-graded by Canvas. We assign HWx during some weeks to cut down your TAs' grading load so they may focus on getting your quiz and/or exams. Go to the assignment tab in Canvas to access the homework and read the instruction within each assignment for more details. Consult your TA if you have any questions about homework and the recorded grades. There is no extension nor makeup for any missed homework. However, you may turn it in late for 20% penalty for each day it's turned in late. See MakeUp for more details.

**Xronos**: A UF-made online homework system, is free of charge and will be explained in the first discussion. It provides extra problems for you to practice but it's not required for grades. Any Xronos (and its technical) issues should be directed to Dr. Nowell at <a href="mailto:jnowell@ufl.edu">jnowell@ufl.edu</a>, but copy your TA and your instructor <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, 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 to both parties and both parties may be sent to the honor court 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 after 7 pm 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 the deadline so that if not successful, you will 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. Ask your TA or your instructor if you have any questions.

### iClicker

Up to **15 points** may be earned by *participating* in class using the clicker. There are no makeups, *however there will be excess of clicker points* given over the course of the semester as a 'forgiveness factor' to allow for absences, broken remotes, late answers, etc., 5 of the extra points collected counts towards extra credits. *However, to receive credit for your responses, your iClicker account must be linked to your Canvas course.* Please see the <u>Registration and Support</u> and <u>iClicker</u> in Canvas. Following university policy, you may expect lost letter grade for attending fewer than 75% in each of the lecture or discussion classes. In addition, you will lose the opportunity to earn bonus points.

You are responsible for maintaining the functioning of your device, including its connection to the UF Wifi network. No credit will be given for questions if you forget your mobile device or your mobile device battery is dead or you do not respond to the question in the allotted time.

You may **not** bring anyone else's transmitter to class if that person is also taking this course. Doing so violates our Academic Honesty policy below, and the incident will be filed with the Dean of Student's Office.

# ACADEMIC HONESTY, POLICY & HONOR CODE

We go to great lengths to ensure that this course is administered fairly, by setting clear goals (exams & assignments dates, lecture, makeup, grade policies, course expectation, encourage teacher-students communication) at the outset, by providing materials (lectures, <u>GLC2</u>, homework, office hours, reviews) to help you succeed, and by assessing progress towards those goals using easily understood procedures (exams, quizzes, clicker, homework). We pledge to do the best job we can to make the material understandable and to bring out the best in every student. We ask our students to be respectful and responsible for their work.

Maintaining the integrity of the grading process demands fairness on our part and honor on your part. Accordingly, we take a very hard line on cheating in any form, including

- 1. Providing or copying answers on exams, quizzes or homework
- 2. Taking an exam or quiz for another student or by another person
- 3. Obtaining exam, quiz or homework from another person
- 4. Obtaining exam, quiz or homework solution from external sources.

Any person caught cheating in any form will have severe consequence and will be subject to Honor Court penalties. Furthermore, we expect students to not tolerate cheating of any kind and to report incidents to your instructors.

#### HONOR CODE

The Dean of Students Office has a detailed discussion about academic honesty and the <u>University of Florida Honor Code</u>, which was adopted by the Student Council. The Honor Code says

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

**Student Honor Pledge:** "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

This policy will be vigorously upheld at all times in this course.

# DISABILITY SERVICES

Students requesting classroom and exam accommodation must first register with the <u>Dean of Students</u> Office <u>Disability Resource Center (DRC)</u>. This must be done at the earliest possible date so there is adequate time to make proper accommodations. ). If you choose to not schedule exams/quizzes before the deadline, you are electing to forgo the testing accommodations to which you are entitled and will take the assessments according to the conditions of the regularly scheduled assessment. Please notify your TA if you choose to request quiz accommodation.

# COURSE EVALUATION

Students are expected to provide feedback on the quality of instruction in this course by completing <u>online 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.

### **ACADEMIC & CAMPUS RESOURCES**

- *Office Hours:* 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.
- <u>GLC2</u>: the Guided Learning Calculus II Google notes has summaries on each topic and lots of worked out examples to guide you through the course. It's strongly recommended that you make use of it throughout the course.
- The open source <u>textbook</u>.

- The <u>Teaching Center Math Lab</u>, 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.
- *E-learning technical support*, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.
- *Career Resource Center*, Reitz Union, 392-1601. Career assistance and counseling. http://www.crc.ufl.edu/

**Campus 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.

- *U Matter, We Care*: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.
- University Police Department, 392-1111 (or 911 for emergency) http://www.police.ufl.edu
- Career Resources 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 Abuse Recovery & Education (CARE)
  - Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161
  - Eating Disorders Program
  - Suicide Prevention Program

# **EXPECTATION & SUCCEEDING MAC 2312**

This is definitely a challenging course. Treating it as anything less than that is inherently unwise, both for your learning and for your grade. I often hear students telling me that this class provides freshmen a reality check that showed that one can't breeze through classes in college. This is where they learn the importance of time management and good work ethics that get them ready for the next step in their academic and life journey. 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. Use your notes as you study. It is not effective to come to class and take notes only to never refer to it. Please take time to engage in regular study of and lecture and use the abundant resources this course has prepared for you. 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.

Be aware that much of the learning of mathematics at the university takes place outside of the classroom. 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 our college students do work outside the classroom on their own to keep up the learning. 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.

Spend a minimum of 3 hours <u>effectively</u> studying outside of class for every hour you spend in class. Be ready to spend at lease 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.

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. 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**.

In studying calculus, you must be careful not to let a tutor, a friend or calculator 'think' for you.

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

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 instructor understand that this is a challenging class. We want you to be successful! I am 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!