Instructor: Mr. Thomas Luckner CRN: 151-56656, 152-56657

Section: 151: 02, Q02, 152: 01 Class Meeting Room & Time:

MATH 152 TR 7:35-8:25pm in LeConte 107 MATH 151 TR 6-6:50pm in LeConte 107 Email: <u>luckner@email.sc.edu</u>

Office: LeConte 121

Office Hours: Tues/Thurs 1-2, 4-5

# **COURSE DESCRIPTION AND OBJECTIVES**

**General:** Small study group practice in applications of calculus. Elective credit only. Must be enrolled in MATH 141 or MATH 142 concurrently.

**Learning Outcomes:** Students will be given the opportunity to engage in and work on the following:

- Collaborate productively with a team.
- Develop a personal framework of problem-solving techniques
  - Make sense of problems.
  - Restate and clarify questions.
  - Identify variables and parameters.
  - Use analytical, numerical and graphical solution methods.
- Create, interpret and revise real-world models and solutions of problems.

#### **MATERIALS**

• Online Materials: We will solely be using materials I put on Blackboard (main place to find materials) or class website (on Blackboard is a link). The details of this will be discussed later in this syllabus and in class. Your books from your 141 and 142 class will be a good tool to reiterate material in this class but are not required.

## **COURSE POLICIES AND EXPECTATIONS**

**Attendance: THIS IS YOUR GRADE.** Attendance is expected and will be recorded via attendance sheet put by the door at the beginning of class. Note this means if you are late (NO MORE THAN 15 MINUTES) and/or miss the attendance sheet, it is YOUR responsibility to come to the instructor after class to sign in without penalty. Absences are broken down into 2 categories:

Excused-Athletic, military, illness, family illness or death, legal, professional obligation (WITH VALID DOCUMENTATION)

Unexcused-no documentation, does not include issues above

Absence from more than 10 percent of the scheduled class sessions, whether excused or unexcused, is excessive and is the only reason you could not pass this course (besides coming to class and refusing to do any work or ask any questions).

**Participation:** All members are expected to participate during class and may be called upon to respond to classroom discussions.

All participants are expected to show respect to other students, the instructors, and any guests who may be visiting the class during the year (Golden Rule).

**Cell Phones:** Cell phones are to be **off and away** during class. If one is caught with their phone out or in use, a warning will be given first. If the student is caught with their phone out a second time, the student will have 5% removed from their final grade **WITHOUT BEING TOLD**. This is since this class is solely dependent on engagement.

**Laptops:** Typically, I do not allow laptops or other technology in the classroom for a math class unless a student shows the ability to take notes via laptop. However, this class excels given access to laptops. Thus, I encourage laptops in this class! The only thing is if a student is caught using their laptop for reasons not related to the class, the cell phone policy will be enacted (5% off final grade).

Other Technology/Objects: If a student prefers to take notes via tablet, inform the instructor that this is your preferred way to take notes. If you have any questions about what can or cannot be used during class, do not be afraid to ask the instructor.

#### **STRUCTURE**

The class will be run on a basis of what students ask for, then what the instructor deems a good idea. For example, Johnny is having trouble with L'Hospital's Rule with limits and decides to ask for a quick recap of L'Hospital's Rule and some examples to work on. Then once this has been done, the instructor will yield any similar questions. Once all questions are answered, the instructor will bring the material he has prepared. **Note** that Johnny was specific about what he was having trouble with! This is very helpful.

It is important to understand that all calculus sections are at different paces. This means people may have different questions. The instructor will try to keep pace with the **SLOWEST** class in an effort to give everyone a chance to understand the material in this class. This does not mean a student who is in a class that is further ahead cannot ask questions! Please feel free to ask any questions!

The instructor plans to run the class in the following manner:

- 1) The students will get in groups with people who share the same instructor. This means students will all be on the same material and the instructor can know what to bring each group for each class by a class google sheet updated by the students. If a student is the only one from a class, that is ok! Then any questions can be answered at the board while the rest of the class can either listen or work in their group.
- 2) Half the class time will be fielding questions and working on topics that are troublesome to students. This could include a short lesson if the instructor feels it is necessary! The second half of class is either a continuation of the first half or free time to work on homework and ask questions on homework! Homework is a formative assessment tool for learning concepts. Thus, I will not do exact problems, but can give similar problems to guide.
- 3) I will be providing worksheets for people that include some problems and my thought process/mini lessons for some topics at the top. Please do give these a read since the goal of them are to bring higher-level mathematical concepts to a more relatable level of understanding.
- 4) In the past, people have taken this class jokingly. To earn a passing grade, a student must demonstrate an effort and desire to learn and help others learn! Every student is here to better understand calculus, so treat the class, the instructor, and each other that way.

Your 141/142 Instructor and TA: The goal of this class is to supplement your current 141/142 class. If you need specific calculus course help (i.e. knowing your grades, when is the next test, do I have homework due, etc.) you should consult either your instructor or TA. As many of you will have different instructors, your class schedules will be different. This means that we may not talk about a topic at the exact time you are learning about it in your regular class, so be prepared to keep a topic in your mind for longer than the two classes you see it in. This will be good practice for your final exams.

**Academic Integrity:** I expect you to familiarize yourself with the Honor Code found in the current student handbook. Keep in mind that "Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline." Honor Code & Carolina Creed: <a href="https://www.sa.sc.edu/creed/">https://www.sa.sc.edu/creed/</a>

**Students with Disabilities:** Students who would like to request accommodations for disabilities must talk to me as soon as possible (after class or during office hours). Students must register with the Office of Student Disability Services before I can make any accommodations.

#### **EVALUATION**

Final Grades will use the following scale.

Р	F
>60%	<60%

### **USEFUL WEBSITES:**

- Blackboard Website: <a href="https://blackboard.sc.edu">https://blackboard.sc.edu</a>
- Software Support for Calculations: <a href="http://www.wolframalpha.com/">http://www.khanacademy.org/</a>
- Good app to use for notes and handouts, "Notability"

#### **SUPPORT:**

- My Office Hours (top of page 1)
- FREE TUTORING In LC 105 (Math Tutoring Center in Leconte)
- Student Success Center Offers FREE tutoring and FREE 1 on 1 ONLINE tutoring. (http://www.sa.sc.edu/ssc/)

Hint for making learning easier: Get to class 15 minutes early, read the book's description of today's lesson (Can determine this by looking at homework or can ask instructor). By seeing the material ahead of time, you can help make the learning curve with the new material manageable.

Hint for making studying for exams easier: When you complete a homework problem or a problem in class, don't simply move on to the next problem, but ask yourself two questions: (1) How could this show up on an exam? (2) What common mistake might I make with this problem on an exam? Do this with EVERY homework problem.