## Information for Students in Math10550, Fall 2023

See the following website for more details: http://www3.nd.edu/~apilking/Math10550/

## Instructors: Contact Information:

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Text: Stewart, Single Variable Calculus, Ninth edition (See Book/Access Code Information on the website before you make any purchases.)

Syllabus: We will cover Chapters 1-5. The topics are functions, limits and rates of change, derivatives, applications of differentiation, integrals, applications of integration.

Tutorials: The Tuesday tutorials are mandatory. In the first tutorial ( $08 / 22$ ) your tutor will go over the class information and review some values of trigonometric functions. In subsequent tutorials, you will have a quiz on the material covered in class in the week prior to the tutorial.

The quiz will consist of five questions similar to old exam questions. You will find a list of material to be covered in quizzes on our website under Quiz Information. To prepare for quizzes, please attempt the old exam questions listed for review on these topics. If you get three out of the five questions correct, you will get full points.

This is a low penalty method to get some feedback and check if you are exam ready on that material. In addition, our statistics show that preparing for tutorials each week by working through old exam questions leads to higher grades on exams. Your tutor will go over the solutions in class after the quizzes have been collected.

There will be no make-up quizzes. If you have a valid excuse for missing a tutorial, please contact your advisor and have them circulate an official note to your instructors (and in particular to your tutor) verifying your excused absence. Your tutor will replace the excused tutorial grade by the average of your other tutorial grades at the end of the semester (contingent upon receiving official notification of your excused absence).

Your Tutorial grade will count for a total of 100 points toward your final grade (10 points for each
tutorial with a Quiz, 10 points for attendance and participation in the last tutorial, with the lowest two scores dropped).

There will be no tutorial on the day of our Tuesday exam (09/19) and there is no tutorial scheduled for Tue. 11/21 before Thanksgiving.
Homework: Homework problems will be assigned and graded electronically. (Click on Online Homework Information on the website for more details). The online homework system has many extra learning tools such as interactive practice problems(master it), videos and links to Wolfram Alpha demonstrations in the text. You are encouraged to make full use of these extra features. Please refer to the separate document Information on Online Homework and the web page listed at the top of this document for details.

Who To e-mail/contact for problems For questions about timetables, exam locations/format and general policies, you will be able to find answers on the class website, or in the information handouts. For problems understanding the material or solving problems, you should find a time that suits your schedule from the available options; the math help room or your instructor's office hours. If you wish to discuss your grade or your progress in the course, request a homework extension, or request a make-up exam etc... , the appropriate person to contact (by e-mail or at office hours) is the instructor of your section. If it is necessary, your instructor will contact the course chair. If you have trouble signing up for webassign or sign into the wrong section, or wish to discuss a technical problem with webassign, please contact webassign student support or attend the Cengage office hours. You will find a link to the Cengage Office hours on our webpage Help Available.

Examinations: There will be three midterms and a final exam
Exam Dates and Locations

|  | Exam 1 | Exam 2 | Exam 3 | Final Exam |
| :---: | :---: | :---: | :---: | :---: |
| Time and | 8-9:15 a.m. | 8-9:15 a.m. | 8-9:15 a.m. | 8-10 a.m. |
| Date | Tue. Sept 19 | Thurs. Oct 12 | Thur. Nov. 16 | Wed. Dec 13 |

Exam Locations have not yet been fully determined, they will appear on the website under Exams: Time/Date/Location when the information is available.

If you are entitled to extra time for your exam, please contact the Sara Bea Center well in advance of your exam to reserve a place there to take the exam. Extra time will not be given in the regular exam hall.
Calculators will NOT be allowed on exams.

## Grading:

Midterms: 100 points each
Final: 150 points
Quizzes: 100 points
Homework: 50 points (each homework carries equal weight)
Your final grade will be determined by your total score (out of 600).
Class Attendance: A first-year student who accumulates more than 3 unexcused absences may be given an F. Whether your instructor enforces this policy or not, it is not a good idea to skip classes. If you have to miss classes due to an emergency or sickness, you should alert your advisor and have them circulate an excused absence note to your instructors and tutors. To catch up on class material, you can work through the lecture notes provided on the website and contact your instructor or go to the math
help room if you have questions. In general not attending class or sitting at the back of class working on assignments for calculus or other classes are factors which have a strong negative effect on grades. Your instructor may or may not take attendance.

## Exam Conflicts

- The Tues/Thurs 8 am exam schedule and the schedule for finals is known for all your courses. Check for any conflicts Here and let your instructors and advisor know about conflicts well in advance. Any student with exam conflicts (midterms of finals) must submit an eForm (through the Academic e-forms App. on inside-ND) at least one week before the exam period to allow for sufficient time to resolve the conflict." The dean's office has access to the number of students in the conflicted classes, this dictates which class gives the make-up exam and the decision will be made by the dean's office.
- If you have three or more finals in one day, or 4 or more finals in a 24 hour period, you may negotiate to change the time of one of these finals. If you intend to request to have the time of your Math 10550 final changed, you must talk to your dean(or the dean's designee or fill out an e-form) at least one week before the start of the final exam period (see section 3.2.2.4 of the undergraduate academic code). Note that unless your reason for requesting a rescheduled final are in accordance with university regulations, you will not be allowed to reschedule your final. In particular TRAVEL PLANS THAT CONFLICT WITH YOUR FINAL EXAM(INCLUDING CATCHING A BUS TO THE AIRPORT) AND ATTENDING FAMILY EVENTS SUCH AS WEDDINGS AND GRADUATIONS DO NOT QUALIFY AS A REASON TO HAVE YOUR FINAL RESCHEDULED. If you have a conflict on finals week, please make sure that you are available to take the exam in the make-up slot; on Friday afternoon of finals week.
- If you are an athlete, make sure that you check for exam conflicts with your athletic schedule for the semester and let your athletic advisor know about such conflicts so that they can arrange to have someone from the athletic department attend the meet to proctor the exam. Please note that according to NCAA rules, attending practice is not considered as a reason for an excused absence.

Missed Exams: Note that there will be three Midterm Exams and a Final Exam.

- Please take note of the dates of all exams.
- A student who misses an examination and has documentation showing that they have an excused absence will be given a make-up exam. Students who do not have an excused absence may be allowed take a make-up exam for a credit of $90 \%$ of the points they score on the make-up (the second time you miss an exam without an excused absence, you will get a grade of zero for the exam). Please be aware that travel plans, sleeping in, defective alarm clocks, etc. are not considered to be a valid reasons for an excused absence.
- If you have a valid excuse (illness, excused athletic absence, etc.) for missing an exam, please have your advisor arrange to have an official e-mail sent to your instructor and Professor Pilkington as soon as possible. Please be advised that if you are sick, a note from a visit to St. Liam's will be necessary. A note from the dial-a-nurse service will not constitute an excused absence. (Also please do read the note on the honor code below carefully)
- Due to the increase in demand for make-up exams in recent semesters, it has become very difficult to find a common time to schedule a proctored make-up. Priority in scheduling will be given to students who have an excused absence. If you do not have an excused absence and you cannot make the scheduled time, the instructor will substitute $90 \%$ of the average of your other grades for that exam. Make up exams may have a different format than the midterm exams.

Honor Code: Both examinations and homework are conducted under the Honor Code, While discussion in small groups in doing homework is permitted (and strongly encouraged) in this course, the work should be your own. Letting online tutors or other students complete your homework is a violation of the honor code and also quite foolish. Your homework provides you with an opportunity to test your knowledge and find your own weaknesses in a low stakes environment. You should start each homework well before the deadline and if you discover that there are some problems that you are having trouble with, take them to the math help room or your instructor's office hours.

Exams and quizzes are proctored and must be completed without the aid of a calculator or formula sheet (other than the one provided, if applicable).

Obviously forging notes or tampering with notes from St. Liam's is a serious offense and a clear violation of the honor code. If you are a foreign student, a violation of this kind may affect your ability to get a visa, so please be warned and do not engage in such behavior.

Study Habits/Learning Strategy In this course we emphasize both the acquisition of new ideas and the process of solving problems with those ideas. In order to develop a thorough knowledge of the material, it is important that you actively engage in the process of problem solving. In contrast to many courses on AP calculus, we reflect on situations to which theorems and formulas do not apply in addition to situations in which the theorems studied do apply. In addition exam problems often require the use and integration of many concepts from Calculus 1 along with concepts from precalculus. The extra depth usually requires a change in study habits and perspective for calculus students making the transition to college calculus. The study strategy outlined below is strongly recommended. More tips on Studying appear on the website under Study Tips. You should reserve at least 5 hours outside of class to read the book, summarize your lectures, complete your homework and look over old exam questions.

Many factors affect performance in the course. It is not necessarily a disadvantage if you have not had a course on calculus in high school. One factor that makes a very strong positive contribution to grades and learning outcomes for the course is having a growth mindset. Developing a growth mindset does not depend on your background and will help you throughout your college career.

In addition, pay careful attention to your own strengths and weaknesses and try to polish your thinking accordingly. It is a mistake to think that your strengths and learning habits should be exactly the same as those of your classmates. Do not consider yourself in competition with your classmates, there are many mutually beneficial ways to interact with your classmates and learn from them, and it is best to engage with them in this way.

## Ground work (The PATH to success!)

1. Prep. for lecture: Prior to each lecture, attempt to read the relevant section of the book or the lecture notes (Current Lectures (Section 06)) to get the main ideas. Review the concepts from precalculus that are necessary for the upcoming lecture.
2. After your lecture: summarize the main ideas and examples treated. Pay special attention to the conditions necessary to apply each theorem or method studied and try to think of situations
where the theorems and methods do not apply in addition to those in which they do apply. For each example treated in class, reflect on the methods and results used to solve the problem.
3. Test questions and Homework: Start the online homework well before the due date so that you have time to get help if you do not understand it. After the due date, look at the solutions and reflect on your mistakes (if any) and the methods used to solve each problem. At the weekend look for the list of old exam questions to be reviewed in preparation for the Tuesday Quiz under Quiz Information on our website. You will find those old exam questions under Old Exams For Practice. This will help you to integrate the material and with the feedback you get from the quiz on the following Tuesday, you can identify your weak points on the material, and determine if your test preparation strategies need to be revised.

## Putting it together (The CAR that gets you there!)

1. Condense the material: At the end of each week, put together a synopsis of the lectures and examples from that week and save it for easy exam review. Make sure you get help on any concepts or problems that you could not understand/resolve.
2. Attend Tutorial. The quiz will help you to run a mini-simulation of the exam environment on the work from the previous week. The question will be old exam questions. Your tutor will go over the solutions and as they do, you should reflect on the methods, theorems and background material used in the solution. If you get a question wrong, you should think about why it happened and take the necessary steps to revisit the gaps in your knowledge or revise your study strategies, or both. In particular, make a note of the material you did not know well or the mistakes you made, so that you can give that part of the material special attention when reviewing for your exam.
3. Review for Exams: Before each exam, start you review early (a week or more before the exam). Review your lecture summaries and make sure that you get help on your weak areas (requires planning ahead). Work through the practice exam prior to the day on which it is covered in class. On the day of the exam, you will be required to answer questions on a large body of material without any props. You must prepare honestly and thoroughly for this scenario when working through the practice exam. Extra old exams are available on our website for practice under Old Exams For Practice.

Communication for this course is mainly through e-mail or in class. Please make a folder in your e-mail account to store all messages pertaining to this course for your reference. In particular store all messages from your instructor, your tutor and Professor Pilkington.
Resources Please make sure you are aware of the resources for this course by taking time to browse through the website and the online homework. Of note are :

Online Homework Practice problems, videos, interactive e-book with links to Wolfram demonstrations and videos.

## Website

- Notes from some sections and previous classes, Current Lectures (Section 06) and Professor Borelli's Lectures(Fall 2011).
- Practice Exams under Old Exams For Practice
- Old Exam Questions under Old Exams For Practice.
- List of quiz topics for tutorials under Quiz Information.

Help See website for more details: Help Available.

- Help with Signing up for Webassign: Cengage Office Hours.
- Office Hours: Your instructor and tutor will announce office hours in class; Help Available.
- MATH Help Room (walk in), run by Graduate Students.
- Learning resource center, tutoring and collaborative learning sessions, check website for details; Help Available.
- Exam Reviews, The night before each exam, one of the instructors will hold a walk in review/Q\&A session; Exam Reviews. Also tutors and Instructors often volunteer to hold extra independent open reviews. Information about these will be included in the exam information sent by e-mail prior to the exam.


## Bottom Line; The To-Do Checklist for Start of Semester

1. Go To Your Tuesday Tutorial. (Required and counted as part of your grade (10 points)).
2. Find out your section number or instructors's name and sign up for Online Homework (see homework handout).
3. Go to Class on Wednesday, bring pen and paper.
4. Get down to work straight away, homework, old exam questions, review materials from precalc jump right in!
5. Buy the Cengage Unlimited, \$124.99 (4 months subscription) This gives you access to the e-book (Stewart Calculus) and homework for Calculus I, II and III along with access to the e-book (Stewart et-al, Precalculus) and precalculus review modules (to be set up) for Calculus I, II and III, and more. (I believe you can rent a hard copy of the book for the semester, with this option for about \$8-10. )
