Math 252 Integral Calculus   Winter 2019

Instructor: Vikki Maurer   **Class:** M-F 9:00 to 9:50am

Course: This is the second course in the calculus sequence. In this course you will apply calculus to solve problems with confidence, persistence, and openness to alternative approaches. Interpret and communicate the concept of the integral. Connect the graphical behavior, numerical patterns and symbolic representations of functions, their derivatives and antiderivatives. Collaborate to solve calculus problems from a wide variety of applications. Use a graphing calculator and or other technology to solve calculus problems.

Required for this Course:
- MyMathLab Access Code which includes the E-book for Calculus, Early Transcendentals, 3rd Edition by Briggs, Cochran, Gillett, and Schulz
- **MyMathLab Course ID: maurer72956**
- ANY Graphing Calculator (Free App on your phone, Desmos, etc.) You will not use a calculator for exams so you can use any calculator while you complete homework.

Phone: 541-917-4370 but email is best.

Email: maurerv@linnbenton.edu   **Office:** WOH 119

Office and Advising Hours: M11-12: W11-12: R10-11
Other times by appointment or drop by.

Course Requirements:
20% MyMathLab Homework
20% In-Class Assignments and any take home problems
 4% Integration Proficiency
36% Midterm Exams
20% Final Exam

Course Grades: Final course grades will follow the standard cut-off A 90%, B 80%, C 70%, D 60% and Below 60% earns an F grade. You must earn at least a C grade in Math 252 in order to move on to higher math classes for which Math 252 is a prerequisite.

Incomplete Grades: An incomplete grade may be issued for a student who is earning a grade of C or better, but who has failed to complete a major requirement such as the final exam. Any student seeking an incomplete must discuss this option with the instructor and sign an agreement prior to the time when grades are issued.

Your Time: Plan to spend a **minimum** of 10 hours per week outside of class reading your text and practicing homework problems. I can present the material, but for you to master the concepts; you must spend time on it.

Homework and YOUR Responsibility: I will assign weekly problems from each section in MyMathLab. Each weekly assignment will have a Saturday midnight deadline. After each class session, you should log into MyMathLab and work on the problems you know how to do after that day's lecture. You will be able to download the assignment and ask questions during class as well. Starting the homework assignment on the evening it is due is never a good idea. I give you weekly due dates so you can manage your own time. Your instructor does not routinely answer email in the evening so plan ahead. You will be able to complete assignments late but there is a penalty for any work submitted past the deadline.

Missing Class and Late Homework: If you miss class check my website for the lecture notes and any changes to the schedule. If you miss a homework deadline now and then don't worry. You can still complete an assignment and earn up to 70% credit… but only up to the exam date for that material. Once the exam date has passed then you cannot improve your score on that older assignment. The biggest reason why students fail to complete a math class is because of poor attendance. If you miss several of our classes you will find it very difficult to get caught up. Be in class each day.

Tests: There are two midterm exams that you will take in class. You will not use graphing calculators on any exam. The dates for these exams are listed on the calendar and will not change. There are no exam retakes or make-ups. If you miss a midterm exam then your final exam percentage will count as the missing test score.

In-Class Problems: We will often work in pairs or groups to solve calculus problems during class. These in-class problems will be collected. If you are not in class to work on the problem, then you will not earn credit. There is no way to make up these in-class problems. I will drop 2 of these in-class problems at the end of the term.

Final Exam: Your cumulative final exam is worth 150 points. You will be asked not only to demonstrate your mastery of the calculus you learned this term, but you will also be writing about concepts.

Weeks	Schedule and Exam Dates
Week 1 Jan 7 - 11	Sections 4.9, 5.1 and 5.2 The Antiderivative, Riemann Sums and Definite Integrals
Week 2 Jan 14 - 18	Sections 5.3, 5.4 and 5.5 Fundamental Theorem of Calculus, Even/Odd Functions Using Symmetry, Substitution Rule
Week 3 Jan 21 - 25	**Monday, January 21 NO SCHOOL** Sections 6.1 and 6.2 Velocity and Net Change and Areas Between Curves
Week 4 Jan 28 – Feb 1	Monday, January 28 is review day. **Tuesday, January 29 is EXAM 1** Sections 6.3 and 6.4 Volumes by Integration
Week 5 Feb 4 - 8	Sections 6.5, 6.6 and 6.7 Use Integrals to find Arc Length, Surface Area and Begin Applications Involving Work and Force
Week 6 Feb 11 - 15	Section 6.7 (continued) Applications Involving Work and Force Thursday, February 14 is review day. **Friday, February 15 is EXAM 2**
Week 7 Feb 18 - 22	**Monday, February 18 NO SCHOOL** Sections 8.1, 8.2, and 8.3 Integration Basic Approaches, Integration by Parts, Integration of Integrals with Powers of Trig Functions
Week 8 Feb 25 – Mar 1	Section 8.4 and 8.5 Integration by Trigonometric Substitution and Integration by Partial Fraction Decomposition
Week 9 Mar 4 - 8	**Integration Proficiency Test in class on Monday, March 4** Sections 8.6 and 8.8 Numerical Integration, Integration Strategies and Integration Tables
Week 10 Mar 11 - 15	Section 8.9 Improper Integrals Thursday and Friday of this week are review days.
Finals Week Mar 18 - 20	**Final Exam, Monday, March 18, 10:00am to 11:50am**

Tentative Schedule: Note that Exam dates will not change.

Help: There are many resources available for you if you need help with calculus. Ask questions during class or office hours. MyMathLab has helpful tutorials and resources. Search YouTube or mathtv.com for the topic of interest and watch a tutorial. Talk with an instructional assistant at the math desk in the Learning Center. Sign up for a FREE tutor in the Learning Center.

A Word About the Math Help Desk: Originally the math help desk was designed to support the developmental math students. Over the years more transfer level math students have come to rely on the math help desk. There is a problem, however, with getting too much help. You end up not learning to think critically on your own; you don't develop confidence in your own abilities; and you end up approaching the math help desk for every little question. Typically students who rely too heavily on the math help desk or on the solutions manual have good homework scores but failing test grades. Be sure you do not go to the math help desk until you have wrestled with the problem first. Read your class notes, check examples in the text, and be sure you have a good handle on what the question is asking you to do.

Cheating: Cheating will not be tolerated.   If you choose to cheat on an exam and are caught, you will receive a zero grade on your exam, and I will file an incident report. A second episode of cheating will guarantee you an F grade for the course and more severe disciplinary action from the school. Copying homework from another student or allowing a student to copy your homework is also cheating. If you are having so many problems that you feel the only way out is to cheat, then you need to come talk with me. I am here to help you succeed. There are always ways to work things out for students who are willing to try.

Anyone With Special Needs or Circumstances? Students who have issues I should be aware of, have emergency medical information that I should know about, need special arrangements in the event of evacuation, or have documented disabilities who may need accommodations, should talk with me as early as possible, no later than the first week of the term. If additional assistance is required the student should contact the Center for Accessibility Resources in RCH 105 or call 541-917-4789.

LBCC Comprehensive Statement of Nondiscrimination
LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: linnbenton-advocate.symplicity.com/public report.