

Spring 2021 - MTH 252 Integral Calculus - CRN 40208

Instructor: Nicole Seaders

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Class Times: MW 9-10:50, F 9-9:50

Class Location: Zoom/Moodle

Virtual Office: Zoom link in Moodle

Drop-In Hours: M 3-3:50p, W 2-2:50p, F

10-11:50a

What you need for the class:

Regular and reliable access to the internet

- A web camera for Respondus monitored testing and class participation
- Ability to scan documents and create pdfs for uploading (free apps like CamScanner work fine)
- A calculator without a symbolic manipulator. (I recommend a TI-36XPro or TI-84)
- MvMathLab Access Code (includes ebook Calculus, Early Transcendentals, 3rd Edition by Briggs, Cochran and Gillett)
- at least 10 hours a week outside of class times to practice and learn the material

Course Description: The second course in the calculus sequence for students majoring in mathematics, science and engineering. Topics include techniques of integration, numerical integration, improper integrals, applications of integration, and an introduction to differential equations.

Prerequisite: MTH 251 Differential Calculus with a C or better.

What will you learn in this class: the student will be able to

- Calculate, interpret and communicate the concept of the integral.
- Integrate a variety of functions using multiple techniques.
- Recognize when and how to apply calculus tools to solve problems in business, the sciences and engineering.

Course Grades: Your grade in this class is based on the following:

| Online Homework | 18% |
|----------------------------------|-----|
| Class Activities | 4% |
| Written Homework and Reflections | 10% |
| Project | 10% |
| 2 Proficiency Tests (6% each) | 12% |
| 2 Exams (12% each) | 24% |
| Final Exam | 22% |

Final Grade: 90%-100%=A, 80%-89%=B, 70%-79%=C, 60%-69%=D, <60%=F

Student work: Mathematics is a combination of knowledge and skill, and like any skill (or sport) can only truly be learned by doing. Lectures will be interactive and we will frequently work problems during class. Online homework is your opportunity to practice and learn the material with immediate feedback and multiple chances. Write-ups will help you solve more complex problems and practice communicating your solutions. The corresponding weekly forums will ask you to learn from your mistakes and make connections. Finally a project will challenge you to synthesize what you have learned and explain your understanding in a professional manner.

You will be asked to demonstrate what you have learned on two exams, two proficiency tests, and a Final.

Class Work and Participation: In-class activities will be worth 5 points each. Some will be graded solely on participation. There is no way to make up this in-class work but one will be dropped at the end. Homework: Online homework will be completed and submitted electronically (link in Moodle). Deadlines are Tuesdays, Thursdays and Saturdays at 11:59p (~5 per week, one for each hour in class). Important: Work the problems by hand in a notebook you create for your 252 homework. This will give you practice writing out solutions, a place to start when asking for help, and give you a clear record of work to study for exams. When you come to office hours or other tutors for help, you should bring a copy of the problem and your notes for your attempt of the problem.

Weekly write-ups will be uploaded as a pdf in Moodle by Sundays at 11:59p. Start these assignments

Tests: The proficiency tests in weeks 4 and 10 are to ensure you can apply basic integration techniques correctly to compute integrals by hand. Students will have multiple retakes and need to earn >50% on these to pass the class. There are two midterm exams on Monday of Weeks 4 and 7 (4/19, 5/10) and a

early as the problems are often challenging. The corresponding forum deadline is Monday at 11:59p.

comprehensive Final on Monday (6/8) 10-11:50a, which will focus on concepts and applications.

Missing Class and Late Work: If you miss class, check online for the lecture notes and any changes to the schedule. You <u>cannot</u> make up in-class activities. You can have two, no questions asked, 48 hour extensions on the online homework if you email with subject line "late pass". Otherwise, *if you miss an online homework deadline, you can still earn up to 70% credit up to the evening before the next midterm <u>or Final</u>. Write-ups must be turned in by the deadline so you can participate in the weekly forums.*

Class resources: This class has many resources to help you succeed.

- Whether you have questions about material, the course structure, or even other topics, I am available in my drop-in hours or by appointment.
- Your classmates are a great resource and studies have correlated academic social groups with success in learning mathematics. Discord is a place to meet and schedule study sessions.
- The Learning Center offers the Math Support Zoom and free one-on-one tutoring.
- In addition to your textbook, *MyLab Math* has a **StudyPlan** that has additional homework problems with "Help Me Solve This" and "Show Me An Example" options.

Expectations: Expect to come prepared and ready to engage the class. This includes being present with camera on, asking questions, participating in activities, and interacting with classmates. Students are responsible for any material or other information covered during class. Students should also log into Moodle several times a week to check announcements, study course materials, and complete homework.

Academic Honesty: I assume that you are ethical and honest. However, if there is an incident of academic dishonesty (including but not limited to cheating, plagiarism, forgery, or aiding or abetting cheating or plagiarism), you will be subject to disciplinary action which may include receiving an F for this class. Any incident of this nature will be reported to the administration where it will be noted in your file.

Student Needs: The Roadrunner Resource Center is available to help students who have difficulty affording groceries or lack a safe and stable place to live. RRC can also direct you to community resources to help with other issues getting in the way of your success (e.g. buying books, transportation, child care, part-time employment, etc.) Call 541-917-4877 or visit www.linnbenton.edu/rrc.

Special Circumstances: Students who may need accommodations due to documented disabilities, or who have medical information which the instructor should know, or who need special arrangements in an emergency, should speak with the instructor during the first week of class. If you think you may need accommodation services, please contact Center for Accessibility Resources, 917-4789.

Statement of Nondiscrimination: LBCC maintains a policy of nondiscrimination and equal opportunity in employment and admissions, without regard to race, color, sex, marital and/or parental status, religion, national origin, age, mental or physical disability, Vietnam era, or veteran status. The LBCC community is enriched by diversity.