



## **MTH 251 Differential Calculus, Fall 2021, CRN 20420**

**Meeting times: Monday and Wednesday. 1:00-2:50 PM, Friday 1:00-1:50**

**Zoom [Meeting ID: 945 7104 5528](#)**

**Instructor:** **Andrea Moreira Viteri**

**Email:** [moreira@linnbenton.edu](mailto:moreira@linnbenton.edu)

**Office Hours (for students):** Tuesday 3:30-4:30 PM and Friday 2:00-3:00 PM or by appointment.

### **Required Course Materials:**

- Regular access to a computer and the internet.
- Web-Camera for Testing and Class Participation
- Access code for [Achieve online homework with e-book Course ID: f9b3k6](#).

The access code can be purchased at the LBCC bookstore.

For more help with enrolling in the Achieve course:

<https://macmillan.force.com/macmillanlearning/s/article/Achieve-Access-Code-FAQ>

- *A scientific calculator or graphing calculator that does not have a symbolic manipulator. The TI-36X-Pro or TI-84 are recommended.*
- Ability to scan documents or create pdf documents for uploading work. Free apps for phones work fine. (Cam Scanner, for example.)

**Course Description:** The first course in the calculus sequence for students majoring in mathematics, science and engineering. Limits and derivatives are approached using graphical, numeric, and symbolic methods. Linear approximations, related rates, curve sketching and optimization are among the applications of differentiation covered in this course.

**Prerequisite:** MTH 112 Trigonometry or equivalent with a grade of "C" or better.

**Student Learning Outcomes:** Upon completion of the course, the student will be able to:

1. Calculate, interpret and communicate the concepts of limits and derivatives.
2. Recognize when and how to apply calculus tools to solve problems in business, the sciences, and engineering.
3. Connect the graphical behavior, numerical patterns and symbolic representation of functions and their derivatives.

**Grading Policy:** Your grade in this class is weighted based on the following:

|                                 |     |
|---------------------------------|-----|
| Online Homework - Achieve       | 15% |
| Online Pre-Class Work - Achieve | 5%  |
| Weekly Class Work/Quizzes       | 20% |
| Tests (2 @ 15% each)            | 30% |
| Projects                        | 10% |
| Final Exam                      | 20% |

|                 |   |
|-----------------|---|
| Scale: 90%-100% | A |
| 80%- 89%        | B |
| 70%- 79%        | C |
| 60%- 69%        | D |
| 0 – 59%         | F |

*All grades will be posted in the gradebook on Moodle.*

A grade of Incomplete may be assigned at the discretion of the instructor under special circumstances. The student must have completed the majority of the course, been in regular attendance and passing the course prior to the “special circumstance.”

We will be using The [Moodle](#) site in conjunction with [Macmillan’s Achieve Website](#) for this course. Each week you will have several items on Moodle either as a resource or to complete in addition to your Achieve pre-class and homework.

**Online Homework:** There are **homework** exercises assigned for each section we cover. This is your opportunity to practice and learn the material. [Achieve](#) Homework should be completed by the due dates on the Macmillan website. Assignments not opened prior to the relevant test will have a zero score. Problems in open assignments completed after the due date receive a **3% penalty each day past the due date**. **Pre-Class Work** is also completed on Achieve.

### **Projects and Write-Ups:**

- Selected problems are assigned as a **Homework Write-Up**. The write up will include: the problem statement, all steps—including the calculus and algebra necessary to solve it, appropriate explanation of the process and the answer clearly identified. It should be written so that anyone in a MTH 251 class would be able to easily follow and understand your solution. Homework Write-Ups will be graded on correctness, presentation, readability and the communication of your solution. Up to one half of the grade is based on the *communication and explanation of the solution*. In other words, a correct solution without explanation can lose up to half of the points.
- Projects will include applications of the material for the course. Specific guidelines for each project will be given and explained when the appropriate material has been covered in the course. Expect 1-3 projects this term.

**Weekly class work:** These are short assignments or activities, given and completed the same week the material is covered. Typically you will work in small groups, putting what you just learned into immediate practice. The group work will be submitted as a YouTube link to the recording of your **group Zoom presentation**. If you are unable to attend the Zoom Class Meetings, you will still be able to download and complete these with your own zoom group at the agreed upon meeting time. Submit your completed work in a pdf file on Moodle.

All written/group assignments that are completed outside of class are due at **11:59 p.m. on Sunday** of the week it was assigned. Late assignments will not be accepted after Wednesday following the due date. **Late work will receive a 20 percentage point penalty**. It is important that you seek out help with assignments **before** the date they are due. I will

drop the lowest score from the class work category at the end of the quarter.

***Please be prepared to upload your completed written work as a pdf file. Please be sure items are numbered and pages are in order. One single combined document for each assignment, please.***

#### **Tests:**

- Tests (2) will have a 2-hour time limit, will be taken during class time and must be submitted at the end of class on the scheduled day. No retakes for these tests. ***Students will **immediately** submit their scratch work as a pdf file on Moodle in order to receive credit.***
- The *tentative* test dates are listed on the course calendar. If you have been missing class prior to a test, it is your responsibility to confirm the date of the test as it may change.  
Testing will be through Moodle:
- [Moodle Directions: Respondus Lockdown Browser and Monitor](#)
- [Video: Introduction to Respondus](#)

**Final exam** is scheduled on **Monday, Dec 6th, 2021.**

**Attendance:** I will monitor your participation and attendance through your participation during Zoom Classes, your Achieve log-in record, your timely completion of online homework and written assignments. *Attendance, effort and attitude will be noted by the instructor and may be used to help determine "borderline" grades.*

**HELP!** If you have questions, PLEASE ask!

- I have scheduled Zoom office hours when you can drop in (see at the beginning of this document).
- Email me for a scheduled Zoom appointment
- Visit my [instructor website](#) and [Moodle](#) for helpful links to class notes, videos, Zoom links
- The **Math Desk** WILL be operating FallTerm both in person and remote to support students. Visit the [MATH help site](#).
- The URL for the **Learning Center Remote Resources** site is <https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/index.php> This will have all relevant Zoom or Discord meeting links, hours, and updated information.
- **Form a study group:** Your classmates are important resources for understanding and completing the homework. You gain a deeper understanding of mathematical concepts when you express them in your own words and explain them to someone else. It is ***strongly recommended*** that you study together with other students in small groups. The most successful calculus students form study groups early.

#### **Expectations:**

- I expect that my students will be involved in and working on this class several times a week. This includes asking questions and participating in group discussions, watching videos, etc.
- Spend **at least 10-15 hours per week working on this class.**
- You should log into Zoom meetings prepared (this means you should have your notebook, tablet/laptop, class work, webcam on, etc.).

- I expect you will be respectful of everyone in the class, in word as well as behavior. Discussions should be respectful and supportive of the success of everyone in the class.
- [Virtual classroom expectations](#)

**Academic Honesty:** I assume that you are ethical and honest. However, if there is an incident of academic dishonesty (cheating), you will receive a score of zero for that test/assignment and the incident will be reported to the college administration for possible further disciplinary action. If there is a second offense, you will receive a grade of F for the course and the incident will be reported to the college administration with a recommendation for disciplinary action.

**Special Circumstances:** LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in the class, please talk to your instructor as soon as possible to discuss your needs.

If you believe you may need accommodations but are not yet registered with CFAR, please visit the [CFAR Website](#) for steps on how to apply for services or call 541-917-4789.

**Nondiscrimination Statement:**

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. To report: [linnbenton-advocate.symplicity.com/public-report](http://linnbenton-advocate.symplicity.com/public-report).

**The instructor reserves the right to make changes to the syllabus as necessary.**

**Specific Week 1 Requirements to stay enrolled in this class:**

1. Read the course syllabus.
2. Use Free access code to log into [Achieve](#) and enter your **LBCC email** for yourself.
3. Complete the Orientation and Training Assignments on Achieve.
4. **Attend or watch Zoom Class meeting 1 at 1:00 p.m. on Monday, September 27th, 2021 and Wednesday, September 29th, 2021**
5. Complete Achieve homework for Sections 2.1 and most of 2.2