Math 251- Differential Calculus Fall 2021

Instructor: Hollis Duncan

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Required materials:

• CALCULUS: EARLY TRANSCENDENTALS 4TH ED.

• Access to online homework MacMillan Achieve course id: cfabqv

• Laptop/tablet for use in class

Course Description:

This is 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. Prereq: Mth 112

Grading: Your grade will be approximately based on the following:

Online Homework 25pts
Quizzes/In class assignments 25pts
Midterm 25pts
Final 25pts

Scale: A: 90-100 pts

B: 80-89 pts C: 70-79 pts D: 60-69 pts F: Below 60 pts

No "Y" or "WP" will be given in this class.

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.

Homework/Quizzes:

Homework will be assigned at the end of each class meeting. All homework is due the following class meeting unless otherwise stated.

Quizzes will be announced, make sure that you stay up to date with all homework assignments and ask questions when you have them.

Test and Final:

All exams will cover material discussed in class and in homework. I will let you know about a week in advance the actual date of the exam. If you miss an exam you will receive a zero for that exam. For your test and final you may be required to meet with your instructor for an oral exam.

LRC Hours

Attendance:

Attendance is expected. If you are not in class you cannot take quizzes or turn in assignments. No late assignments will be accepted and no quizzes will be made up. If you know you will not be in class on a certain day let me know in advance, not after you are absent. Make every effort to attend each class.

Special Circumstances:

<u>Disabilities Services and Emergency Planning - Meet with Instructor Week One.</u> If you have emergency medical information for your instructor, need special arrangements to evacuate campus, or have a documented disability, please meet with your instructor, by appointment, no later than the first week of the term, to discuss your needs. If you have a documented disability that will impact you at college and you seek accommodations, contact the Office of Disability Services (ODS) for intake and to document your disability with LBCC. Then, each term, at least two to three weeks prior to the start of classes, submit your "Request for Accommodations" form to ODS and pickup instructor letters. ODS may be reached from any LBCC campus/center by email to ODS@linnbenton.edu or by calling 917-4789. Letter pickup is available at each LBCC campus/center

To be successful:

- Be in class on time and prepared
- Know my office hours and come by to ask questions or clarify ideas, I can help!
- Work in **groups** outside of class (a good place to meet is the **LC**)
- When you or your group are struggling with a problem ask Mike at the "Math Help Desk" in the LC
- Get a free tutor from the tutorial services area in the LC

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws.

Basic Needs

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Roadrunner Resource Center for support (resources@linnbenton.edu, or visit us on the web www.linnbenton.edu/RRC under Student Support for Current Students). Our office can help students get connected to resources to help. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.

Tentative schedule of topics:

Week	Sections
1	2.1-2.4
2	2.5-3.1
3	3.2-3.4
4	3.5-3.7
5	3.8, 3.9 Midterm
6	3.11, 4.1
7	4.2-4.4
8	4.5
9	4.6, 4.7
10	4.8, 4.9
	Finals Schedule