



Differential Calculus Math 251 – Winter 2019 Jeff Crabill, Instructor

MW 10:00 – 11:50 AM WOH-120
F 10:00 – 10:50 AM

Office: WOH-131
Phone: 917-4627



Office Hrs: MWTh 12:00 – 12:50 and by appt.
CRN: 30153

Suggested Reference Materials

Calculus by OpenStax (Free e-book)
Or any other suitable Calculus reference (text, online, etc)

Prerequisites:

Math 112 (Trigonometry), a solid algebra foundation, and knowledge of your graphing calculator and/or computational software (or a willingness to learn).

If you don't have the prerequisite courses, or their equivalents,
you should NOT take Math 251!

Learning Outcome Goals:

Upon completing MTH 251, students will be able to do the following:

1. Apply calculus to solve problems with confidence, persistence, and openness to alternate approaches. (This includes review of and proficiency in algebra and trigonometry.)
2. Interpret and communicate the concepts of limits and derivatives.
3. Connect the graphical behavior, numerical patterns and symbolic representation of functions and their derivatives.
4. Collaborate to solve calculus problems.
5. Recognize when and how to proficiently apply calculus tools to solve problems in business, science, and subsequent mathematics courses.
6. Use a graphing calculator and/or other technology to solve calculus problems.

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 optimizations are among the applications of differentiation covered in this course.

This will be the course where you see your understanding of functions and your algebra skills turn into more useful tools to help you understand the world. Spend the quarter relating what you learn to concepts in physics, economics, and biology.

Course Website: <http://www.schoology.com>



- Syllabus
- Course Information
- Daily Smartboard Notes
- Regular (rote) homework
- All assignments posted on schoology

Grading & Assessment

Each assignment in the course will fall into one of the following categories and will be listed on schoology.

Your grade will be based on the following categories and weights:

Assessments	45%
Rote Work	20%
Understanding	25%
Challenge Problems	10%

Grades will be given on the standard scale** based on a weighted average of your scores .

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
<59%	F

No **Y** or **WP** grades will be given in Math 251.

**Instructor reserves the right to bump up individual grades, case-by-case, based on above average attendance and excellent homework.



Your grades will be stored in the Gradebook on the course schoology.com page. Please check it occasionally for accuracy.

Make sure you know how to calculate the weighted average that results in your grade.

Course Policies:

1. Attend classes regularly. Participate and do homework and projects, because math is not a spectator sport! If you have not formed a study group, make it part of your weekly study!
2. Missed exams cannot be made up. One missed exam score will be replaced by the final exam grade.
3. Late work is not accepted. Please turn in your work, completed or not, when it is due.
4. Incompletes are given solely at the instructor's discretion, but will generally not be granted. You must complete the course requirements within the current quarter to receive credit for the course, extraordinary circumstances notwithstanding.
5. The instructor reserves the right to modify this syllabus at any time. Changes will be announced in class.
6. Any circumstance that is not specifically addressed in this syllabus shall be handled solely at the instructor's discretion.



**There is only one way to go
from here! – UP!**

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.
(for further information <http://po.linnbenton.edu/BPsandARs/>)

Disabilities Services Statement

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.

Statement of Inclusion

The LBCC community is enriched by diversity. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. I actively support this right regardless of race, creed, color, personal opinion, gender, sexual orientation, or any of the countless other ways in which we are diverse. (related to Board Policy #1015)

HERE'S HOW TO GET HELP!

There are many resources available to help you with the study of calculus.

One of these is...

THE LEARNING CENTER

Hours:

MW 7:30 AM - 7:00 PM

TTh 7:30 AM - 9:00 PM

Fridays 7:30 AM - 4:00 PM

ANY TIME YOU USE THE LEARNING CENTER AT MAIN CAMPUS YOU MUST SIGN IN AND OUT ON THE ATTENDANCE COMPUTER.

- At least one Instructional Assistant who can answer your questions is available in the Learning Center during its hours of operation.
- Your classmates are an important resource. Many students find that working with other students is an effective way of doing homework. The Learning Center is a good place to do this. Be sure that you are working together towards understanding the solution process and concepts, not just 'getting the answer'. Often another student can explain things in terms that an instructor cannot. If you find that you are doing most of the explaining in your study group, remember that you learn concepts best by explaining them to someone else.
- Make a note of my office hours. If these times do not fit your schedule, we can make an appointment to meet at another time. I will be glad to help you whenever I can - just ask!
- Answers to the odd numbered problems can be found in the back of the text. Written solutions to the odd-numbered problems in the text are in the *Student Solutions Manual*.
- Videotaped lectures on topics in calculus are available for checkout from the main desk in the Learning Center. Ask for the tapes by topic, not by chapter or section of your text. You may view the tapes in the Learning Center, but they may not be checked out overnight.

**BE SURE TO SEEK HELP IMMEDIATELY IF YOU ARE HAVING TROUBLE WITH ANY CONCEPTS.
IT IS ESSENTIAL THAT YOU ATTEND CLASS REGULARLY AND KEEP UP IN ORDER TO
SUCCEED IN CALCULUS.**