MTH 252—Integral Calculus – Spring 2019
Sec B01 – CRN 40936
TuTh 6:00 – 8:20pm BC 234

Instructor:	Juli Schutfort	**Office:**	BC 101
Email:	schutfj@linnbenton.edu	**Office Hours:**	T,TH 5:30 – 6:00pm
			other times by appt.

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

Outcomes: Upon completion of the course, you 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 Materials: Regular access to a computer and the internet
Graphing Calculator (TI-83 or TI-84 are recommended)
Myopenmath - an open source textbook and software.

Course Grades: Grades in this class are determined as follows:

2 Tests (20% each)	40%
Final Exam	30%
In-Class Assignments	10%
MyOpenMath Homework	20%

Grades will be assigned as outlined in the scale below:

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

Homework: Success in a math class goes hand-in-hand with completing the homework assignments. Homework will be completed and submitted electronically using MyOpenMath.

Enrolling in MyOpenMath

·   Go to www.myopenmath.com

·   Click on "Register as a New Student."

- · Enter a user name, like your student ID number.
- · Choose and confirm a password, one you will not forget.
- · Enter your first and last names, and your e-mail address.
- · Enter the Course ID: **45318**
- · Enter the Enrollment Key: **mth252**

In-Class Assignments: There will be in-class assignments (ICAs) consisting of problems that will allow you to practice what we're learning in class and the topics in the assigned reading. The ICAs are due at the end of class and no late activities will be accepted. The lowest two scores will be dropped. I strongly encourage you to work in groups, although each student must turn in their own copy.

Tests: All tests (final exam included) will be given in the classroom. All tests will have a time limit of 110 minutes and a 3''x 5'' notecard will be permitted. Tests must be taken on the scheduled day and if you miss a test you will get a score of zero. The tentative test dates are listed on the calendar. The final exam is cumulative.

Special circumstances: You should meet with your instructor during the first week of class if

- • You have a documented disability and need accommodations,
- • Your instructor needs to know medical information about you, or
- • You need special arrangements in the event of an emergency.

If you have not accessed services and think you may need them, please contact Disability Services, 917-4789.

Expectations: I expect that my students will be involved in class. This includes being present, asking questions and participating in discussions. You should come to class prepared (this means you should bring your paper, pencils, calculator, etc. as well as have your homework with you). I expect you to be respectful of everyone in the class, in word as well as behavior. Along these lines, I ask that you turn off and put away your cell phone during class so as to avoid causing a distraction.

Additional Help:
Use available resources. If you have questions, come see me or send a message in myopenmath. Aside from that, you can go to the Learning Center/Learning Annex for math help.
In Corvallis: Math help is in BC-232.

Monday-Thursday	Friday
12 pm – 7 pm	CLOSED

Academic Honesty: I assume that you are ethical and honest. However, if there is an incident of academic dishonesty, 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.

LBCC's Nondiscrimination Policy: 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.

Tentative Schedule

Week	Tuesday	Thursday
1	4.10 Antiderivatives	1.1 Approximating Area
2	1.2 The Definite Integral	1.3 Fundamental Theorem of Calculus
3	1.4 Integral Formulas and Net Change	1.5 Substitution
4	1.6 Integrals Involving Exponential and Logarithm Functions	Exam 1
5	1.7 Inverse Trig Functions	2.1 Area Between Curves 2.2 Determining Volumes by Slicing
6	2.3 Volumes of Revolution 2.4 Arc Length of a Curve	2.5 Physical Applications 2.6 Moments and Centers of Mass
7	3.1 Integration by Parts	Exam 2
8	3.2 Trigonometric Integrals	3.3 Trigonometric Substitution
9	3.4 Partial Fractions	3.6 Numerical Integration
10	3.7 Improper Integrals	Review
11	Final Exam Tuesday at 6:00pm	