MTH 252—Integral Calculus – Fall 2020
CRN 27747
MW 8:00 – 8:50am , F 9:00 – 9:50am Virtual (zoom)

Instructor: Nurideen Abubakari **Office:** Online (zoom)
Email: abubakn@linnbenton.edu **Office Hours:** Tues 8:00 – 8:50 am
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%
Write-ups	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: **89936**
- Enter the Enrollment Key: **MTH252**

Write-ups: There will be Write-ups 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.

Additional Help:

Use the Learning Center and Math Café

The Learning Center will offer remote help with your homework. On the LBCC website you will find information about how to get help from math instructional assistants or tutoring. Go to the website at the link: https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/

Additionally, the Math Café offers success coaching by appointment that can include

- study strategies, note taking, learning with online homework, time management schedule, etc.
- making a catch-up plan, to get up to date on assignments.
- preparing for an exam.
- understanding and navigating online homework.

Expectations

- I expect that my students will be involved in class. This includes attending Zoom class sessions, watching required videos, reading the eBook, working on MyOpenMath, asking questions, and participating in discussions and any group work. (The instructor notes excellent participation/attitude and will sometimes "bump up" a borderline grade for such students.)
- You should attend all online zoom meetings prepared. Watch instructor videos you are told to watch before you attend the Zoom session.
- Spend time each week reading the eBook, and completing MyOpenMath assignments. Spend **at least 8 hours per week working on this class.** The Moodle shell will always be available prior to the start of a week so you will know what is expected for that week.
- I expect you will be respectful of everyone in the class, in word as well as behavior.

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.

Instructor: Nurideen Abubakari
Class: MTH 252

Tentative Schedule

Week	Monday (8-8:50am)	Wednesday (8-8:50am)	Friday(9-9:50am)
1	4.10 Antiderivatives	1.1 Approximating Area	Catch-up
2	1.2 The Definite Integral	1.3 Fundamental Theorem of Calculus	Catch-up
3	1.4 Integral Formulas and Net Change	1.5 Substitution	Catch-up
4	1.6 Integrals Involving Exponential and Logarithm Functions	Exam 1	Catch-up
5	1.7 Inverse Trig Functions	2.1 Area Between Curves 2.2 Determining Volumes by Slicing	Catch-up
6	2.3 Volumes of Revolution 2.4 Arc Length of a Curve	2.5 Physical Applications 2.6 Moments and Centers of Mass	Catch-up
7	3.1 Integration by Parts	Exam 2	Catch-up
8	3.2 Trigonometric Integrals	3.3 Trigonometric Substitution	Catch-up
9	3.4 Partial Fractions	3.6 Numerical Integration	Catch-up
10	3.7 Improper Integrals	Review	Catch-up
11		Final Exam	