



Math 253 Series Calculus/Linear Algebra

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Fall 2021 (Hybrid) CRN: 20191

Course Information

[Shannon's Classroom and Office](#)

Zoom Meeting ID: 266-855-221

Zoom Meeting Times: Monday, Tuesday, Wednesday and Fridays from 9-9:50am

[Join Our Class Discord!](#)

Office hours are daily and by appointment. We will meet in our same zoom classroom space.
(When contacting your instructor you can expect a response within one business day.)

Course Description

The third course in the calculus sequence for students majoring in mathematics, science and engineering. Topics include sequences and series of real and complex functions, matrix algebra, linear dependence and independence, eigenvalues and eigenvectors. This course satisfies the OSU requirement of MTH 306 (265/264) for engineering programs.

If you have any concerns if this course will transfer correctly, contact your major advisor.

Prerequisite: MTH 252 or equivalent with a grade of C or better.

What will you learn in this class?

- Determine whether a sequence or series converges or diverges.
- Calculate exactly (if possible) or approximate the sum of a convergent series.
- Understand and utilize power series to perform mathematical calculations.
- Apply vector and matrix operations to systems of equations and transformation matrices.

What do you need for this class?

- Daily access to a computer and the internet
- Webcam for class meetings
- Edfinity Student Access Code (\$29 through the Edfinity website or bookstore)
- [Matrix and Power Series Methods 5th edition by Lee and Scarborough](#) (free first edition available as a pdf on the internet)
- [Interactive Linear Algebra by Dan Margalit, Joseph Rabinoff](#) (free online through the link)

Here is what the Learning Center has to offer:

- **Tutoring** - Students are eligible for up to 3 free tutoring appointments a week! Meet one-on-one over Zoom with a trained academic tutor.
- **Academic Coaching** - Learn time management, test prep, note-taking, study strategies, and assignment planning to realize your academic goals. Available by appointment. Look for study skills workshops for success!

- **Writing Support** - The Writing Center offers one-on-one support for any student, for any writing project, in any class, and at any stage in the writing process. Available by drop-in Zoom room, appointment, and through the [Online Writing Lab](#).
- **Math Support** - Students can learn math in the safety of their own homes with the help of our Virtual Math Desk. Drop-in math help is available seven days a week!
- **Science Support** - Get help with chemistry, astronomy, geology, and physics at the Remote Science Help Desk. Various science tutors are available by drop-in Zoom room.

Do your students want to keep support resources nearby while working through a difficult concept?

Do they want a place to connect with other students?

*Then our **LEARNING CENTER DISCORD SERVER** is for you!*

Math Support Services: **“drop in math help”**

- *Remote and In-Person* Math Support services for all levels of math are available, 6 days a week, through a single Zoom link: <https://linnbenton.zoom.us/j/94627678411>.

Math Help Desk Zoom

- Open remotely during ALL service hours.
- Hours: 9am - 8pm Monday through Friday, 11am - 4pm Saturday, and CLOSED Sunday.
- Math Support will have **in-person support** Monday - Friday 9am - 12pm & 2pm - 5pm, and Sat from 11am - 4pm.

LBCC Mask Mandate for when we meet for testing

[Wear a mask or face covering](#) indoors at all times. Your mask or face covering must be properly worn (fully covering nose and mouth and tight-fitting). Mesh masks, face shields, or face covering that incorporates a valve designed to facilitate easy exhalation are not acceptable. If you have a medical condition or a disability that prevents you from wearing a mask or cloth face covering, you must obtain an accommodation from CFAR (Center for Accessibility Resources) to be exempt from this requirement.

State guidelines do not limit class size. Physical distancing accommodations can be made upon request and cleaning supplies are also available for personal use.

How will your grade be calculated?

Your grade will be calculated using a weighted average based on the following:

Category	Percent
Edfinity Practice Problems (Online Homework)	15%
Write-Ups (Written Homework)	10%
Projects/In Class Work/Other Duties as Assigned	5%
2 Middle Exams : Exam 1 and Exam 3	30%
2 Final Exams : Exam 2 and Exam 4	40%

Letter grades will be assigned based on:

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

“Y” or “WP” grades will NOT be given.

What exactly is in each category? How will the class work?

For this class, we will use [Moodle](#) together with Edfinity online math homework platform embedded into Moodle. This means you will not have to leave Moodle to access all assignments for the class.

Most weeks you will have several items in Moodle to complete in addition to some practice problems. You will want to log into Moodle daily to participate in the course lessons and activities.

Edfinity Practice Problems (Online Homework)

There will be practice problems assigned for each topic covered in the lectures. The practice problems will be embedded in Moodle. Your grade for this category will be calculated by taking the average of the problem set scores.

Write Ups (Written Homework)

Each week along with your online practice problems you will have a write-up homework or mini-project to be completed and uploaded in Moodle.

Mini-Projects

Specific guidelines for each project will be given and explained when the appropriate material has been covered in the course. You can expect about one small project every 2 weeks. Projects will be completed and uploaded in Moodle. You will also make a short video presentation for each project. For most projects there will be a peer review activity that you can earn points for participating in.

Middle and Final Exams (4 in total, see calendar and/or WebRunner for these dates)

There are two middle exams and two final exams that cover each of the two sections of the course (Power Series and Linear Algebra). We will be taking our exams **in person**, in WOH 120, during our regularly scheduled meeting times. It is your responsibility to inform me **before** the test date, if there are any conflicts.

Hybrid Final Exam Schedule: Finals for classes with multiple delivery modes will be scheduled according to the instructor's choice and follow the above guidelines.

Attendance

Your regular attendance (you are considered present if you come to zoom on time and with your camera on) and thoughtful participation in class are essential for your success in learning, and therefore required. If you miss any of the classes during the first week, you will be dropped for nonattendance. If there is a week that you will be unable to log in and participate, please let me know. Students are responsible for any material, updates, or other information available in Course Notes and the class calendar.

If there is a reason for not turning on your video, you must email me for permission. Reasoning? It makes it very difficult to connect and build a community when all I see are silent black squares. I have had many,

many students tell me how hard it is when they are in a breakout room basically alone! You will be sent to the waiting room if you do not have your video on and have not received permission to stay dark.

It's ok if you are eating! It's ok if you are holding a cat! In your pajamas? That's ok! Drinking tea with a blanket around your shoulders? Hey, I do that too! I can't wait to see your lovely faces.

Class Resources

This class has resources to support your success!

Q&A Drop In Hours (Office Hours)

If you have questions, please ask me! You can reach me through Discord or by email. We can make an apt. for office hours.

Study Group

Your classmates are an important resource for understanding and completing the work for the course. Often a fellow student can explain things in a different way than your instructor. Studies have shown there is a correlation between success in learning math and students who engage in study groups. It is strongly recommended that you study together with other students in small groups.

Class Policies and Expectations

Late Work

The work in this course has been planned to help you learn. When work is completed late or last minute you miss out on fully engaging in the learning opportunity. Completing the work on time also helps prepare you for the next topic.

Completing your work on time makes your learning more efficient and will mean that you spend less time overall learning the same material.

If you miss an Edfinity practice problem set full credit deadline, you can still complete the assignment and earn up to 75% credit up until the day of the final exam covering that material. Edfinity practice problem sets will not be accepted after this deadline. Projects need to be timely so other students can benefit from your presentation. Other late work may be accepted at the discretion of the instructor.

Expectations

- Since this is a 4-credit class you will spend **at least 12-16 hours per week working on this class** (including attending live lectures, watching videos and attending in person testing).
- You should log into Zoom meetings prepared (this means you should have your notebook, table/laptop, work, etc. ready).
- When we meet for zoom I expect you are caught up with the previous day's material. I have organized our course similar to how it would be if we were in person. This calendar is just to help you stay organized.
- I expect you will be respectful of everyone in the class, in word as well as behavior. and Discord board posts should be respectful and supportive of the success of everyone in the class. We will all need extra patience and kindness this term. If you are disrespectful in discord, you will be removed.

Academic Honesty

I assume that you are ethical and honest. Using sites like chegg.com (or similar) for solutions to your work is cheating, even on assignments where collaboration and getting help is encouraged.

The goal of assigned work is for you to personally build a neural network of understanding, which copying and “seeing” the answer will not provide, since building neural networks require thinking hard and making mistakes. See the first class day notes for links and scientific evidence backing these facts.

If there is an incident of academic dishonesty (including but not limited to cheating, plagiarism, forgery, or aiding or abetting cheating or plagiarism) you will receive a grade of F in the course and/or on the assignment. The incident will also be reported to the college administration with a recommendation for further disciplinary action.

Special Circumstances or Accommodations

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.
- You need special arrangements in the event of an emergency.

If you have documented your disability, remember that you must make your request for accommodations through the Center for Accessibility Resources (CFAR) [Online Services webpage](#) every term in order to receive accommodations. 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.

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 at 541-917- 4877, or schedule an appointment on the web at www.linnbenton.edu/rrc . Our office can help students get connected to resources to help. It might be helpful to notify the instructor, if you are comfortable in doing so. This will enable them to provide any resources that they may possess.

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.

Statement of Inclusion

The LBCC community is enriched by diversity. Each individual has worth and makes contributions to create that diversity at the college. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. (related to Board Policy #1015)

Please be prepared to upload your completed work as a pdf file. Please be sure items are numbered and pages are in order. One single combined document for each assignment. Find an easy to use PDF converter if needed (Cam Scanner works nicely).