



# CALCULUS

## CALCII200 — Calculus II, 3.0 hours

### PROFESSOR

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Lauren graduated from Marietta College with a Bachelor of Science in Mathematics and a minor in Philosophy. She received her Master of Science from The University of Akron in Applied Mathematics. While completing her Masters research, she worked as a Statistician at American Greetings in Cleveland, Ohio. She also has completed coursework and research towards a Ph.D. in Engineering Applied Mathematics at The University of Akron. While going to school at UA, she was employed as a Graduate Assistant and taught many courses in the Mathematics department Her daughter is almost two years old and Lauren enjoys spending time with family, attending Cleveland Cavaliers games, running, yoga, cooking, gardening, and reading.

### CONTACT INFORMATION

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E-mail: [lbrubaker@lakewood.edu](mailto:lbrubaker@lakewood.edu)

Cell Phone: 800-517-0857 X 723

### ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

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All members of the Lakewood University community who use the University's computing, information or communication resources must act responsibly. Support is accessible by calling 1-800-517-0857 option 2 or by emailing [info@lakewood.edu](mailto:info@lakewood.edu)

### BOOKS AND RESOURCES

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Larson, Ron. Calculus. 11th Ed. Cengage, 2023.

### EVALUATION METHOD

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Graded work will receive a numeric score reflecting the quality of performance.

Course Requirement Summary

- Assignments - Total of 100 Points
- Weekly discussion forums-Total of 80 Points
- Final Exam - 50 Points

### GRADING SCALE

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Graded work will receive a numeric score reflecting the quality of performance as given above in evaluation methods. The maximum number of points a student may earn is 190. To determine the final grade, the student's earned points are divided by 190.

Your overall course grade will be determined according to the following scale:

A = (90% -100%)  
B = (80% - 89%)  
C = (70% - 79%)  
F < (Below 70%)

## ACADEMIC INTEGRITY/ PLAGIARISM:

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Cheating (dishonestly taking the knowledge of another person whether on a test or an assignment and presenting it as your work) and plagiarism (to take and pass off as one's own the ideas or writing of another) are a serious issue. While it is legitimate to talk to others about your assignments and incorporate suggestions, do not let others "write" your assignments in the name of peer review or "borrow" sections or whole assignments written by others. We do get ideas from life experiences and what we read but be careful that you interpret these ideas and make them your own.

I am aware that many types of assignments are available on the internet and will check these sources when there is legitimate suspicion.

Penalty is a zero on the assignment. In cases where there is a major or continuous breach of trust, further discipline, such as an "F" in the course, may be necessary.

The major consequence of any form of cheating is damage to your character and the result of trust and respect.

## DISABILITY ACCOMMODATIONS

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Students who have a disability and wish to request an academic accommodation should contact Jim Gepperth, the Disabilities Services Coordinator and Academic Dean. The student can request an accommodation at any time although it is encouraged to do so early in the enrollment process. The student should complete an accommodation request form which begins a conversation between the school and the student regarding the nature of their disability and an accommodation that would help the student succeed in their program. The school may request documentation regarding the disability to address the accommodation request effectively. The school will communicate to the student the type of accommodation arranged. This process typically follows a team approach, bringing together persons from the academic department (including the instructor) and personnel from other departments as necessary. Additional information on disability accommodations may be found in the Lakewood University Catalog.

Disability Services Email: [disabilityservices@lakewood.edu](mailto:disabilityservices@lakewood.edu)

## SUPPLEMENTAL TEXTS

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You can use the following resources to assist you with proper source citation.

American Psychological Association Style Guide- [https://www.mylakewoodu.com/pluginfile.php/118179/mod\\_resource/content/1/APA%20Style%20Guide%207th%20edition.pdf](https://www.mylakewoodu.com/pluginfile.php/118179/mod_resource/content/1/APA%20Style%20Guide%207th%20edition.pdf)

The Purdue OWL website is also a helpful resource for students. Here is a link to the OWL website: [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_formatting\\_and\\_style\\_guide/general\\_format.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html)

## LIBRARY

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Mary O'Dell is the Librarian on staff at Lakewood University

She is available by appointment. You can make an appointment with her by emailing her at [modell@lakewood.edu](mailto:modell@lakewood.edu) or call at 1-800-517-0857 X 730

You may also schedule a meeting at this link: <https://my.setmore.com/calendar#monthly/r3a761583354923270/01032020>

She can assist you with navigating LIRN, research, citations etc.

# SUPPORT

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Each student at Lakewood University is assigned a Success Coach. Your Success Coach exists to assist you with academic and supportive services as you navigate your program. They will reach out to you, often, to check-in. Please use the resources they offer.

Student Services is available to assist with technical questions regarding Lakewood University and all services available to you.

1-800-517-0857 option 2  
info@lakewood.edu  
studentservices@lakewood.edu

# CAREER SERVICES

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Students are offered Career Services at any point as they journey their academics at Lakewood University.

1-800-517-0857 option 2  
careerservices@lakewood.edu

# LESSONS

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TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #1	<ul style="list-style-type: none"><li>Infinite Series</li></ul>	Study Course Syllabus Read Chapters 6.1-6.4 Participate in the Discussion Forum Lesson Evaluation		Objective 1
Lesson #2	<ul style="list-style-type: none"><li>Conics, Parametric Equations, and Polar Coordinates</li></ul>	Read Chapters 7.1-7.4 Participate in the Discussion Forum Complete Assignment 1 Lesson Evaluation	Assignment 1 upon completion of the lesson	Objective 2
Lesson #3	<ul style="list-style-type: none"><li>Vectors and the Geometry of Space</li></ul>	Read Chapters 7.5-8.2 Participate in the Discussion Forum Complete Assignment 1 Lesson Evaluation	Assignment 2 upon completion of the lesson	Objective 4 Objective 5
Lesson #4	<ul style="list-style-type: none"><li>Vector-Valued Functions</li></ul>	Read Chapters 8.3-8.7 Participate in the Discussion Forum Lesson Evaluation		Objective 3 Objective 4 Objective 5
Lesson #5	<ul style="list-style-type: none"><li>Functions of Several Variables</li></ul>	Read Chapters 8.8-9.4 Participate in the Discussion Forum Complete Assignment 3	Assignment 3 upon completion of the lesson	Objective 4 Objective 5 Objective 6
TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES

Lesson #6	<ul style="list-style-type: none"> <li>Multiple Integration</li> </ul>	Read Chapters 9.5-9.8 Participate in the Discussion Forum Lesson Evaluation	Objective 4
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TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #7	<ul style="list-style-type: none"> <li>Vector Analysis</li> </ul>	Read Chapters 9.9-10.2 Participate in the Discussion Forum Complete Assignment 4 Lesson Evaluation	Assignment 4 upon completion of the lesson	Objective 3 Objective 4 Objective 5 Objective 6

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #8	<ul style="list-style-type: none"> <li>Additional Topics in Differential Equations</li> </ul>	Read Chapter 10.3-10.6 Participate in the Discussion Forum Complete Assignment 3 Complete the Final Exam Request the Next Course Lesson Evaluation THANKS FOR A GREAT CLASS	Assignment 5 and Final exam upon completion of the lesson	Objective 6

## DESCRIPTION

This advanced course is designed in a way intended for students who have already completed a Calculus II course and wanted to extend their skills in this subject.

### Program Objectives

- Solve first-order differential equations.
- Utilize integration to determine area or volume.
- Utilize various integration techniques.
- Solve improper integrals.
- Solve application problems involving integration.
- Determine convergence and divergence of sequences and series. Express curves using polar coordinates and apply Calculus concepts to these curves.
- Describe curves parametrically and apply Calculus concepts to these curves
- Express curves using polar coordinates and apply Calculus concepts to these curves.

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