



# COLLEGE MATHEMATICS II

## MATH100 — College Mathematics I, 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. From 2011-2013, Lauren was employed as a Visiting Assistant Professor of Mathematics at her alma mater, Marietta College. She had the opportunity to teach courses ranging from College Algebra all the way up to Differential Equations.

In 2013, she decided to make a career change and venture into the Insurance industry.

She was employed by Farmers Insurance as a Senior Product Analyst and began coursework in the summer of 2014 on an MBA in Finance from Tiffin University. After leaving Farmers in late 2016 after the birth of her daughter, she decided to return to teaching. She taught at Ventura College in Ventura, California and most recently at Cuyahoga Community College in Cleveland, Ohio. 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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Johnson, David B. Mathematics: A Practical Odyssey. 8th ed. Belmont, CA: Brooks/Cole Cengage, 2016.

### EVALUATION METHOD

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

- Assignments - Total of 90 Points
- Weekly discussion forums-Total of 50 Points
- Midterm quiz - 60 Points
- Final Exam - 100 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%)  
D = (60% - 69%)  
F < (Below 60%)

# 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](mailto:info@lakewood.edu)  
[studentservices@lakewood.edu](mailto: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](mailto:careerservices@lakewood.edu)

## LESSONS

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TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #1	<ul style="list-style-type: none"><li>Logic</li><li>Sets and Counting</li></ul>	Study Course Syllabus Read Chapters 1 & 2 Review PowerPoints Participate in the Discussion Forum Complete Assignment 1  Complete Weekly Forum	Assignment 1 upon completion of the lesson  Forum - 1 (Chapters 1 & 2)	Objective 4 Objective 8
Lesson #2	<ul style="list-style-type: none"><li>Probability</li></ul>	Read Chapters 3 Review PowerPoints Participate in the Discussion Forum Complete Assignment 2  Complete Weekly Forum	Assignment 2 upon completion of the lesson  Forum 2 - (Chapter 3)	Objective 2 Objective 3
Lesson #3	<ul style="list-style-type: none"><li>Statistics</li><li>Finance</li></ul>	Read Chapters 4 & 5 Review PowerPoints Participate in the Discussion Forum Complete Assignment 3  Complete Weekly Forum	Assignment 3 upon completion of the lesson  Forum 3 (Chapters 4 & 5)	Objective 2 Objective 3 Objective 5

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #4	<ul style="list-style-type: none"> <li>Voting and Apportionment</li> </ul>	Read Chapters 6 Review PowerPoints Midterm Exam	Midterm Exam completion of the lesson	Objective 5
Lesson #5	<ul style="list-style-type: none"> <li>Number Systems and Number Theory</li> <li>Geometry</li> </ul>	Read Chapters 7 & 8 Review PowerPoints Participate in the Discussion Forum Complete Assignment 4  Complete Weekly Forum	Assignment 4 upon completion of the lesson  Forum 4 (Chapter 7)	Objective 4 Objective 7
Lesson #6	<ul style="list-style-type: none"> <li>Graph Theory</li> <li>Exponential and Logarithmic Functions</li> </ul>	Read Chapters 9 and 10 Review PowerPoints Participate in the Discussion Forum Complete Assignment 5  Complete Weekly Forum	Assignment 5 upon completion of the lesson  Forum 5 (Chapters 9 & 10)	Objective 5 Objective 6
Lesson #7	<ul style="list-style-type: none"> <li>Markov Chains</li> <li>Linear Programming</li> </ul>	Read Chapters 11 & 12 Review PowerPoints Participate in the Discussion Forum Complete Assignment 6  Complete Weekly Forum	Assignment 6 upon completion of the lesson  Forum 6 (Chapters 11 & 12)	Objective 2 Objective 5
Lesson #8		Review the PowerPoint Complete the Final Exam Request the Next Course Course Evaluation THANKS FOR A GREAT CLASS	Final exam upon completion of the lesson	

## DESCRIPTION

The goal of this course is to expose students to the relevance of mathematics in the context of everyday ideas across various disciplines while broadening their view of mathematics. Analytical tools and problem skills learned in this course will be beneficial in the real world. Topics include, logic, set and graph theory, probability and statistics, finance, voting theory, geometry, and algebra.

## OBJECTIVES

1. Define key terms and definitions related to logic, sets, algebra, finance, probability and statistics.
2. Apply various problem-solving skills to real-world application problems.
3. Calculate and interpret various probabilities and statistics and communicate the results using the language of probability and statistics.
4. Define various sets of numbers and use number systems with different bases.
5. Apply contemporary mathematics skills, such as voting and apportionment, finance, linear programming, graph theory and matrix applications.
6. Use mathematical functions involving exponential and logarithmic terms.

7. Define and apply geometry concepts such as perimeter, area, volume, and the Pythagorean Theorem.
8. Apply counting techniques, including permutations.