

MAED 200: Introduction to *Mathematica*
Spring 2020 Section 001 1 credit hour

Instructor:	Dr. Zach Abernathy	Instructor's Teaching Schedule:	TR 9:30-10:45am SIMS 114
Office:	Bancroft 161		
Office Phone:	803-323-4605	Office Hours:	MW 1:00-2:00pm and by appointment.
Math Department:	803-323-2175		
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Instructor Website:	http://faculty.winthrop.edu/abernathyz/		

The instructor reserves the right to make modifications to this syllabus. Students will be notified in class & by email.

Student Learning Outcomes – Math Department

1. Students apply fundamental mathematical concepts and techniques to solve problems and evaluate results.
2. Students demonstrate the ability to apply appropriate technologies to the study of mathematics and effectively use such technologies to investigate and develop an understanding of mathematical ideas.

Student Learning Outcome – Introduction to *Mathematica*

Students will develop the skills to use *Mathematica*, a comprehensive computer system for doing mathematics, graphics, numerical analysis and much more to solve problems in a variety of disciplines.

Text, Materials and Learning Aids

- There is no required text for this course.
- There are several methods within *Mathematica* to get help with the purposes, syntax and options for all *Mathematica* commands. These methods will be reviewed in class.

Problem Sets and Grading

Each week a *Mathematica* notebook will be posted on the course website. Class time will generally be provided for you to work on this assignment. You should download this notebook, work the problems and e-mail the completed notebook to me by the due date and time. Late work may be heavily penalized. Each of these notebooks will count for 15% of your grade, and a cumulative final exam will count for 40% of your grade. Grades will be assigned as follows:

92-100 A	90-91.99 A-	87-89.99 B+	82-86.99 B	80-81.99 B-	77-79.99 C+
72-76.99 C	70-71.99 C-	67-69.99 D+	62-66.99 D	60-61.99 D-	

Attendance Policy

The University Attendance policy as stated in the current catalog (<https://www.winthrop.edu/recandreg/undergraduate-catalogs.aspx>): if a student's absences in a course total 25 percent or more of the class meetings for the course, the student will receive a grade of N if the student withdraws from the course before the withdrawal deadline; after that date, unless warranted by documented extenuating circumstances as described in the previous section, a grade of F or U shall be assigned.

Students with Disabilities/Need of Accommodations for Access

Winthrop University is committed to providing accessible learning experiences and equal access to education for all students. The syllabus is available in alternate formats upon request. If you are a student with a disability (including mental health concerns, chronic or temporary medical conditions, learning disabilities, etc.) and you anticipate or experience academic barriers due to the condition, please contact The Office of Accessibility (OA) for information on accommodations, registration, and procedures. After receiving approval for accommodations through OA, please make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely manner. OA contact information: accessibility@winthrop.edu; 803-323-3290; 307 Bancroft Hall Annex.

Academic Integrity

Review the student code of conduct for university policies on academic misconduct. Academic misconduct will not be tolerated and will result in a failing grade on the assignment and/or in the course. The full handbook is available online at: <https://www.winthrop.edu/studentconduct/winthrop-university-student-handbook.aspx>.

Electronic Devices

All electronic devices (including cell phones) should be set to silent and kept in your book bag or purse throughout class time unless otherwise instructed.

Computer Use

The use of computers during class time is strictly restricted to *Mathematica* unless otherwise directed by the instructor.

Tentative Course Schedule

Date	Topic
T 1/14	The basics of <i>Mathematica</i>
R 1/16	Plotting and solving with <i>Mathematica</i>
T 1/21	<i>Mathematica</i> does precalculus
R 1/23	<i>Mathematica</i> does differential calculus
T 1/28	<i>Mathematica</i> does integral calculus
R 1/30	<i>Mathematica</i> does data analysis: lists, tables, and statistics
T 2/4	More on solving: systems of equations and differential equations
R 2/6	<i>Mathematica</i> does future calculus: sequences and series, parametric equations, and three-dimensional plotting
T 2/11	Review and evaluation
R 2/13	Final exam

Add/Drop: Through W 1/15

SU and Course Withdraw Date: F 1/31