

MATH 1100-001, FALL 2015

Schedule and Classroom: MWF 10:45AM-11:35AM SW 133

Instructor: Nat Smale

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Phone: 801-581-7921

Office Hours: Monday and Friday 11:40AM-12:40PM or by appointment. The Monday office hour will be held in the Business School, room to be announced later. The Friday hour will be in my office.

URL: www.math.utah.edu/~smale

Prerequisite: A grade of “C” or better in Math 1050 or Math1080 or Math 1090 or Math 1210, or an Accuplacer CLM score of 80 or better, or SAT Math score of 630 or better.

Text and WebAssign: You must purchase Enhanced WebAssign (EWA), an online platform which will be used for homework, and this will provide you automatically with an e-book version of the text, Mathematical Applications, 11th ed. by Harshbarger and Reynolds, ISBN: 978-1-305-10804-2. Your EWA account is automatically created when you enroll in the course on CIS. Use the link in Canvas to access your account. You will be able to access it on the first day of class. It is free for the first 2 weeks, and then must be purchased. For information on buying a hard copy of the text at a reasonable price (cheaper than the campus bookstore), go to the website www.math.utah.edu/schedule/bookInfo and click on the link for Math 1100 book purchasing information. There are a number of options outlined.

Course Materials: Review problems, exam solutions, reading assignments etc... will be posted online. Go to www.math.utah.edu/~smale and click on the link for our class. Each week I will post an outline of what material will be covered during the week, and what sections of the text to read and perhaps some suggested exercises in the text (not to be turned in). Canvas will be used to record grades as well as to make announcements to the class.

Course Description: Not for students who have completed more than one semester of calculus. Differentiation, maximization and minimization of functions, marginal analysis and the optimization of constrained functions, integration and applications.

Expected Learning Outcomes: Upon successful completion of the course, a student should be able to:

1. Have a basic conceptual understanding of limits
2. Know how to differentiate and integrate polynomial, rational, logarithmic and exponential functions
3. Use derivatives to gather information about the shape of the curve and use that

information to graph the curve $y=f(x)$, for polynomial, logarithmic, exponential and simple rational functions.

4. Understand how to use differentiation to optimize functions for business applications, such as maximizing profit examples.

5. Use integration to find the area under curves and for business examples such as average values.

6. Take partial derivatives of basic functions of two variables.

Tutoring: There is free tutoring in the Math Center (downstairs in between JWB and LCB) Monday through Thursday from 8AM to 8PM and on Friday from 8AM to 6PM. For private tutoring, you can check the University Tutoring Services, 330 SSB. Also, there is a list of tutors at the Math Department Office, JWB 233.

Computer Lab: Also in the Math Center, Room 155C. Link to computer lab is <http://www.math.utah.edu/ugrad/lab.html>

Homework and Quizzes: Homework problems will be assigned each week using the Enhanced WebAssign (EWA). This will be explained in class. There will be three quizzes, also done with WebAssign. The quizzes will be done on September 18, October 23, and November 23.

Exams: There will be three midterm exams on Wednesdays September 23, October 28, and December 2, and a comprehensive final exam on Tuesday, December 15 from 10:30AM-12:30PM. For the midterms, I will let you know on the Friday before, what material will be covered. I will drop the lowest midterm score in computing the final grade. Exams will be closed book, however, you will be allowed one side of one 8.5" by 11" sheet of notes for the midterm exams and two sides of one sheet of paper for the final exam. Partly because of the vast differences in calculators and to simplify things, calculators will not be allowed on exams. Please bring University ID to all exams.

Grading: The grade will be computed as follows:

Homework 20%

Quizzes 10%

Midterms (drop lowest) 40%

Final Exam 30%

ADA Statement: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services (CDS), 162 Olpin Union Building, (801)-581-5020. CDS will work with us to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to CDS.

Student Responsibilities: All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. You have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, collusion,

fraud, theft, etc. Students should read the Code carefully and know you are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee. <http://regulations.utah.edu/academics/6-400.php>