Calculus 1

MATH 30 - Spring 2017

Instructor: Dr. Joshua Wiscons

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Office: Brighton (BRH) 144

Office Hours: M,W 2:30PM-3:30PM, T 1:00PM-2:00PM, Th 10:30AM-11:30AM, and by appointment

Course Webpage: webpages.csus.edu/wiscons/teaching/math30_s17.html

Prerequisites Important! You must bring proof of passing the Calculus Readiness (CR) Exam (with a score of at least 36) by the first Thursday of classes; any student who fails to do so will be dropped. For more information and to schedule your exam, visit the website: nsm-assessment-test.nsm.csus.edu/DIAG/

Book Calculus: Early Transcendentals, Eighth Edition; by James Stewart. You also need to purchase a WebAssign access card. I recommend purchasing a looseleaf version of the book together with WebAssign access through the link for the Math 30 textbook here: www.csus.edu/math/courses/textbooks/textbooks.htm. (WebAssign also provides an online electronic version of the book while you are enrolled in the course.)

Typical Day A typical class meeting will consist of group work, discussion, student presentations, and minilectures from me.

Course Goals The overarching goals of this course are to (1) increase the students' capacity for fact-based reasoning, (2) develop the necessary competency with the concepts and mechanics of Calculus 1 for further study in mathematics and other fields, (3) improve the students' written and oral communication of mathematics, and (4) develop the skills and mindset for solving problems with teamwork.

Course Components

WebAssign Homework. There will be WebAssign assignments usually due **Tuesday** and **Friday** evenings. You will typically have 5 attempts per problem. The main goal of these problems is to build your comfort and confidence with the core techniques of the course. You are allowed and encouraged to work together, but you are expected to **enter your solutions on your own**.

Group Work. Most days you will work in a group to complete a series problems. Each group will be responsible for writing up a single final draft of their solutions, collected at the beginning of the next class. Your team's work must be written clearly, must include all supporting work, and must be professional in appearance. In general, all members of the team will receive the same grade.

Discussion. After group work sessions, teams will take turns presenting their solutions This component of the course will evaluate your progress in areas such as ability to describe a solution (with clarity and thoughtfulness), ability to share and shed light on your difficulties and failures, and ability to listen critically and respond accordingly, e.g. catching errors and asking follow-up questions. In general, all members of the team will receive the same grade.

Exams. There will be 3 midterm exams <u>tentatively</u> scheduled for Feb. 15 (Wednesday), Mar. 15 (Wednesday), and Apr. 19 (Wednesday). There is also a comprehensive Final Exam scheduled as follows.

Section 07 (4PM) Wednesday, May 17 from 3:00PM-5:00PM Section 09 (1PM) Monday, May 15 from 12:45PM-2:45PM

Grade Composition

WebAssign Homework 10% (the lowest 2 scores will be dropped)

Group Work 12.5% Discussion 12.5%

Midterm Exams 45% (lowest score - 12%, middle score - 15%, highest score - 18%)

Final 20%

- **WebAssign** We will use the online homework system, WebAssign. No special software is needed, just an internet connection and browser. You need to self enroll in WebAssign. I have included directions below, which will be repeated on our SacCT course page.
 - 1. Go to www.webassign.net/login.html
 - 2. Click on the red button that says "I HAVE A CLASS KEY"
 - 3. Enter the key for our class: csus 2449 0416
 - 4. Enter a username. Please use your Sac State username, which should be everything that comes before the @ symbol in your Sac State email address.
 - 5. Enter **csus** for the institution.

You will have free trial access for the first two weeks of the semester, which *includes access to an electronic version of the book*. After that date you will be required to purchase an access code (which should come bundled with the text if you bought it through the department's webpage).

Peer Assisted Learning (PAL) Sessions There are optional adjunct sections (NSM 12E, Peer-Assisted Learning MATH 30) that students can take concurrently with Math 30. These are offered several times per week (see class schedule.) NSM 12E is a one-unit course, graded Credit/No Credit, which is facilitated by undergraduate students (PAL leaders) who have successfully mastered the material in Math 30. In these PAL sections, Math 30 students will work in small groups on worksheets dealing with the course topics. Spaces in NSM 12E are limited and are filled on a first-come first-served basis.

Even if you do not enroll in NSM 12E, you may still go to the PAL leader office hours for help. Office hours of the PAL leaders are held in Sequoia (SQU) 248 and the times will be announced when they become available. Times of office hours will also be posted outside the door of SQU 248.

Getting Extra Help Mathematics is hard. Try hard. But don't be surprised if that is not always enough. Talk with your classmates. Talk with the Math Tutoring Lab tutors (in BRH 118). Talk with me. But please try to avoid asking "how do I start." Instead, try to rewrite the problem in a way that is more meaningful to you and then ask, "does my interpretation of the question seem correct." Very often, the act of "simply" reformulating a problem will lead to insight about its answer.

Technology The emphasis of this course is on conceptual understanding. The use of calculators is not permitted on midterm exams or on the final exam. Feel free to use calculators and/or computer software programs on the homework assignments, but keep in mind that you cannot use them on exams. (I am a big fan of Desmos for graphing and WolframAlpha for other computations.)

General Education GE Area: B4 (Mathematical Concepts and Quantitative Reasoning)

Learning Outcomes Solve problems by thinking logically, making conjectures, and construction valid mathematical arguments. Make valid inferences from numerical, graphical, and symbolic information. Apply mathematical reasoning to both abstract and applied problems, and to both scientific and non-scientific problems.

Writing Component The course will have a writing component, evaluated for clarity and style and aimed at improving the students' ability to write logically precise, well-structured, and well-justified mathematics.

Disabilities Any student with a documented disability needing academic adjustments or accommodations should speak with me privately during the office hours in first two weeks of class. Please provide me with a copy of your accommodation letter from the Services to Students with Disabilities (SSWD) office. All discussions will remain confidential.

Cheating Cheating will result in disciplinary action and will be reported to the Office of Student Conduct. If you are unsure what constitutes cheating, please speak with me and review Sacramento State's *Academic Honesty Policy and Procedures* document here: www.csus.edu/umanual/student/stu-0100.htm.