MATH 173-001 CALCULUS II
SPRING 2018 (March 27-June 1)
MTWThF 12 - 12:50 pm in BOUILLON 111

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Office Hours: MTWF 11am-12pm, and by appointment

Required Text: Jon Rogawski and Colin Adams, Calculus: Early Transcendentals (3rd Edition). W.H. Freeman & Company (2015). This course will cover material from Chapters 5, 6, 7, and 8 of the text.

Course Prerequisites: Calculus I (MATH 172) is a formal prerequisite for this course. You must know the basic rules for differentiation: sum rule, product rule, quotient rule and chain rule. You must also know the formulas for the derivatives of the basic functions, including powers, roots, exponentials, logarithms, trigonometric and inverse trigonometric functions (arcsin, arccos, and arctan). In addition, basic algebra skills are crucial. You must be able to manipulate algebraic expressions, powers and rational expressions. You should be able to solve linear, quadratic, exponential, logarithmic and trigonometric equations.

Learning outcomes: Upon successful completion of this course, the student will understand:

- the concept of definite integral and basic properties of integrals;
- how integrals can be approximated by Riemann sums and by other numerical approximation schemes;
- the concept of antiderivative and its applications;
- the Fundamental Theorem of Calculus;
- analytical methods for constructing antiderivatives, including integration by parts and various substitution methods;
- the various interpretations of the integral as displacement, area, volume, work, density, center of mass, probability distributions and densities;

Course Assessment: Your overall grade will be determined by the following:

- Homework: 15%
- Quizzes: 10%
- Skills Quiz: 10%
- Three Midterm Exams: 40%; tentative dates: April 17 (Tue), May 8 (Tue), and May 29 (Tue)
- Final Exam: 25%; given Tuesday, June 5, from 12 - 2pm

Course grades will be assigned based upon the following scale:

93-100%=A	90-92.9%=A-	87-89.9%=B+	83-86.9%=B	80-82.9%=B-	77-79.9%=C+	73-76.9%=C
70-72.9%=C-	67-69.9%=D+	63-66.9%=D	60-62.9%=D-	below 60%=F		

I reserve the right to adjust the above scale (in the student's favor) if deemed appropriate.

Calculator: A scientific calculator (or a graphing calculator) is required. Please bring your calculator to each class meeting. You are not allowed to use other electronic devices (cellphone, etc.) as a calculator. If you have questions about whether your calculator is suitable, please ask me. In certain quizzes or exams, you may not use any calculator. This will be announced in advance.

Homework: There will be two types of homework for this class. The first type consists of problems from the book and will be assigned at the end of each class. You are encouraged to do these problems before attempting the other type of homework. These book problems will not be handed in or graded.

The second type of homework consists of weekly assignments using the online homework system WebWork. WebWork can be accessed from any computer with internet connection and a web browser. The link to the login page for the course is https://webwork.math.cwu.edu/webwork2/Math173Loke/ . Login to WebWorK the first time using your Canvas user name (**all lowercase**) as your user name and the **password is your student ID number**. You may change your password after your first login. If you can't login, please email me. These WebWork assignments must be completed by 11am on Wednesdays, with possible exception during exam weeks. WebWork checks answers and provides immediate feedback, so you can be sure that you are completing problems correctly. In general, you will have unlimited attempts at a particular problem; the exception is if a problem is multiple-choice, in which case you will have three attempts. Many of the problems contain randomly generated numbers, so your problem may not be identical to a classmate's. Late submissions will not be accepted, however, the lowest homework score will be dropped.

Quizzes: There will be quizzes given on Wednesdays during weeks without an exam. The problems will be taken from or be very similar to homework problems. No make-up quizzes will be given, but to allow for unavoidable absences the lowest quiz score will be dropped.

For every day that you are present in class when a worksheet is given and are making a sincere effort on the worksheet (not making a sincere effort includes working on material for other courses, napping, chatting, or leaving early, for instance), a check mark will be recorded. At the end of the quarter your total number of check marks will be divided by the total possible number minus two (to allow for unavoidable absences) and this percentage will count as one quiz score in your final quiz grade (this quiz score will not be dropped).

Skills Quiz: The Skills Quiz will be given in class (date to be determined). The quiz will consist of 10 integration problems and students may miss up to five problems (0-1 problems wrong: 10 points, 2 problems wrong: 9 points, 3 problems wrong: 8 points, 4 problems wrong: 7 points, 5 problems wrong: 6 points). Students who miss six or more problems will receive a zero. *No calculators, notes, or books are allowed*. Students are permitted two retries.

Exams: Any changes to the tentative exam schedule will be announced in advance. Make-up arrangements must be made at least one business day prior to an exam unless you can document an unexpected circumstance beyond your control that prevented you from taking the exam. Please note that the final exam schedule is set by the registrar's office and cannot be changed.

General Course Policies: Daily attendance is expected and considered necessary for success. It is your responsibility to find out what was covered on days you were absent. You are responsible for any announcements made in class regarding homework, exams, and quizzes. In-class worksheets will be given from time to time and your participation will be factored into your quiz grade.

All work handed in for the course must be written neatly, legibly, clearly, using correct mathematical notation, and with sufficient explanation. A good rule of thumb is to write your solution so that a classmate who knows roughly what's going on in the course but doesn't know how to do this particular problem can understand your solution. As a side benefit, this makes it much more likely that you will be able to understand your solution when you go back to study for exams or the final! The bottom line: for any written work handed in for the course, including quizzes and exams, you must show all pertinent work.

Other Information: Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any barriers to learning, discuss your concerns with the instructor. Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations. Student Disability Services is located in Hogue 126. Call (509) 963-2214 or email ds@cwu.edu for more information.

I reserve the right to change the policies contained in this syllabus as dictated by developments during the quarter. Changes will be announced in class and on Canvas.