DEPARTMENT OF MATHEMATICS
COLLEGE OF THE SCIENCES
CENTRAL WASHINGTON UNIVERSTIY
WINTER 2017

1. **MATH 170—Intuitive Calculus**

CRN	Section	Class Day and Time	Room	Final Exam Day and Time
12486	001	MTWRF 11:00 -11:50	Black 151	Wednesday, March 15 8:00 – 10:00

2. **Course Materials:**
    - **Textbook.** *Calculus Concepts: An Informal Approach to the mathematics of Change,* by Latorre, Kenelly, Biggers, Carpenter, Reed and Harris
    - **Graphing calculator.**   Students are <u>required</u> to have a graphing calculator for this class. The TI-84 Graphing Calculator is strongly recommended, and will be the calculator used in classroom demonstrations. Calculators may **not** be shared or borrowed during testing. Calculators should be brought to class on a regular basis.

3. **Instructor's Office Hours and Contact Information: Dr. Janet Shiver**

Office Location:	*Office Phone:*	*Email Address:*	*Office hours:*
Boullion 115	(509) 963- 2834	shiverj@cwu.edu	2:00 -3:00

4. **Course Description:** This course is designed to introduce the basic concepts of calculus in the context of change. Real world data and problems will be used to explore functions and models and to help conceptualize the idea of change. Students will be introduced to the ideas of limit, derivative and integral and will learn to apply these concepts to real life situations.

5. **Course Expectations:** Being successful in a mathematics class generally requires good study habits, hard work/patience while attempting problem sets, and proper time management during testing situations. Each student is expected to attend every class meeting, to read the assigned sections of the text prior to class, to complete homework problems and other assignments in a timely manner, and to seek the assistance of the instructor or a tutor when difficulties are encountered. The time devoted to assigned problems will pay off on tests and quizzes. All assignments must be NEATLY written in PENCIL and all supporting work must be shown. Students who do not write in pencil, who do not show supporting work or who have turned in sloppy assignments will have their work returned to be rewritten. Rewritten assignments are due 24 hours after they are returned and 10 points will be deducted from the grade. Failure to rewrite an assignment within the 24 hour time period will result in a 0. Late assignments will be accepted up to 24 hours late but 20 points will be deducted from the grade received on the assignment. Late work is anything handed in after the start of class on the day it is due.

6. **Course Objectives:** After successful completion of this course, students will be able to: (1) With the aid of technology, construct and interpret graphs of functions, using calculus to predict and to explain the observed local and global behavior of a function.; (2) develop an intuitive understanding of the limiting process (including one-sided), calculate limits using algebra and estimate limits from graphs or tables of data. 3) develop and intuitive understanding of derivative

including finding and describing change, finding extreme points and applying the concepts to real world problems (4) Understand and interpret simple antiderivatives and apply them to real world problems.

6. **Grading/Make-up Policy:**

25% Activities (quizzes, assignments, labs and/or mini-projects)	50% Tests	5% Attendance 0-1 absence 100% 2 absences 90% 3 absences 80% etc.	20% Comprehensive Final There are no exemptions from the final exam.

For final weighted averages falling in the following intervals, a student will earn at least the corresponding letter grade:

[92-100] = A   [90-91] = A -   [88 – 89] = B+   [82-87] = B   [80-81] = B-   [78-79]= C+
[72-77] = C   [70-71] = C-   [68-69] = D +   [62-67] = D   [60-61] = D-   [Below 60] = F

Students are expected to attend each class period and to be on time. Any missed activities grades due to an absence or tardy will be recorded with a grade of zero. **Missed class work may not be made up.**

A missed test may not be made up without just cause. If you have a conflict (e.g. a CWU athletic event, court date, doctor's appointment, etc.) or severe illness that requires you to miss a test contact the instructor to make other testing arrangements. Arrangements should be made as soon as you know there is a conflict or, in the case of illness, by the scheduled test date.
Documentation must be provided in order to make alternate arrangements.

7. **Absence/Tardy Policy:**
Students are expected to attend class regularly and to be on time. Students who arrive late should enter the class quietly and sit in the first available desk. Students are responsible for signing the attendance roster at each class meeting. Regular attendance demonstrates professionalism and dedication.

8. **Academic Honesty:** The integrity of students and their oral and written work is a critical component of the academic process. All written work submitted in this course will be individual work unless otherwise directed by the instructor. Students must properly document all outside sources used for outside of class assignments. The submission of another's work as one's own is plagiarism, and will be dealt with using the procedures outlined in the CWU Catalog .

9. **Course Outline:** Modification of this schedule will be made at the discretion of the instructor. Announcements made in class or on the class web page will supersede this schedule.

Week of	Class Outline	Notes:
January 2nd	Syllabus, Chapter 1	
January 9th	Chapter 1	
January 17th	Chapter 1 and Chapter 2	**No Class on January 16th** **Test Chapter 1**
January 23rd	Chapter 2	
January 30th	Chapter 3	
February 6th	Chapter 3 and Chapter 4	**Test** Chapter 2 and 3
February 13th	Chapter 4	**No Class on February 15th**
February 20th	Chapter 4 and Chapter 5	

February 27th	Chapter 5	Test **over Chapters 4 and 5**
March 6th	**Chapter 5**	
March 15th	FINAL EXAM	8:00-10:00

10.   **Safety:** Fire drills may be conducted during the semester. In the event of a fire alarm signal, students will exit the building in a quick and orderly manner through the nearest hallway exit. Learn the floor plan and exits of this building. Do not use elevators. Crawl on the floor if you encounter heavy smoke. Assist disabled persons and others if possible without endangering your own life. Assemble for a head count behind Hertz, on the lawn behind the Science building.

11.   **Electronic Devices Policy**: *It is common courtesy to turn all electronic devices to "off" or "silent" mode when entering the library, classrooms and auditoriums.* Please adhere to this policy. All cell phones should be kept out of site during the class. Please be sure they are placed in a pocket, purse, or backpack so they will not present a temptation during class time. Yes, I can see you texting under the table so please don't have them out.

12.   **Request for Disability Modifications:** Students with disabilities who wish to set up academic adjustments in this class should give me a copy of their "Confirmation of Eligibility for Academic Adjustments" from the Center for Disability Services as soon as possible so we can discuss how the approved adjustments will be implemented in class. Students without this form should contact the Center for Disability Services, Bouillon 140 or ds@cwu.edu or 963-1202

Tips for Success
- **Prepare for each class.** A COLLEGE LEVEL MATH COURSE MOVES AT A FAST PACE. New topics are introduced and discussed in each class period. Professors expect students to be proficient in these topics by the next class. Too often students believe that the homework and reading for their math courses can wait until the weekend. This is a losing strategy.
- **If you must miss a class,** it is your responsibility to get notes from a classmate. Exchange phone numbers or emails with someone in class (today). Communicate with your instructor if you must miss an exam or more than one class.
- **Set aside ample time EVERY day** to spend on non-credit math homework. College instructors expect students to spend an average of 2 hours outside of class **for each hour** spent in class. Some topics will be harder to grasp than others. As a result, there will be times when you will need to spend much more than 2 hours. In general, students who do not complete every homework assignment (to the point of understanding) will not perform very well on quizzes and tests.
- **If you do not understand a topic,** get help immediately! Getting assistance early is important. A short trip to the free tutors in the library or your instructor may be all you need.
- **Form a study group** with other students from your class. Study groups can foster a greater understanding of the material and a sense of confidence.
- **READ the textbook and supplementary materials.** The text will have careful explanations of the topics along with examples and illustrations. You are responsible for anything in the assigned reading or homework problems (even if it wasn't discussed in class).