

**Winter 2012 Math 172.03 Calculus 1**  
**11:00 - 11:50 M-F, Shaw-Smyser 113**

**Instructor:** Dr. Jim Bisgard

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**Office Hours:** MWF 1:00 - 2:00,

TTh 2:00 - 3:00 and by appointment.

**Course Goals:** Math 172 is a first course in calculus, and the main topics are limits, continuity and differentiation. You will learn how to calculate limits, what it means for a function to be continuous and the important properties of continuous functions. For differentiation, you will learn the definition (using limits), as well as various rules for computing derivatives: the product, quotient, and chain rules. We will also cover formulas for derivatives of the elementary functions. In addition, we will learn the various interpretations of the derivative: geometric, physical and as a rate of change. Finally, we will use these interpretations to solve various applied problems such as determining the shape of graphs, related rates and maximizing or minimizing functions.

**Required Text:** Hughes-Hallet's Calculus 5<sup>th</sup> ed.; CWU custom (Wiley)

## 1 Grades/Exams/Homework

### Grades

Grades will be calculated using the following weighting system: Quizzes: 40%; Homework: 5%; Exams: 55% total, broken up as follows: 15% for each mid-term and 25% for the final and the following scale:

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

### Quizzes

We will have a take-home quiz every week, except for those weeks when we have an exam.

**Each quiz will be due at 1:00 pm two days after being handed out.** (So, a quiz you get on Tuesday will be due at 1:00 pm on Thursday, while a quiz handed out on Wednesday would be due on Friday.) I encourage you to work with other students, but you should write up your solutions in your own words.

### Homework

Almost every day in class, you will receive a few homework problems. Problems assigned on a Wednesday or later will be due on the Friday of the following week **at 1:00 pm**. (For example, the problems from January 4, 5, 6, 9 and 10 will all be due on Friday January 13.) I will be assigning odd problems from the book and will grade on completion only. This means I'll be most interested in the work you've done - if you just write down an answer, you won't receive any points. It is a good idea to work with other students from class. We won't have time to do every homework problem in class, so please feel free to ask during office hours. However, don't put off asking about homework until the day before it's due!

### Late and Make-up Policy for Homework and Quizzes

I will accept **TWO** late homeworks **OR** quizzes (but not both!) for full credit. However, this homework or quiz must be turned in within two class days of the due date. After that, I will not accept any late work for credit.

## Exams

There will be three exams: two mid-terms and a final. The first mid-term will be on Wednesday, January 25, the second mid-term will be Wednesday, February 15 and the Final Exam will be on Wednesday, March 14. The Final Exam will be cumulative, and **CANNOT BE TAKEN EARLY! DO NOT PLAN ON TAKING YOUR FINAL EARLY!** If you miss an exam, you can take a make-up, but only if you have proof of a compelling reason for having missed the exam and notify me before (if possible) or within 24 hours after an exam to get a make-up. I will not give make-ups for circumstances you know about ahead of time! When a make-up exam cannot be taken before I return the corrected exam, I reserve the right to instead replace that portion of your course grade with your final exam grade.

## Expectation for Quizzes and Exams

Your quizzes and exams should be written up neatly and legibly, using complete sentences where appropriate. (For example, I don't expect you to write  $(a + b)^2 = a^2 + 2ab + b^2$  using complete sentences!) In addition, you should always try and describe what you are doing. For example, if you are trying to calculate the minimum of  $f$ , you should write "First we find the critical points. To do this, we calculate  $f'$  and solve  $f'(x) = 0$ ."

We have a great deal of material to cover in a quarter. As a result, the pace of the class will be very fast, and it may not always be possible to answer every question in class. If you have a question that we weren't able to get to in class, please come by office hours or email me to set up an appointment if you can't make office hours. Please remember: when you come to office hours, **you must bring your notes.**

## 2 Important Dates

January 10 - Last Day for Add/Drop  
January 25 - first mid-term exam  
February 15 - second mid-term exam  
February 17 - uncontested withdrawal deadline  
Wednesday, March 14 - final exam (8:00 - 10:00 a.m.)

## 3 Legalese/Fine Print

*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 Disability Support Services Office as soon as possible so we can discuss how the approved adjustments will be implemented in this class. Students without this form should contact the Disability Support Services Office, Bowillon 205 or [dssreceipt@cwu.edu](mailto:dssreceipt@cwu.edu) or 963-2171.*