Fall 2015 University at Buffalo
MTH121SS Survey of Calculus and Its Applications I

Instructor: Yin Su  
Email: yinsu@buffalo.edu
Office: 136 Math Building  
Office Hours: Mon 2-3pm, Wed 12-1pm

Lectures:  
Tue, Thu 8:00-9:20AM  
Knox 14
Recitations(Labs):  
SS1: Tue 12:00 PM - 12:50 PM  
Cooke 248
SS2: Thu 12:00 PM - 12:50 PM  
Park 146

TA: Austin Anuta-Darling

Description: This is the first part of a 2-semester sequence in Calculus for students in social, biological, and management sciences. The course will cover introduction to important functions, limits and derivative of simple functions, important rules and methods for differentiation, application of differentiation, and some introduction to integration.

Textbook: No mandatory textbook. Taking lecture notes is enough. If you want to read a textbook, you can simply get any standard calculus textbook. The official one for our course is L. Goldstein, D. Schneider, D. Lay, and N. Asmar, Calculus and Its Applications, 4th custom UB edition. (Chapters 0-6)

Prerequisites: NYS Regents Course B, or ULC 148, or MTH 115

Course website: UBLearns page. All course announcements, homework assignments, quiz information, practice exams and your grades will be posted on UBLearns.

Lecture quizzes: If time permits, a short quiz will be given in every lecture. The quiz will test your understanding of the material covered on the same day.

Homework: Homework will be assigned on UBLearns every week. Each homework set will contain about 10 problems, and usually five problems (indicated) will be collected and graded. Final answer of all homework will be provided. Please turn in your homework in the recitation session.

Recitations (labs): Recitation will begin in the second week in your recitation classroom. In recitations, our TA will answer your questions related to homework and discuss important course topics. There will be six quizzes given in the recitation sessions. The dates are

Session SS1:  09/15, 09/22, 10/13, 10/20, 11/17, 12/01
Session SS2:  09/17, 09/24, 10/15, 10/22, 11/19, 12/03

The lowest quiz grade will be dropped. You will need a formal excuse to make up a quiz.

Exams: There will be three in-class exams. Each takes 80 minutes in the lecture room. There is no final exam.

Exam 1 date: 10/01  Exam 2 date: 11/03  Exam 3 date: 12/08

Please note that make-up exams will only be given in special circumstances. In particular, I must be notified beforehand if you require a make-up exam. Students may be asked to provide official documentation justifying the reason for missing an exam.
**Grade components:** Total 600 points.

- Three Exams: 300 points (100 points per exam)
- Lecture quizzes: 100 points (The lowest 5 quizzes will be dropped.)
- Homework: 100 points (The lowest 2 will be dropped)
- Recitation quizzes: 100 points (20 points per quiz. The lowest one will be dropped)

**Grade Scale:**

- A: 540 points or up, with an average 90 or higher in three exams.
- A -: 520 points or up, with an average 85 or higher in three exams.
- B+: 500 points or up.
- B: 470 points or up.
- B -: 450 points or up.
- C+: 430 points or up.
- C: 400 points or up.
- C -: 370 points or up.
- D: 340 points or up.
- F: lower than 340

**Ways to get bonus:**

**Presentation of topics:** You are very welcome to give a 10-15 minute talk in the lecture, about any topic related to calculus, or even just related to math. The talk may focus on any application of calculus, history of calculus, interesting math discovery or unsolved problems. You can ask the instructor for a suitable topic or choose your own. As a reward, a bonus of up to 30 points will be added in the 600-point pool.

**TA comments:** During the semester the TA will report me any recommendation and important comments on students, especially the ones who don’t have solid math background but make great efforts and progress. So go to the recitation and join the discussion. You may be rewarded with up to 20 bonus points in the 600-point pool.

**Use of Calculator:** You are allowed to use any non-graphing scientific calculator in homework, quizzes and exams.

**Math help center:** There is a math help center in math building. Graduate student tutors available will assist you with math questions for free. The math help center starts on Sep.14. The hours and location are Monday-Friday from 9am to 4pm at Math Building room 107.

**Academic integrity:** Students are expected to behave in accordance with the university policy on academic integrity. The guiding principle is that a student’s submitted work must be the student’s own. Any kind of cheating will result in formal charges.

**Additional information:** If you have a diagnosed disability, please advise me during the first week of class so that we may review possible arrangements for reasonable accommodations.

**Important dates:**

- 09/08 Last day to add/drop
- 11/03 Last day to resign
- 11/26 No class due to Thanksgiving.
- 12/10 No class