

MA 123 A1 – Calculus I

Spring 2012

Instructor: Ranjan Panth

Office: PSY Building (64 Cummington St.)– Room 231

Email: rpanth@bu.edu

Lectures: STO B50 – MWF 3:00 to 4:00 pm

Office Hours: T 2:00 to 3:00 pm, WF 1:00-2:00 pm

Teaching Fellow: Yishan Liu (yishan@bu.edu)

Website: <http://blackboard.bu.edu> (Grades and HW will be posted here)

Textbook: Briggs and Cochran: *Calculus (Early Transcendentals)* Addison-Wesley, 2011

Course Description: The topics that will be covered in this course are listed below:

Review of Pre-Calculus

- Quadratic equations
- Exponentials and logarithms
- Trigonometry

Limits and derivatives

- Introduction to limits
- Continuity
- Definition and basic properties of derivatives

Applications of derivatives

- Exponential, log and trigonometric functions
- Product, quotient and chain rule
- Implicit and logarithmic differentiation
- Related rates and optimization
- Qualitative implications of the derivative, graphing
- L'Hospital's Rule

Anti-differentiation and integration

- Anti-derivatives
- Substitution
- Growth and decay differential equations
- Definite integral
- Fundamental Theorem of Calculus

Homework: One homework assignment (written or MyMathLab or both) will be due each week during group discussion sessions. **Late** HW assignments will **not** be accepted. HW will be assigned on Blackboard and will be emailed to you.

Quizzes: A 5 minute, single question quiz will be given each week during the discussion sessions. It is the student's responsibility to attend discussion sessions.

Exams: There will be 2 mid-term exams. Non-graphing calculators and/or calculators that cannot integrate/differentiate will be allowed on the 2nd midterm and the final exam.

Class/Lecture: It is the student's responsibility to attend class. If you miss a class, you need to ask your classmates for their notes. I will **NOT** hold "private tutoring sessions" during office hours for people who miss class.

Examination Schedule:

Exam I	Monday February 20 (in class)
Exam II	Wednesday March 28 (in class)
Final Exam	TBD by Registrar's Office

Makeup exams: Students forced to miss an exam must obtain an excused absence from me **prior** to the exam. I will provide you with an excused absence in a limited number of circumstances. The date/time of the final exam is determined by BU and will not be changed.

Grading Breakdown:

Homework/MyMathLab	10% + 5%
Quizzes	10%
Midterm Exam I	20%
Midterm Exam II	25%
Final Exam	30%

Final Grade Distribution:

1. A is 93% +
2. A- is 90%
3. B+ is 87%
4. B is 84%
5. B- is 80%
6. C+ is 76%
7. C is 71%
8. C- is 65%
9. D is 59%

Since this is a large class, I will also allow for grade curving if the grade for the whole class is consistently low. Grade curving can only increase your final grade and will not lower it.

Cheating: Boston University's policies on cheating and plagiarism are outlined and detailed in the CAS Academic Conduct Code. That code of conduct will be followed in this class. **Any evidence of cheating will result in an "F" for the particular assignment or exam and may result in an "F" for the entire course with disciplinary action as detailed in the CAS Academic Conduct Code.**