

**Information Sheet**

**Instructor** Dr Theodore Vo ([theo@bu.edu](mailto:theo@bu.edu))  
**Discussion Leader** Eric Cooper ([cooper@bu.edu](mailto:cooper@bu.edu))  
**Office Hours & Timetable** See course webpage

**Aims & Scope:** Differential equations are the theoretical framework in which phenomena that evolve in time (or space) are studied. In this course, we will develop a toolbox of analytic and geometric methods to study solutions of systems of differential equations. Throughout the course, we will illustrate the utility of these methods in various disciplines, such as biology, chemistry, engineering, and physics.

**Textbook:** Reading and homework will be taken from

P. Blanchard, R. Devaney, and G. Hall  
“Differential Equations”

4<sup>th</sup> Edition, Brooks/Cole Cengage Learning, 2011. ISBN-13: 978-1-13-310903-7.

**Webpage:** Course announcements, resources, and homework will be posted at

<http://math.bu.edu/people/theo/papers/teaching.html>

Grades will be posted on Blackboard.

**Assessments:** Your final grade for the course will be determined by

Assessment	Due	Weight
Homework	Weekly at the end of Discussion	15%
Quizzes	Weeks 2–5, 7, 9–13, 15	20%
Midterms	Weeks 6 and 14	15% each
Assignment	Monday of Week 12 by 5pm	10%
Final Exam	TBD	25%

Makeup exams for the midterms and final will only be given in truly exceptional circumstances, and the instructor **must be notified immediately**. Makeup exams will not be given for scheduling conflicts.

*Homework:* will be assigned, collected, and graded. Problems and reading will be posted on the course webpage after each lecture. You are expected to read the relevant section of the textbook, and make as complete an attempt at the homework as possible. Homework must be well-presented, *stapled* (folding the corner of the page down is not acceptable), and submitted at the end of Discussion. Poorly presented work will be penalised. **Late work will not be accepted.**

*Quizzes:* will be held in Discussion. Quizzes will be 10 to 20 minutes in duration, and based on lecture and homework material from the previous week. Your lowest quiz grade (excluding the first quiz) will be dropped at the end of the semester. No makeup quizzes will be given for any reason.

*Midterms:* will be held in the Friday lecture of Weeks 6 and 14. Details will be given closer to the date.

*Assignment:* will consist of more challenging problems that explore topics in more depth.

*Final Exam:* date TBD. All material covered in lectures, homework, and the assignment is examinable.

All work that you submit must be your own original work.
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**Discussion:** is your chance to ask about homework or course material – *you will get more out of it if you come prepared*. You may only take the quiz in the section for which you are registered.

**Homework:** will be scored out of 10. Some questions from the homework set will be marked carefully and will be worth 6 of the 10 points. The remaining 4 points are distributed as follows:

- Clarity: the ability to communicate your work is a key transferrable skill
  - 2 PTS** solutions are well set out, clearly written, and justified in sufficient detail
  - 1 PT** solutions are readable, but some details are missing and/or difficult to follow
  - 0 PTS** solutions are essentially unreadable and/or lacking many details
- Effort: it is important for your proficiency that you do as much of the homework as you can
  - 2 PTS** strong effort has been made on all problems and almost all problems are finished
  - 1 PTS** several problems skipped or poor effort has been made on a number of problems
  - 0 PTS** very few problems attempted or poor effort has been made on most of the homework

Poorly presented work will be penalised. You will be drawing lots of graphs in this course. As such, it will be well worth your while to invest in a ruler.

**Grading Policy:** Work will be returned in class. It is your responsibility to make sure your work has been returned and the grade properly recorded. Grades can only be changed if you bring the original work on which the grade was listed. *If work was not returned to you, alert your instructor immediately*. Missing or incorrectly graded work will not be discussed beyond the week in which it was returned.

**Class Help:** In addition to office hours, there are other resources available to assist you:

- The mathematics tutoring room (MCS B24) is open for walk-in tutoring. (<http://www.bu.edu/math/undergraduate/resources/tutoring-room-schedule/>)
- The Education Resource Center offers free individual and group tutoring. They get busy towards the end of semester, so best make contact sooner rather than later. (<http://www.bu.edu/erc/>)
- Professor Meuser runs a math help during semester, which is open to all students. (<http://math.bu.edu/people/dmm/FacRes/mathhelp.html>)

#### **Important Dates:**

Feb 20	Presidents' Day Holiday (Monday classes scheduled for Feb 21)
Feb 23	Last day to drop without 'W' grade
Mar 04 – 12	Spring Recess
Mar 31	Last day to drop with 'W' grade
Apr 12	Last day to officially take leave of absence or withdraw from the university
Apr 17	Patriots' Day Holiday
May 03	Last lecture

**Disabilities:** The instructor must be notified at the beginning of the semester of any student disabilities. Special consideration will only be given in accordance with University policy.

**Academic Conduct:** Your work and conduct are governed by the BU Academic Conduct Code (<http://www.bu.edu/academics/policies/academic-conduct-code/>), which promotes high standards of academic honesty, integrity, and fairness. It is your responsibility to know and follow the provisions of the code.

**Civility Policy:** Lectures and Discussion are devoted time for learning. Activities that interfere with this process will not be tolerated. The use of phones, laptops, etc is permitted *provided* it is related to the class. Good manners are important. Failure to comply with these policies will result in your being asked to leave, and may impact your final grade.