

September-December 2017: Math 215/255: Differential Equations Common Page

<http://www.math.ubc.ca/~coombs/215/math215255>

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[Math department tutoring centre](#) is located in LSK 301/302.

Links to section web pages:

- [Section 101 \(Palmer, 8am in LSK 201\)](#)
 - [Sections 102+103 \(Coombs, 9am in Chem B250 and 1pm in LSK200\)](#)
 - [Section 104 \(Iyaniwura, 1pm in IKBLC 261\)](#)
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- **Text:** Our main reference will be the online textbook Diffy Qs by Lebl. You can download the book (for free) or order a copy (for cheap) to be sent to you from this page: <http://www.jirka.org/diffyqs>.
 - **Clickers** will be used in some sections of this course. Please confirm with your section instructor about whether you need to get a clicker (available from the bookstore).
 - **Matlab/Octave.** You will need one of these tools for some of the homework in this class. See below for instructions about how to get one of these programs for your personal computer. You can also/alternatively use the Math department computer labs.
 - Additional free online notes are available at the following sites:
[Paul's online notes \(highly recommended\)](#)
<http://www.math.ust.hk/~machas/>
<http://www.springerlink.com/content/p78848/?MUD=MP> (for the last link you will need to be accessing from UBC, either directly or via VPN: <http://www.it.ubc.ca/service-catalogue/internet-and-telephone/network-management/myvpn>)
- You can also consult physical textbooks. Some favourites are Boyce and DiPrima (any recent edition) and Edwards and Penney. Boyce and DiPrima has often been used at UBC.
- [Gustafson's notes on nonlinear systems](#)
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Important Dates:

- First class: Sept 6th, 2017.
 - Midterm test 1: Monday, October 16th (in class)
 - Midterm test 2: Wednesday, November 15th (in class)
 - Final exam: TBA
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Grading

- The breakdown of marks between course elements will be as follows: Final exam 50%, Homework 15%, Webwork 10%, Midterms 10% each, in-class quizzes, questions and/or clickers 5%.

- Missing a midterm or quiz normally results in a mark of 0. Exceptions may be granted in two cases: prior consent of the instructor or a medical emergency. In the latter case, the instructor must be notified within 48 hours of the missed test, and presented with a doctor's note immediately upon the student's return to UBC. No make-up midterms will be given.
- A student must get at least 40% on the final exam to pass this course. A student who gets less than 40% on the final exam and whose grade computed by the grading scheme would be a passing grade shall receive a final grade of 48%.
- Term marks may be scaled up or down on a classwide basis, depending on performance on the final exam. This is to ensure fairness across all sections of the course.
- You must submit only your own work. Although you are welcome to study together and discuss the homework with other students, the work you submit (electronically or on paper) must be your own. UBC policies on cheating and plagiarism are extremely strict. If in doubt, enquire before submitting.
- Not all homework problems will necessarily be graded.

Written Homework

- will be posted here.
- All homework must be **stapled**.

WebWork

Webwork will be due before 10pm on Mondays, starting from Monday September 18th. Please login to the [course webwork page](#). The problems will be available 5-7 days in advance.

Midterms and Quizzes

- information will be posted here.
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Computer homework information

Getting the needed software

- Computer homework information will be given in class as needed.
- Here are three options for obtaining software needed for the homework.
- (1) Matlab is available from [UBC IT services](#) for UBC students to install on their own computers. You do not need any additional toolboxes for this class.
- (2) You can install [Octave](#). Octave is a free program that is quite similar to Matlab so that most programs are easily portable from one to the other. Installation of Octave on Windows and Linux is fairly simple (in fact if you have a recent Linux distribution, Octave might already be installed). However on Mac computers, installation has been reported to be a bit trickier. *We will not help you install software on your personal computer.*
- (3) You can use the Mathematics [undergrad computer labs](#), located in LSK 121 and LSK 310. The labs are open from 8am-6pm Monday to Friday. LSK 310 is also where the TA help will be available (either on a lab computer, or take your laptop). To use the lab computers you will need to login using a user account. Follow

the instructions that will be sent to you by email (and/or ask the TAs during lab hours for assistance).

Lab TA hours:

For help with Matlab, TAs will be available in LSK 310 at the following times (subject to change through the semester, please check back for updated hours):

- Monday: TBA
- Tuesday: TBA
- Wednesday: TBA
- Thursday: TBA

Matlab and Octave resources

- UBC Math [Matlab/Octave resources page](#).
- Matlab is used by **lots** of people worldwide. The [Mathworks help site](#) is a good place to look for help, but often you will also find an answer by directly using Google or another search engine.
- **Useful notes on Matlab for novices** [\[PDF\]](#).

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