

MATH 215, SECTION 201, JAN-APR, 2014



COURSE TIME/LOCATION: M/W/F 10:00-10:50 in MATH 100
SECTION WEBSITE: www.math.ubc.ca/~mlrtlm/m215
INSTRUCTOR: Michael Lindstrom (Mike)
OFFICE HOUR: Official: W 17:00-17:50 in LSK 303D
Unofficial (LSK 311E): Just drop by – I'll do the best I can to help *any time*
REVIEW: Weekly Review: T 18:00-18:50 in MATH 100
CONTACT INFO: Email: M L R T L M [at] math [dot] ubc [dot] ca
Office Phone: 604-822-0957 (but email is better...)
CONNECT & WEBWORK <http://resources.connect.ubc.ca/> (forums to ask/discuss, etc.)
TEXTBOOK: *Notes on Diffy Qs – Differential Equations for Engineers*: <http://www.iirka.org/diffyqs/>
SUGGESTED TEXTBOOK: *Elementary Differential Equations and Boundary Value Problems* by Boyce and DiPrima
PREREQUISITES: Math 101 and Math 221 (prerequisites) and Math 200 (corequisite) – or equivalents
REGISTRATION ISSUES/EXCEPTIONS: Registration issues/exceptions may be considered by undergrad chair
UPDATES: Check your emails! Also see section website (above) and Twitter: [@math215_201ubc](https://twitter.com/math215_201ubc)

EXTRA HELP:

Outside of class there is help available in the Math Learning Centre (LSK 301 and 302). You may need to consult the schedule to see when tutors will be available who can tutor these more advanced topics. More information here: <http://www.math.ubc.ca/Ugrad/ugradTutorials.shtml>. The Math Learning Centre is free.

This class section will also have weekly review sessions. These sessions are completely optional, but may be a useful study resource.

You are highly encouraged to form study groups, share notes, discuss homeworks, etc.

And don't forget about office hours (official/unofficial)!

GRADING SCHEME:

Your final mark will be computed as follows:

Term Work: 50%
 Common Midterms: 30%
 Common WebWork: 10%
 Section-Specific: 10%
 2% labs
 4% highest of your clicker/quiz/homework marks
 3% middle of your clicker/quiz/homework marks
 1% lowest of your clicker/quiz/homework marks
Final Examination: 50%

Midterms: There will be 3 midterms on the following Thursdays from 18:45 – 19:45: January 30, February 27, March 27. All midterms will be in Chem B250. Each midterm will contribute equally to the 30% mark for midterms. Any midterm conflicts must be reported by January 10.

WebWork: There will be a WebWork assignment given roughly every week. Late WebWorks will not be accepted under any circumstances. The lowest mark will be dropped. The WebWork problems can be accessed via Connect.

Labs: There will be three demonstrations/labs done in-class, each of roughly 25 minute duration to explore the applications of course topics. Each lab will include a pre-lab assignment done on WebWork due before the lab (2 marks), and in-class work to be handed in (8 marks). All lab marks will count. Tentative dates are in the course schedule. You are highly encouraged to work in groups (maximum size of 4); each group will submit one lab. Calculators will be necessary. You will be allowed a non-programmable non-graphing calculator for the work in class.

Homework: There will be approximately 6 homeworks assigned, due roughly every two weeks. Tentative due dates are in the course schedule. Some of the problems will be taken directly from WebWork. Some of the homework problems may be quite challenging. The lowest homework mark will be dropped. Understanding the homework is vital to learning and understanding the course material!

Quizzes: There will be approximately 6 quizzes at the start of class at dates to be determined. The quiz dates will be announced a week beforehand. Each quiz will be 10 minutes. The lowest quiz mark will be dropped. Latecomers will not be allowed to write the quizzes. Tentative quiz dates are in the course schedule.

Clickers: Each time a graded clicker question is asked, 1 point is earned for participation (any response) and 1 further point is earned for the correct answer. Full clicker marks are awarded for earning 85% of all points. Part marks are assigned for the corresponding portion of 85%. For example, if there were 60 points in total, earning ≥ 51 points would amount to 100% and earning 30 points would amount to 59%. You are allowed to share a clicker. To do so, you must complete the clicker pair form and submit it by January 10.

(Optional) Practice Final Exam: A practice final exam will be given Friday, April 4, 18:00-19:30 in MATH 100. This exam will not officially be for marks and not writing it will not adversely affect your grade. Besides extra practice, if you do better on this practice exam than on your section-specific mark, it will replace a portion (TBA) of your section-specific mark.

(Optional) Project: As an optional project (not officially for marks), you may write a brief (1000 word maximum) report on a real-life application of the course material or on the deeper theory behind it. This is due March 31. Points are awarded for clarity of exposition, mathematical correctness, level of difficulty, and originality. A selection of project writers may be asked to explain their work; inability to do so will result in a reduced mark. Only write what you understand. If you do better on this project than on your section-specific mark, it will replace a portion (TBA) of your section-specific mark.

Final Exam: A final exam covering all the material of the course will take place during the final exam period. The date, time, and policies are to be announced.

GENERAL POLICIES:

If a midterm is missed for a valid reason, the average of the other midterm marks will be counted instead.

Valid reasons include one of the following: (a) prior notice of a valid, documented absence (e.g. out-of-town varsity athletic commitment), (b) notification to the instructor within 48 hours due to a medical condition, or (c) an emergency. All of (a), (b), and (c) require written documentation, for example a doctor's note stating the student was medically unfit to be in school, a photocopy of a death certificate, or a letter from a coach. A score of zero will otherwise be assigned.

If an assignment, lab, or quiz is missed for a valid reason as above, its mark will not count. Without a valid reason, a score of zero will be assigned. If homeworks are not submitted in class, they are deemed late and a grade of zero will be assigned unless special permission is granted beforehand. Each student will be given one free extension for the term for up to 72 hours for a homework (i.e. one homework may be handed in 72 hours late with no penalty).

If you collaborate on an assignment, you must identify who you worked with on your assignment and what you submit must be your own work! If copying (i.e. cheating) is noted, all parties involved will receive -300% for their overall homework mark. Plagiarism is serious! In the case individuals or a pair is found cheating the clicker system (i.e. skipping and getting someone to cover for them), all parties involved will receive -300% for their overall clicker grade.

There will be no calculators during the tests. A random selection of quizzes/midterms will be photocopied before being returned. Adjusting answers after a test and asking for a re-grading is cheating.

If a student is suspected of cheating (on a midterm, quiz, assignment, etc.), the undergraduate chair of mathematics will be notified, an investigation may be launched, and severe academic disciplinary action may follow. This could include expulsion from the university for a year!

Homework-specific or conceptual questions should be posted on Connect instead of an individual email to the instructor (this way everyone can benefit from the discussion and the same question doesn't continue to come up again and again).

The final course marks may be scaled and the instructor reserves the right to revise any mark. This syllabus may also be changed at any time.

CLASSROOM GUIDELINES:

Please be on time: And if you do arrive late, please enter with your notebook and pen ready and be as quiet as possible to avoid interrupting others.

Noise level: Conversations are best had outside of the classroom... It's disruptive if you chat during a lecture.

Electronic Devices: Please turn off the noise on any cell phones, etc. Please only use laptops and other electronics in the back rows of the room to avoid distracting others.

Snacks: Snacks and drinks are okay, but please: nothing loud or smelly. And please clean up after yourself.

Participation: You are encouraged to get involved in the material, to answer questions in class, and to ask questions when you're unclear of what's going on. Don't be afraid to ask questions! To better engage with classroom discussion, please refrain from sitting at the very back and try to sit next to a classmate to discuss in-class problems.

Surveys: Throughout the term you will be given online surveys to fill out. They will be anonymous and will give you the opportunity to express how things are going in the course and to address any concerns you may have.

Review: An effort will be made to offer as much review as possible.

Succeeding: There is no rule that anyone has to fail! To get here, you have passed a number of prerequisite courses. There is absolutely no reason you cannot excel in this course if you work for it ☺!