# Math 220 – Mathematical Proof
## Section 921, Summer 2015

**Instructor:** Sandi Merchant
**Office:** LSK 202C
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**Office Hours:** Tues & Thurs 12:00 - 1:00 pm in LSK 300B, or by appointment

**Course Schedule:** Tues & Thurs 10:00am-12:00 pm. (May 12 to Aug 13)
**Classroom:** MATH 100
**Textbook:** Mathematical proofs: A transition to advanced mathematics, 3rd Ed., by Chartrand, Polimeni and Zhang, Pearson Education, 2013.
**Course Web Page:** www.math.ubc.ca/~merchant/math220-2015
**Prerequisites:** Either (a) a score of 64% or higher in one of MATH 101, MATH 103, MATH 105, SCIE 001 or (b) one of MATH 121, MATH 200, MATH 217, MATH 226, MATH 253, MATH 263.

**Course Description:** Sets and functions; induction; cardinality; properties of the real numbers; sequences, series, and limits. Logic, structure, style, and clarity of proofs emphasized throughout.

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**Evaluation:**
Weekly Homework: 10%
Weekly Quizzes (pre-lecture reading quizzes): 5%
In-class Activities (clicker questions and group work): 5%
Midterm Exams: 30%
Final Exam: 50%

**Homework:** Weekly homework will be posted on the course webpage on Mondays and collected in class on the Tuesday of the following week. It is likely that only a subset of the assigned questions in each homework set will be marked. No late homework will be accepted.

**Pre-lecture Reading Quizzes:** Each week you will be assigned readings with an associated online quiz. Quizzes will open on Thursdays and will close at midnight on Sundays. The content of the lectures will be based on the quiz results, so to maximize the benefit of the lectures, please take the readings and quizzes seriously. No late quizzes/rescheduling of quizzes will be allowed.

**In-class Activities:** Each lecture will consist of a combination of lecture, clicker questions, and small group work. Please ensure that you bring your i>clicker to class with you each day. Clicker questions and the hand-in work from group activities will be scored 75% for participation and 25% for correctness.

**Midterms:** There are three midterm exams, each worth 10% of your total grade. No notes, books, calculators or other electronic devices will be allowed on the midterms. The dates for these midterms are:

Midterm #1: Tuesday June 2
Midterm #2: During the "exam week" of June 22-26. Date and time to be determined.
Midterm #3: Tuesday July 28

**Final Exam:** There will be a final exam, worth 50% of your total grade, to be scheduled sometime during the exam week (Aug 17 = Aug 21). It is your responsibility to ensure you are available during this time, as rescheduling of exams is not possible. No notes, books, calculators or other electronic devices will be allowed on the final exam.

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**Course Policies**

**Exam Conflicts or Hardships:** If you have an exam conflict (two midterms or final exams scheduled at the same time) or an exam hardship (3 or more final exams in a 24-hr period), you must notify your instructor no later than two weeks prior to the examination date and an accommodation will be made.

**Missing a midterm:** If a student misses a midterm, that student shall provide a documented excuse otherwise a mark of zero will be entered for that midterm. The concession granted for valid excuses will be determined on an individual basis. Examples of valid excuses are an illness which has been documented by a physician and Student Health Services, or an absence to play a varsity sport (your coach will provide you with a letter). If you are absent for an exam, please note the following:

- A physician's note must specifically state that the student was medically unfit to write the missed exam on the date of the exam. Absence of this exact information will result in a mark of 0.

- Your instructor should be notified **within 48 hours** of such an absence and appropriate documentation should be produced **within 7 days**. Failure to comply with these time limits will result in a mark of zero.

**Missing the Final Exam:** If you miss your final exam, you will need to present your situation to your faculty's Advising Office to be considered for a deferred exam. See the UBC Calendar for detailed regulations. Your performance in a course up to the exam is taken into consideration in granting a deferred exam status (for instance, failing badly normally means you will not be granted a deferred exam). For deferred exams in mathematics, students generally sit the next available exam for the course they are taking, which could be several months after the original exam was scheduled.

**Cheating:** UBC takes cheating incidents very seriously. After due investigation, students found guilty of cheating on tests and exams are usually given a final grade of 0 in the course, suspended from UBC for one year, and a notation made on their Transcript of Academic Record.