

**MATH 220: Analysis**  
Section 203, Winter 2003

**When:** Tuesdays and Thursdays, 2:00–3:30 PM

**Where:** Mathematics 104

**Course web page:** <http://www.math.ubc.ca/~gerg/>

**Textbook:** D'Angelo and West, *Mathematical Thinking: Problem-solving and proofs*, 2nd edition (Prentice Hall)

**Prerequisites:** MATH 121 or MATH 200, or a mark of at least 64% in one of MATH 101/103/105

**Instructor:** Prof. Greg Martin

**Office:** Mathematics 212

**Email address:** [gerg@math.ubc.ca](mailto:gerg@math.ubc.ca)

**Phone number:** 822-4371

**Office hours:** Mondays 10:00-11:30 AM and Wednesdays 1:30-3:00 PM

**Description:** We shall spend the entire first half of the course learning the foundations of mathematical reasoning, including mathematical logic, valid proof techniques, and proof-writing style and clarity. Then we'll proceed to topics in analysis (specifically, sequences and series). These topics correspond to Chapters 1–4 and 13–14 of the textbook. If time permits, we'll also include topics in discrete mathematics as well, all for the purpose of illustrating and gaining experience with logical proofs.

**Use of the web:** All homework assignments and other course materials will be posted on the course web page, <http://www.math.ubc.ca/~gerg/>. After the first day, *no handouts will be distributed in class*. You may access the course web page on any public terminal at UBC or via your own internet connection. Accounts for the Mathematics department undergraduate computer lab (located in the MSRC building) will be given to any enrolled student who requests one; please email or visit the instructor to request an account.

All documents will be posted in PDF format and can be read with the free Acrobat reader. The course web page contains instructions on how to download the Acrobat reader if you do not already have it.

**Evaluation:** There will be two midterm exams and one final exam as well as weekly homework assignments. The course mark will be computed as follows:

- Weekly homework assignments: 15 percent
- Two in-class midterm exams (Tuesday, February 4, 2003 and Tuesday, March 18, 2003): 35 percent
- Final exam (time and place to be announced): 50 percent

*You are required to be present at all examinations. No makeup tests will be given. Non-attendance at an exam will result in a mark of zero being recorded. Unavoidable, documented medical emergencies are the only exception to this policy.*

Homework will be assigned on Thursdays and due the following Thursday in class. *Late homework will not be accepted.* To account for forgetfulness or unforeseen circumstances, each student's lowest homework score will be dropped. Missed homework will not be excused beyond this point, except for documented medical reasons.

Students are allowed to consult one another concerning the homework problems, but *your submitted solutions must be written by you in your own words.* If two students submit virtually identical answers to a question, both can be found guilty of plagiarism.