Math 141 Real Analysis in One Variable

Fall 2019

Course Overview:
MATH 141. QR: Real Analysis in One Variable. 3 Credits.
Principles of analysis in one variable. Heine-Borel and Bolzano-Weierstrass theorems; rigorous development of differential and integral calculus; infinite sequences and series.

Expanded Course Description and Textbook:

1) Logic and Proofs 2) Sets and Functions 3) The Real Numbers 4) Sequences 5) Limits and Continuity 6) Differentiation 7) Integration 8) Infinite Series

Practically all of the problems on the homework, midterms, and final will be proofs or will have proofs as essential parts of their solutions.

May not be taken concurrently with or after MATH 241.
Prerequisite: MATH 052 (preferred) or CS 064.

Class time: The class meets 9:40am to 10:30am M W F in Lafayette L107
Please refrain from using computers and cell phones during class.

Attendance: In accordance with University Policy, I allow students to miss classes due to religious observances, varsity sporting matches or any other activities stated in the UVM attendance policy. If you will be absent, plan to get the class notes from a peer and read the lesson plans posted on Blackboard.

Instructor Information:
Name: Dr. Dan Hathaway
Email: Daniel.Hathaway@uvm.edu  *Include Math 141 in the subject line
Office: Innovation Bldg, Room 311

Office Hours:
Monday, Wednesday, and Friday 11:50 am to 1:00 pm

Please feel free to email me to set up an appointment at another time if you have class during these office hours.

Homework:
Approximately weekly homework will be assigned. No late homework will be accepted. The one lowest homework score will be dropped.

**Midterm Exams:** There will be 2 midterm exams. The dates of the midterms are September 25 and October 30. You may bring one 3 x 5 inch card filled front and back to the midterm exams. You may keep these cards for use on the final exam. Each test is cumulative from the beginning of the course. No books, calculators or electronic devices. No make-up exams.

**Final Exam:** There will be a cumulative final exam given at the end of the semester. The final exam will be held on Dec 13 at 10:30am to 1:15pm in our usual classroom. You may bring three 3 x 5 inch cards filled front and back to the final exam. No books, calculators or electronic devices.

**Computation of grade:**
- Homework: 25%
- Midterm1: 20%
- Midterm2: 20%
- Final Exam: 35%

**The following are General Policies:**

**Academic Integrity:** Any suspected violations of the Code of Academic Integrity are taken very seriously and will be forwarded to the Center for Student Ethics and Standards. For more information about the Code of Academic Integrity, visit the Center for Student Ethics and Standards website at [www.uvm.edu/cses](http://www.uvm.edu/cses).

**Special Accommodations**
In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. ACCESS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated in an accommodation letter to faculty. Contact ACCESS: A170 Living/Learning Center; 802-656-7753; [access@uvm.edu](mailto:access@uvm.edu) or visit [www.uvm.edu/access](http://www.uvm.edu/access).