

Math 554/703I Course Outline

Fall 2020

Text : *Elementary Real Analysis*
<http://classicalrealanalysis.info/com/Elementary-Real-Analysis.php>
by: Brian S. Thomson Judith B. Bruckner, Andrew M. Bruckner
Electronic version free from above website.
Paperback version from Amazon: ISBN-13: 978-1434841612 for \$ 17.95 (Part-One)

Professor : Anton R. Schep

Office : LeConte 317F

Email : schep@math.sc.edu

Web page : [//people.math.sc.edu/schep/math554-2020.html](http://people.math.sc.edu/schep/math554-2020.html)

Office hours : TTR 11:00–12:00, virtually on Blackboard Collaborate. Other times available by appointment

Tests : 3 one hour tests, each counting 20%, 1 Final exam counting 30%

Tentative test dates(all in person): September 23(W), October 21(W), November 20(F)

HW+Quizzes : 10%

Homework assignments : [//people.math.sc.edu/schep/homework554-2020.html](http://people.math.sc.edu/schep/homework554-2020.html)

All homework should be submitted electronically as a pdf file (use if necessary an app for IOS or Android, there are many in the respective app stores). Name the file something like Last-First-HW1.pdf

Date of Final Exam : Dec. 11, Friday, 9:00 a.m. (Online)

Instructional Method The class will meet for at least 50% online, with MF online and W in person. Depending on how the pandemic changes, more or less classes will be given in person. Online classes will be live-streamed (when feasible) or recorded.

Material to be covered : Chapters: 1,2, 4, 5, 7,...

One of the goals of this course is to provide the theoretical foundation of many results used in calculus. In calculus the emphasis is on how to calculate limits, derivatives and integrals, while here the emphasis will be on the definitions, theorems and proofs, which show the justification of what we do in calculus. This is the Honor's version of the class, which does not necessarily mean that we will cover more topics than the regular version of the course. We will however explore a number of topics in more depth than the regular class.

Make-up policy : No make-ups for missed homework or quizzes (lowest 2 or 3 scores will be dropped), make-ups for missed hourly tests or final will only be given if they were missed for legitimate reasons. In this case any effort should be made to contact me as soon as possible and you might need to provide documentation to support your reasons for missing the tests.

Learning Outcomes: Students will master concepts and learn how to do proofs of real analysis

Cell Phone Policy: Please remember to turn off or silence your phone prior to class. No texting allowed during class.

Attendance policy : A grade penalty can be invoked, if more than 10% of unexcused classes are missed. If you have a medical issue (COVID-19 related in particular), your priority is to deal with the medical situation, and you will not be penalized for missing class. Medical absences related to Covid-19 should be reported on UofSC's COVID-19 Student Report Form.

Graduate Credit : Students in Math 703I or students taking Math 554 for graduate credit will have additional or some different questions on tests, homework and quizzes.

Face Coverings Face coverings protect you and your classmates in case the wearer is unknowingly infected but does not have symptoms. Faculty, students and staff are required to wear an appropriate face covering in all classrooms and in other designated areas on campus. Face coverings should cover your nose and mouth in a community setting. Students with conditions that prohibit them from wearing a face covering must register with the Student Disabilities Resource Center (SDRC); appropriate accommodations will be approved by the SDRC, and I will be notified. Failure or refusal to wear the required face coverings in designated areas may result in your immediate removal from the classroom and corrective action, including referral to the Office of Student Conduct, in accordance with University policies and procedures (UNIV 3.04).

Special accommodations: If you have special needs as addressed by the Americans with Disabilities Act and you have registered with the USC Office of Student Disability Services (OSDS), you need to speak with Prof. Schep before using an approved accommodation.

Honor Code: The Honor Code is a set of principles established by the University to promote honesty and integrity in all aspects of the campus culture. It is the responsibility of every student at the University of South Carolina to adhere steadfastly to truthfulness and to avoid dishonesty in connection with any academic program. A student who violates, or assists another in violating the Honor Code, will be subject to University sanctions. The Honor Code delineates the values set forth in the tenets of the Carolinian Creed