Course Title: Principles of Real Analysis I, MATH 519 – Fall 2019

Credits: 4

Prerequisite: MATH 377 or permission of the instructor.

Course Description: This course is the first in a sequence of two courses on Real Analysis. The course begins with a rigorous study of the real number system including the topology of the real line. Next it provides a thorough study of sigma algebras, theory of measure and integration mostly focused on the Lebesgue measure and integral. Finally it covers topics from the theory of differentiation, functions of bounded variation, absolute continuity and convex functions.

Instructor: Nelson Castaneda
Office: Marcus White 123
Phone: 860 832-2851
Email: castanedan@ccsu.edu

Office Hours:
Monday and Wednesday 2:55 - 4:55 PM,
Friday 4:05 - 5:05 PM.
We can arrange to meet at a different time if necessary.


Class Meeting Times: Monday and Wednesday from 7:20 to 9:00 PM.

Coverage: We cover most of the material from the first six chapters of the book and the basic theory of metric and topological spaces.

Homework: You must attempt to solve most of the problems from the sections covered in the course. In addition to this a file with additional practice problems will be posted on Blackboard Learn. Questions regarding those problems can be asked by email or in the meetings with the instructor. Written solutions to selected problems will be collected at the times scheduled below.

Midterm Test and Final Exam: There will be a midterm test and a final exam. The midterm exam is given on Wednesday, October 23 and is worth 25% of the course grade. The final exam is given on Monday, December 9 and is worth 30% of the course grade.

Assessment: Your grade will be based on:
Homework 35%; Midterm Test 25%; Final Exam 30%; Class Participation 10%

The minimum averages to determine the letter grades are as follows:
A 93% A- 90% B+ 87% B 83% B- 80% C+ 77% C 73% C- 70% D+ 67% D 63% D- 60%
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<tr>
<th>Assessment</th>
<th>Date</th>
<th>Topics</th>
<th>Score</th>
<th>Grade %</th>
<th>Accumulated %</th>
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<tbody>
<tr>
<td>Homework 1</td>
<td>September 11</td>
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<td>Homework 2</td>
<td>September 25</td>
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<td>Homework 3</td>
<td>October 9</td>
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<tr>
<td>Midterm Test</td>
<td>October 23</td>
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<td>Homework 4</td>
<td>November 6</td>
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<td>Final Exam</td>
<td>December 9</td>
<td>Everything</td>
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University Policies:

1. You must take the final examination at the time specified in the university’s Final Exam Schedule: Monday, December 9th, 7:45 - 9:45 PM.

2. If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. My telephone number and office hours are given above.

I will need a copy of the accommodation letter from Student Disability Services in order to arrange your class accommodations. Contact Student Disability Services, Willard - DiLoreto Hall, Room W 201, if you are not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations with your faculty.

3. In the event of a weather emergency which requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call (860) 832-3333 for the “general snow message,” or check the online Cancellation/Delay Information.

4. Students may drop full semester courses up to the last day of the third week of classes in the regular semester. Courses dropped by Monday, September 16 will not appear on the students transcript. Please drop the course by September 16 if you think that this course is not appropriate for you. Feel free to stop by my office to discuss your situation.

5. Students withdrawing from a full semester course from September 16 through November 18 (through the 12th week of the semester) may do so by completing a withdrawal form. A notation of W will appear on the student transcript. Withdrawals during this time do not require written authorization; however, it would be prudent for the student to discuss this matter with their instructor or/and their academic advisor.

6. Forms to either drop or withdraw from a course may be found on the registrar’s website or obtained in the registrar’s Office in Willard - DiLoreto Hall, Room D 202.

7. Cessation of attendance, notice to the instructor, or telephone calls to the Enrollment Center are not considered official notice of a student’s intention to drop the course. After November 18th withdrawals are allowed only under extenuating circumstances, only for students who are passing the course, and require written approval of the course instructor and the department chair.

8. Central Connecticut State University (CCSU) will not tolerate sexual misconduct against students, staff, faculty, or visitors in any form, including but not limited to: sexual assault, sexual exploitation, sexual harassment or stalking, as defined in CCSU policies. For additional information, please consult the website of the Office of Diversity and Equity.

9. You are responsible for understanding and abiding by the University’s policy on academic integrity. Information on the policy may be found at Academic Integrity Policy. This policy is rigorously enforced by the Department of Mathematical Sciences.

10. All students are expected to demonstrate integrity in the completion of their course work. Academic integrity means doing one’s own work and giving proper credit to the work and ideas of others. It is the responsibility of each student to become familiar with what constitutes academic dishonesty and plagiarism and to avoid all forms of cheating and plagiarism. Students who engage in plagiarism and other forms of academic misconduct will face academic and possibly disciplinary consequences. Academic sanctions can range from a reduced grade for the assignment to a failing grade for the course. From a disciplinary standpoint, an Academic Misconduct Report may be filed and a Faculty Hearing Board may impose sanctions such as probation, suspension or expulsion.

11. For further information on academic misconduct and its consequences, please consult the Student Code of Conduct and the Academic Misconduct Policy.