



Department of Mathematics, Computer & Information Science

ANALYSIS

MA6250 • SYLLABUS SPRING 2015

Professor: **Frank Sanacory**

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Office Hour: **M 3:00 - 4:30, TR 1:00-2:30**

Course Web Page: **sanacory.net**

TEXTBOOK: Real Analysis and Foundations, Third Edition by Steven Krantz.
ISBN-13: 978-1466587311

COURSE DESCRIPTION: The standard in analysis. What are the real numbers? We shall discover what is the reason (completeness) for the real numbers and use this to develop the Calculus. We shall study first the real numbers and their properties and basic topology including: completeness, the existence of a supremum and the metric definitions for open sets, closed sets and compact sets. We will continue developing the basic theory, learning the epsilon-delta definitions for limits, continuity, uniform continuity, derivatives and the Riemann definition of the integral.

COURSE OBJECTIVES: After successful completion the student should be able to prove and compute any variety of continuity, sequence, series and integral results. The student should also know the two fundamental theorems of Calculus as well as understand their proofs. Also, the student should be a competent proof writer.

COURSE EVALUATION & GRADING: Your grade for the course will be based on your homework/quiz performance (20%), two tests (40%), and a comprehensive final exam (40%). The grading scale is as follows:

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|----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| A = [93, 100] | B + = [87, 89] | C + = [77, 79] | D + = [67, 69] | F = [0, 59] |
| A- = [90, 92] | B = [83, 86] | C = [73, 76] | D = [63, 66] | |
| | B - = [80, 82] | C - = [70, 72] | D - = [60, 62] | |

TUTORIAL: Drop-in tutorial is available in the mathematics learning center.

OFFICE OF SERVICES FOR STUDENTS WITH DISABILITIES: SUNY/Old Westbury is committed to assuring that all students have equal access to learning and extracurricular activities on campus. If you have, or suspect you may have a physical, psychological, medical or learning disability that may impact how you function academically and/or your access to activities on campus, please contact Dr. Lisa Whitten, Director of the Office of Services for Students with Disabilities (OSSD). She will work with you to determine which accommodations you need, and provide you with documentation for your professors. The OSSD is located in the NAB, Room 2064. OSSD services are free and confidential. In addition, we hire qualified note takers at \$100.00 for the semester if you are enrolled in the course, and \$9.00 an hour if you are not. You can reach Dr. Whitten at 516-876-3009 or whittenl@oldwestbury.edu.

FINAL EXAM: Will be held on Monday, May 11 at 4:40 pm in our usual classroom.