THE COLLEGE AT OLD WESTBURY
STATE UNIVERSITY OF NEW YORK

Department of Mathematics, Computer & Information Science
ANALYSIS
MA6250 · SYLLABUS SPRING 2013

Professor: **Frank Sanacory**   *Office:* **NAB 2014**
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Office Hours: **MTWR 3:00 pm – 4:00 pm**
Course Web Page: **https://webfs.oldwestbury.edu/faculty_staff/sanacoryf/**

TEXTBOOK: Metric Spaces by Mícheál O'Searcoid. Springer-Verlag, Springer; 2007 edition.

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:

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

TUTORIAL: Drop-in tutorial is available in the mathematics learning center, Room **A118.**

ACCOMMODATIONS FOR STUDENTS WITH SPECIAL NEEDS: If you have or suspect you may have a physical, psychological, medical or learning disability that may impact either your course work or extracurricular activities, please contact Dr. Lisa Whitten , Director, The Office of Services for Students with Disabilities (OSSD). Academic Village, D112, Phone: 516-876-3009, Fax (516) 876-3005, TTY: (516) 876-3083, whittenl@oldwestbury.edu. We will determine if you qualify for accommodations and arrange them with your professors if you do. All support services are free and all contacts with the OSSD are strictly confidential. SUNY /Old Westbury is committed to assuring that all students have equal access to learning and social activities on campus.

FINAL EXAM: Will be held on Monday, May 13 at 4:40 pm in our usual classroom.