

MAT 601 – Fall 2013
MWF 10:35-11:30, 306 Carn

Instructor: Prof. Terry R. McConnell, 317F Carnegie, 443-1499, trmconn@syr.edu, office hours: MWF, 2:30-3:30 pm and by appointment

Catalogue Description: MAT 601 **Fundamentals of Analysis** 3 each Y
Real and complex numbers, elementary point set topology, continuity, differentiation. Sequences and series, Riemann-Stieltjes integration with respect to complex integrators.

Text: Walter Rudin, Principles of Mathematical Analysis, 3rd Ed., McGraw-Hill, New York, 1976 (ISBN 0-07-054235-X)

Course Description: This is the first course in the 2 semester sequence MAT 601-2. The sequence covers the foundational material for all graduate study in analysis and related fields, and also prepares mathematics graduate students for the department preliminary examination in analysis. MAT 601 will cover the first 5 chapters of Rudin.

Grading: There will be two in-class exams as well as a comprehensive final exam. The final exam will be Friday, December 13, 5:15-7:15 p.m. in a room to be announced later. The dates for the in-class exams will be announced later. The two in-class exams will each count towards 25% of the final grade. The final counts 30%, and homework counts 20%.

Homework: Homework will be collected regularly and will be graded. It is arguably the most essential part of the course. You cannot learn mathematics by watching someone else perform it any more than you can learn to play the violin by attending a concert. Complete and elegant solutions to all problems in Rudin can easily be found on the internet, placed there by well-intentioned but misguided souls who believe their work is a benefit to humanity. **Do not use these materials!** Doing so constitutes a violation of academic integrity. (See below for more detailed information on Syracuse University's policy on academic integrity.) Try as much as possible to do the homework on your own. If you are stuck, you may ask the professor or fellow students for hints, but you should always give proper credit in your solutions for ideas that are not your own.

Students with Disabilities: If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located in Room 303 of 804 University Avenue, or call 315-443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations.

Academic Integrity: The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The

policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see <http://academicintegrity.syr.edu>

Religious observances policy. SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class.