

# **MAT 602 Fundamentals of Analysis**

## **Spring 2018**

**TuTh 3:30pm - 4:50pm, 100 Carnegie Hall**

**Instructor:** Tadeusz Iwaniec

Office: 304 F Carnegie

Phone: 443-1495

Office hours: Tu 2:00-3:00, Th 2:00-3:00, and by appointment.

email: tiwaniec@syr.edu

**Textbook:** *Principles of Mathematical Analysis*, 3<sup>rd</sup> edition, by Walter Rudin.

**Course Description:** This course is a continuation of MAT 601. We will cover Chapters 6-9 in the text including Riemann-Stieltjes integral, sequences and series of functions, power series, Fourier series, functions of several variables.

### **Schedule and Grading:**

Midterm Exam: Tuesday, March 6. 30%

Spring Break (no classes), Sunday, March 11 - Sunday, March 18

Last day of classes: Tuesday, May 1.

Final Exam: Friday, May 4, 8:00 am – 10: 00 am. 40%

Homework: 20%

Quizzes: There will be occasional quizzes on the homework problems. 10 %

The Midterm Exam will be on Chapters 6 and 7. The final exam will be on Chapters 8 and 9. There will be no make-ups for these exams. The exams will consist of solving problems and of theoretical questions on the material. (i.e. definitions of important concepts, relevant examples, statements and proofs of theorems)

### **Homework:**

The key to success in this course is to master the homework. Homework will be collected weekly, usually on Tuesdays. No late homework will be accepted. You are encouraged to discuss the homework problems with your classmates and to work together, but submitted assignments must be written up individually.

**Note:** You are expected to attend every class. If you must miss a class for some reason, it will be up to you to find out from me or other members of the class what you missed including any announcements concerning homework, or exams that were made during the class. You are highly encouraged to ask questions in class.

**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>

**Students with Disabilities:** Students who may need academic accommodations due to a disability are encouraged to discuss their needs with the instructor at the beginning of the semester. In order to obtain authorized accommodations, students should be registered with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498 and have an updated accommodation letter for the instructor. Accommodations and related support services such as exam administration are not provided retroactively and must be requested in advance.

**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 a 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.

### **Tips for success in this course:**

- 1) It is absolutely essential that you understand how to solve all the assigned problems. Once you understand how to solve a problem, write your solution down neatly and in full detail with explanations that make your reasoning clear.
- 2) Don't fall behind! If you are having difficulty, see me immediately to discuss the problem!
- 3) Take advantage of office hours.
- 4) Discussing problems with a classmate is very useful.
- 5) Again, questions in class are strongly encouraged.
- 6) I believe you can be successful in this course! You should expect to work hard. Don't get discouraged if you find some of the material difficult. Be persistent and patient! If you follow the above suggestions, your experience in this course will be a rewarding one.

*I look forward to a great semester!*