MAT 661: Introduction to Topology   Fall 2015

Instructor: Peter Horn, Assistant Professor of Mathematics
email: pdhorn@syr.edu
Office: 206E Carnegie
Phone: (315) 443-1575
Office hours: Tu 12:30 to 2, Fr 1:30 to 3, and by appointment. I have an open door policy for short to medium questions.
Lecture: MoWeFr 9:30 - 10:25, 115 Carnegie

Course description: Topological spaces, continuous mappings, compactness, connectedness, path connectedness, separation axioms, metric spaces, quotient spaces, CW complexes, the fundamental group, and the classification of 2-dimensional manifolds.

Prerequisites: MAT 512 or graduate standing in mathematical sciences.

Text: *Topology: A Geometric Approach* by Terry Lawson, Oxford University Press.

Course website: Please check https://pdhorn.expressions.syr.edu/fall2015mat661/ for any homework, handouts, or other information.

Grading policy: Homework (40%), one midterm exam (30%), and one final exam (30%). The exams will be take home. Good mathematical exposition is expected on all written assignments. You may work together on the homework, but you are required to hand in your own work. You must work alone on exams. Homework will be assigned roughly once a week.

Attendance policy: Regular attendance is highly recommended, but roll will not be taken formally. You are responsible for all material covered and announcements made in class, whether or not you attend class. If you will miss class for a religious reason, **you must notify me within the first two weeks of the semester**.

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 309 of 804 University Avenue, or call (315) 443-4498 or TDD: (315) 443-1371 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for 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.

Religious observances policy: Syracuse University's 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 holy days 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 no later than the end of the second week of classes for regular session

classes and by the submission deadline for flexibly formatted classes. Student deadlines are posted in MySlice under Student Services/Enrollment/My Religious Observances/Add a Notification.

Academic integrity: Syracuse University's academic integrity policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The university policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same written work in more than one class without receiving written authorization in advance from both instructors. The presumptive penalty for a first instance of academic dishonesty by an undergraduate student is course failure, accompanied by a transcript notation indicating that the failure resulted from a violation of academic integrity policy. The presumptive penalty for a first instance of academic dishonesty by a graduate student is suspension or expulsion. SU students are required to read an online summary of the university's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice. For more information and the complete policy, see http://academicintegrity.syr.edu.

Any form of cheating will not be tolerated in this course. First offenses in cheating will result in a failing grade on that assignment, and subsequent offenses will be reported to your dean.

Copying homework solutions from any source, including the Internet, is considered cheating.

How to succeed: Here are a few basic suggestions for how to succeed in this course.

1. It is absolutely essential that you understand how to solve the assigned homework problems and, more importantly, how and why the skills and techniques presented in the course are used in solving the assign problems.

2. Ask questions.

3. Stay caught up. Mathematical concepts build on each other cumulatively and you need to stay on top of the material at every stage. If you are having difficulty, don't expect that the problem will take care of itself and disappear later. Contact me immediately and discuss the problem.

4. Form a study group. Many students benefit from a study group to work through challenging problems and to review for exams. You should attempt the problems ahead of time by yourself and then work through any difficulties with your study partners. Explaining your reasoning to another student can help to clarify your own understanding.

5. You should expect to work hard. Don't get discouraged if you find some of

the material very difficult. Be persistent and patient! If you follow the above suggestions, your experience in this course will be a rewarding one.

Use of student work: In compliance with the federal Family Educational Rights and Privacy Act, registration in this class is understood as permission for assignments prepared for this class to be used anonymously in the future for educational purposes