

MATH 429 Introduction to Topology Spring 2021

Class meets: Monday, Wednesday, Friday 10:10 - 11:00 a.m. on Zoom through 2/12. Starting 2/15, the students may either attend lectures in 114 McAllister or participate by Zoom.

Instructor: Dr. Victoria Sadovskaya (you may call me Victoria)

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Office: 426 McAllister

Office hours: on Zoom Monday 4:30 - 5:30 p.m., Wednesday 3:00 - 4:00 p.m., and by appointment. You may also to send me questions by email.

Course web page: <http://www.personal.psu.edu/vxs137/429/429.html>

The course materials will be also posted on *Canvas*.

Course description: The goal of the course is to introduce students to the main concepts and tools of general topology. It covers metric spaces, topological spaces, separation axioms, product spaces, identification spaces, compactness, connectedness, and fundamental group. The course emphasizes development of mathematical theory with rigorous proofs.

Prerequisite: Math 311W.

Text (required): *Introduction to Metric and Topological Spaces* by Wilson A. Sutherland, 2nd edition. Notes will be provided for the last topic, the fundamental group.

Homework will be assigned on Fridays and collected on Thursdays via Canvas. *No late homework will be accepted, except in cases of illness or an emergency.* Solutions must be neatly and clearly written (or typed) in complete sentences, they should be logically structured, and all steps should be justified. You may use statements proved in class and results of previous homework assignments. You may discuss general approaches to problems with me and with other students, but you must write solutions on your own. *You may not copy solutions from any source.* Additionally, I will assign exercises that will not be collected. I strongly encourage you to do all suggested exercises since this will help with understanding the course material.

Exams: There will two midterm exams and a two-hour cumulative final exam. The midterms will be given via Canvas during regular class periods, and their dates will be announced two weeks in advance. The final exam will be scheduled by the university during the final exam week, and it will also be administered via Canvas. All students must plan to take exams at the scheduled times. If you are unable to take a midterm exam you should notify me promptly. If there is a compelling reason, such as illness or an emergency, your score will be replaced by the final exam score. Otherwise, the score for the missed test will be zero. *During the exams, you may use the course textbook and class notes, but no other sources.*

Grading Policy: The final score and letter grade will be calculated as follows:

Homework:	60%	A	at least 90%	B-	at least 77%
Exam 1:	10%	A-	at least 87%	C+	at least 74%
Exam 2:	10%	B+	at least 84%	C	at least 70%
Final Exam:	20%	B	at least 80%	D	at least 60%

Attendance: You are expected to attend every class. If you have to miss a class, please visit the course web page to find out what was covered and to check for any announcements. You will need to study the book or class notes to learn the material covered that day.
Please notify me if you have to miss more than one class.

Academic Integrity is the pursuit of scholarly activity in an open, honest and responsible manner. It is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University's Code of Conduct states that all students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment by all members of the University community not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.

Students with disabilities: Penn State welcomes students with disabilities into the University's educational programs. Every Penn State campus has an office for students with disabilities, and the contact information is provided at the Student Disability Resources website <http://equity.psu.edu/sdr/disability-coordinator>. For further information, please visit <http://equity.psu.edu/sdr/>. In order to receive consideration for reasonable accommodations, you must contact the appropriate disability services office, participate in an intake interview, and provide documentation (<http://equity.psu.edu/sdr/guidelines>). If the documentation supports your request for reasonable accommodations, your campus disability services office will provide you with an accommodation letter. Share this letter with your instructors and discuss the accommodations with them as early as possible. You must follow this process for every semester that you request accommodations.

Counseling and psychological services: Many students face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

Counseling and Psychological Services at University Park (CAPS)

<http://studentaffairs.psu.edu/counseling/> 814-863-0395

Penn State Crisis Line (24 hours/7 days/week): 877-229-6400

Crisis Text Line (24 hours/7 days/week): Text LIONS to 741741

Reporting Educational Equity Concerns: Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, or harassment due to age, ancestry, color, disability, gender, gender identity, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity via the University's Report Bias webpage <http://equity.psu.edu/reportbias/>