

CENTRAL CONNECTICUT STATE UNIVERSITY
DEPARTMENT OF MATHEMATICAL SCIENCES
SPRING 2010

COURSE: MATH 523 (70)
TITLE: GENERAL TOPOLOGY
PREREQUISITES: MATH 377 or permission of the instructor.
COURSE DESCRIPTION: Rigorous study of General Topology. Topics include: Set Theory, Metric Spaces, Continuity, Topological Spaces, Basic Constructions, Separation Axioms, Compact Spaces, Locally Compact Spaces, Connected Spaces, Continua, Homotopy.

INSTRUCTOR: Ivan Gotchev, Ph. D.
OFFICE: MW 115A
PHONE: 832-2839
EMAIL: gotchevi@ccsu.edu
OFFICE HOURS: TR 3:00 – 3:25 PM, 4:50 – 6:40 PM, and F 1:20 – 1:50 PM, or by appointment.

TEXTBOOK: Topology by Sheldon Davis, © 2005 by McGraw-Hill.
COVEREGE: Chapters 1 – 13 will be covered.
SCHEDULE OF CLASSES: TR 6:45:00 – 8:00 PM in MS 212.
ATTENDANCE: The material covered by this course will be discussed and explained clearly in class and proper examples will be solved. Therefore regular class attendance is important.

EXAMINATIONS: There will be two tests, three projects, two take-home exams and a cumulative final exam on Thursday, May 20, 6:30 – 8:30 PM in MS 212. The examination problems will be similar to those solved in class or given as homework assignments.

HOMEWORK: The best way to learn mathematics is to solve as many problems as possible. In the list below are given suggested homework assignments that you have to solve before solving your take-home exam problems.

GRADING:

TWO TESTS	30%
TWO TAKE-HOME EXAMS	20%
THREE PROJECTS	30%
FINAL EXAM	20%

If you score 93% or more your final grade will be an A, 90% or more but less than 93% - A-, 87% or more but less than 90% - B+, 83% or more but less than 87% - B, and so on. Less than 60% is F.

Suggested Homework Assignments and Tentative Time Table

Date	Chapter	Suggested Homework Assignments
1/26	1	Sets, Functions, Notation
1/28	1	1 – 8
2/2	13	A Little More Set Theory
2/4	13	1 – 2
2/9	2	Metric Spaces
2/11	2	1 – 19
2/16	2	
2/18	3	Continuity, 1 – 10
2/23	Test 1, Tuesday, February 23. THE 1 due date.	
2/25	4	Topological Spaces
3/2	4	1 – 10
3/4	4	
3/9	5	Basic Constructions: New Spaces from Old
3/11	5	1 – 20
3/16	6	Separation Axioms, 1 – 15
3/18	6	Project 1 “The Urysohn Metrization Theorem” begins.
3/30	Test 2, Tuesday, March 30. THE 2 due date.	
4/1	7	Compact Spaces, 1 – 11.
4/6	7	Project 2 “The Countable Ordinals” begins.
4/8	8	Locally Compact Spaces, 1 – 7.
4/13	8	Due date for Project 1.
4/15	9	Connected Spaces, 1 – 7.
4/20	9	Project 3 “The Cantor Set” begins.
4/22	10	Other Types of Connectivity, 1 – 8
4/27	10	Due date for Project 2.
4/29	11	Continua
5/4	11	1 – 6
5/6	12	Homotopy, 1 – 6
5/11	12	Due date for Project 3.
5/20	Final Exam, Thursday, May 20, 6:30 – 8:30 PM	

UNIVERSITY POLICIES

- 1. You must take the final examination at the time specified in the course selection book (Thursday, May 20, 6:30 – 8:30 PM in MS 212.)**
- 2. If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangement in case the building must be evacuated, please make an appointment with me as soon as possible. My telephone number and office hours are given above.**
- 3. In the event of a weather emergency which requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call (860) 832-3333 for the “general snow message”.**
- 4. The last day to drop a course is Friday, March 19. Approvals for withdrawal prior to this date are not required; however, it is strongly recommended that students consult with their academic advisors prior to deciding to withdraw. Cessation of attendance, notice to the instructor, or telephone calls to the Enrollment Center are not considered official notice of a student’s intention to drop the course. After March 19 withdrawals are allowed only under extenuating circumstances and require approval of the course instructor, department chair and dean of the School of Arts and Sciences.**

RESOURCES AVAILABLE

- 1. If you need help, take advantage of your instructor’s office hours. Do not wait until just before the test to do so.**
- 2. Form a study group with other students in your section. Explaining solutions to homework problems to each other is a good way to learn.**