

Point-Set Topology

POLICIES / SYLLABUS

Instructor

Eric Moorhouse, Ross Hall 216, moorhous@uwyo.edu, 766-4394

Class Meeting

MWF 8–8:50am, RH 247.

Office Hours

MWR 2:30–3:50pm, RH 216. Subject to change; for latest information, see my schedule at <https://ericmoorhouse.org/schedule.html>. Also available by appointment. Please let me know if you meet by Zoom as I no longer open Zoom during office hours except by special request.

Textbook

We recommend the standard reference at our level, namely James R. Munkres, *Topology*, 2nd ed., Prentice-Hall, 2000. Unfortunately, however, this book is out of print and copies are becoming scarce. A useful and inexpensive substitute is *Counterexamples in Topology* by L. A. Steen and J. Arthur Seebach, Jr., Dover, 1995, which would be good to have on hand in its place. I will strive to keep lectures self-contained; nevertheless you should locate a copy of one or the other of the two books I have recommended. From time to time I will also provide handouts with course-related content.

Grading Scheme

I will assign grades (A, B, C, D, F, W) at the end of the semester according to the scale: A=exceptional,

B=very good, C=adequate, D=poor, F=fail, W=withdrawal. I always encourage students to consult me at any time during the semester with questions, including (but not restricted to) questions about your progress in the course. You may ask questions by email, at your own risk (remember that email is not secure); but questions asked in person typically receive more prompt and complete answers.

Participation	20%
Homework	80%

I also encourage students to present a topic during class for part of their grade. The terms of this can be negotiated directly with me provided you do so early in the course, so that I can be sure the topic is suitable and that you have suitable resources for preparing a presentation

on the topic we have agreed upon. Please discuss this with me early in the course (before midsemester) if this is of interest to you.

Homework

Homework will be assigned periodically. It is fine for you to discuss the homework with other students. However, do not copy anyone else's work directly, and do not copy other sources. Copying will adversely affect your grade.

Topics Covered

Our focus is, as described in the course catalogue, point-set topology (also known as general topology). This is a very interesting and established subject, well deserving of a course on its own, not as a footnote to analysis or any other subject area (although we will mention the role played by topology in a variety of other subjects). It is most closely related to set theory and mathematical logic; and so it is appropriate for us to mention these connections in our course. We do not have time to discuss algebraic topology, which is also very interesting but a separate course (MATH 5605).

Participation

You are expected to attend class regularly and be prepared to participate. A portion of your grade will be based on the regularity of your presence in class, and on your involvement in class discussions.

Course Website

Please bookmark the site <https://ericmoorhouse.org/courses/5600/> and visit it regularly for class updates and announcements, electronic copies of handouts, etc.

Appropriate Conduct

For issues of academic honesty/dishonesty, classroom deportment, etc., we refer to

- [UW Student Code of Conduct](#) (UW Dean of Students)
- [Students & Teachers Working Together](#) (UW College of Arts & Sciences)

Links to both documents appear on our course website.

Syllabus Changes: This syllabus is subject to change. Updates to this syllabus will appear electronically on the course website, and you will be alerted by email.