

# Math 372 – Topology

# Syllabus

# Spring 2017

<b>Professor Cindy McCabe</b>  Office: <b>D354</b> Science Building Phone: 715-346-2085 Email: <a href="mailto:cmccabe@uwsp.edu">cmccabe@uwsp.edu</a> <a href="http://www.uwsp.edu/mathsci">www.uwsp.edu/mathsci</a>	<b>Office Hours</b> 10:00-10:50 Mon. & Fri. 12:00-12:50 Tuesdays 1:00-1:50pm Thursdays 2:00-2:50pm Wednesdays <i>or by appointment</i>	<b>Class Meets</b>  Mon, Tues, Thurs 2:00 – 2:50 pm CCC 212
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**Text (available for rental):** *Introduction to Topology – Pure and Applied*, by Colin Adams & Robert Franzosa (Pearson Prentice Hall, ISBN 0-13-184869-0 or 978-0-13-184869-6). Topics include most of those in Chapters 1 – 7, and selected topics from Chapters 12 and 14.

**Prerequisites:** Math 213 and Math 300

**Objectives** for students in this course:

To journey further in abstract mathematics by working with topological spaces, continuity, homeomorphisms, metric spaces, connectedness, knots, and manifolds.

To be able to think and communicate better mathematically through the study of topology, including the reading and writing of mathematical proofs.

**Evaluation:** Final course grades will be determined by the following:

- 150 points for in-class quizzes (three quizzes worth 50 pts each)
- 45 points for in-class work, sometimes done in groups (highest 15 scores)
- 80 points for (nearly) weekly homework assignments (highest 8 scores)
- 25 points for the manifold project
- 150 points for Exam 1 (in-class on Thursday Feb. 23)
- 150 points for Exam 2 (in-class on Thursday April 13)
- 150 points for Exam 3 (Tuesday May 16, 12:30 – 2:30pm)

Total: 750 points for this course

Course Grades at or above	93.3	90	86.7	83.3	80	76.7	73.3	70	66.7	60	%
	700	675	650	625	600	575	550	525	500	450	Points
will receive at least a grade of	A	A -	B +	B	B -	C +	C	C -	D +	D	

I reserve the right to exercise discretion in raising a student's grade if the final weighted average does not appear to reflect the quality of a student's work (for example, because of one low exam score early in the course). I will not use discretionary judgments to lower a student's final grade.



Three regular **quizzes** and three **exams** have been scheduled. Please note the dates now so that you can plan for them in advance. The quizzes will be on Tuesday, Feb. 14, Tuesday, April 4, and Tuesday, May 2. Part of the in-class work may include quick quizzes over recent definitions and theorems, which will be announced in class. Note that the third exam is during the **final exam** time slot, Tuesday, May 16<sup>th</sup>, 12:30 – 2:30 pm. Unless specified otherwise, the use of calculators (including most graphing calculators) will be permitted during regular quizzes and exams.

*Any calculator, phone, smartwatch, or other device with any external connection must be stowed away, silenced, and not used during exams and quizzes.*

Almost every day, a list of **homework** exercises will be assigned. Full homework assignments will be collected approximately once each week (often on Thursday). This is meant to be formative assessment, so written comments will be given and homework grades (out of 10 points each) will mostly be based on evidence of thoughtful completion of the assignment.

There will be **in-class work** each week, sometimes done in groups. Some days you will need to prepare text exercises for class discussion. This work will be worth 3 points each time. Your highest 15 scores will be part of your semester grade. This is also meant as formative assessment, so grades here will be based on evaluations of *satisfactory work, some significant contributions, or little to no significant contribution.*

Each homework set, in combination with reading assignments and the in-class work we do, will be a *minimal* list of items which you need to understand in order to do well in this course. This work is extremely important, so make sure you stay on top of it and ask questions on whatever you don't understand. The effort you put into your homework and in-class work, and into studying them after completion, will have a big impact on your semester grade through the improved quiz and exam scores that it produces.

During the second half of the semester, there will be a **Manifold Project**. You will choose your own manifold, make one using a 3D printer, and write a short paper describing your manifold and many of its properties.

I do not anticipate other graded items, but if any arise, they will be announced in class and the course points will be adjusted.

**Desire to Learn (D2L):** Course materials such as assignments, handouts, grade information, and announcements may be found on the web in Desire to Learn, <https://uwsp.courses.wisconsin.edu/>. To access D2L, use your regular campus logon ID and password, and then click on our course: TOPOLOGY... under SEM II 2016-17.



**For Help:** Ask questions as they arise. Come to see me before or after class, stop by during my office hours, or schedule an appointment with me for another time. One of the great parts of my job is working with conscientious students!

**Attendance** is expected at every class meeting. It is the student's responsibility to make prompt arrangements with me for finding out what was missed and for making up any assigned work in the case of an absence. Quizzes and exams may not be made up unless arranged with me ahead of time, and then only for sufficient reason. If a dire emergency occurs, contact me as soon as possible to see if an exception is in order.

For information on **accommodations** available to students with disabilities, visit the Disability and Assistive Technology Center in room 609 of the Learning Resources Center (715-346-3365) or their website:  
<http://www.uwsp.edu/disability/Pages/default.aspx>.

All students are expected to know the UWSP student **responsibilities** found on the Dean of Students webpage. Academic Concerns are available at the link below. Information on Conduct Concerns and on Personal Concerns are also available on the Dean of Students site. <http://www.uwsp.edu/dos/Pages/Academic-Concerns%20for%20Students.aspx>.

**Incompletes:** A grade of incomplete may be given when circumstances arise which are beyond the student's control, and the student is unable to complete the course, AND the student is passing when the circumstances arise.



