# Math 332–Abstract Algebra: Group Theory
## Spring 2017

<u>Meeting Time/Place:</u>    9:00 – 9:50 am TRF in Science D228

<u>Instructor:</u>   Matthew Welz        <u>Office:</u> Science B335

<u>Text:</u>   *Contemporary Abstract Algebra (8e)* by Joseph A. Gallian

<u>Office Hours:</u>  Tuesday 2pm, Wednesday 2pm (at Smith Hall), Thursday and Friday 11 am

<u>Contact Info:</u>   Phone  715-346-3968
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<u>Web page:</u>    **http://www4.uwsp.edu/math/mwelz/**
                   Check here for assignments, solutions, calendar, and announcements in general.

<u>Course Description:</u>   We will study, among other selected topics, the group axioms, homomorphisms and isomorphisms between groups, normal subgroups and quotient groups, cyclic groups, permutation groups, finite abelian groups, and some of the isomorphism theorems.  We will focus on *both* the theory of groups and concrete examples of groups.  We will be covering most of Part 2 in the text.

<u>Grading:</u>   Your grade in this course will be based on:

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|---:|---|
| Definitions | – 5% |
| Assignments | – 35% |
| Two Tests | – 40% (20% each) |
| Final Assessment | – 20%. |

The Definitions portion of your grade will come from **very** brief definition/theorem quizzes at the beginning of one class per week.  The Assignments portion of your grade is made up of weekly homework sets.  The Final Assessment will either be a traditional final exam OR a group paper and presentation on an interesting topic or application of group theory that we do not cover in class.  The project would be completed at the end of the semester.  Either way, we'll talk more about the final assessment later in the semester and determine which it will be.  The majority of your energy will be spent on the homework sets; this is where you will really hone your proof-writing.  In addition to studying algebra, we really want to focus on communicating mathematics effectively.  You are encouraged to work in small groups (giving credit to those in the group) and use your notes and textbook, but you are not to receive solutions from outside sources; much of your *learning* will occur while working these sets.

**The two tests will (tentatively) be on Friday, March 3rd and Friday, April 21st.**

**The Final Exam is scheduled for Monday, May 15th  8:00 am -10:00 am.**

**D2L:**   This will not be a big part of the course but all your grades will be entered there.

**Grading Scale:**

| A | 93-100 | B+ | 87-89 | C+ | 77-79 | D+ | 67-69 |
|---|--------|----|-------|----|-------|----|-------|
| A- | 90-92 | B | 83-86 | C | 73-76 | D | 60-66 |
| | | B- | 80-82 | C- | 70-72 | | |

In most cases, I will use the scale above but I may, on occasion, assign a grade that is **higher** than specified by the scale if circumstances warrant it.

**Academic Integrity/Conduct:**   You are expected to be familiar with the *UWSP Community Bill of Rights and Responsibilitie*s: http://www.uwsp.edu/dos/Documents/CommunityRights.pdf as well as the *Student Academic Standards and Disciplinary Procedures*: http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf. In particular, **don't cheat!!**

Also, students are expected to respect each other, instructor, and the above codes of conduct. This includes **turning off cell-phones and all other noise making devices** for the 50 minutes you are in class.

**Attendance:**   Regular attendance is expected; make-up tests will be given only for an emergency. In which case, you have until class begins on the day of the test to contact me. Otherwise, you will receive a grade of 0%.

**Other Help:**   Outside of my office hours, tutoring may be available through the Tutoring-Learning Center in LRC 018. Please, don't hesitate to talk with me about setting up a plan.

The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for students with disabilities. For more info on UWSP's policies: http://www.uwsp.edu/disability/Pages/toQualifyForDisabilityServices.aspx

If you have a disability and require classroom and/or exam accommodations, please register with the Disability and Assistive Technology Center (on the 6th floor of the Learning Resource Center) and then contact me at the beginning of the course. Without documentation I cannot give you accommodations. For more information, refer to their webpage here: