

SYLLABUS – MATH 311W

DISCRETE MATH

Description: This course introduces mathematical proofs. To do so, we will learn about numbers, groups, and other mathematical constructions. Because this course introduces students to a new way of thinking about and doing, mathematics, it can be *extremely* challenging. There will be a writing component to this course. In particular, all students are expected to write proofs.

- **Time:** Monday, Wednesday, Friday 1:25pm – 02:15pm
- **Location:** 115 Osmond Lab
- **Instructor:** Karl Schwede
- **Contact information:**
 - email: schwede@math.psu.edu
 - office: McAllister, 318C
 - office phone: (814)865-8439
 - website: <http://www.math.psu.edu/schwede/math311>
- **Office hours:** Wednesday 3:30 - 4:30, Thursday 10:00-11:00.
- **Textbook:** “Numbers, Groups, & Codes”, (2nd Edition), *J. F. Humphreys & M. Y. Prest*

Grade: Your grade will be determined by the following formula.

10% Exam #1, tentatively Wednesday, October 3rd

15% Exam #2, tentatively Wednesday, November 14th

50% Homework/Quizzes/Worksheets/Papers/Group work, homework will be assigned and collected approximately weekly. Your lowest homework grade will be dropped.

25% Final Exam, date TBA

Generally, late homework will not be accepted and missed exams/quizzes cannot be made-up. In unavoidable circumstances, you must speak with me *prior* to missing the homework/exam/quiz to receive credit. In such cases, the grade impact will be dealt with on a case by case basis.

Students are encouraged to work together when solving homework problems. However, each student must turn in his or her own write-up. For homework problems, students may use material found in the book in a section covered before the homework is due. Additionally, the student may use anything proven in class or on earlier homework. Finally, there will be some team projects.

Academic Integrity: All Penn State policies regarding ethics and honorable behavior apply to this course.

Statement involving disabilities: Penn State welcomes students with disabilities into the University’s educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services Web site at <http://equity.psu.edu/ods/> [equity.psu.edu].

In order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines at

<http://equity.psu.edu/ods/guidelines/documentation-guidelines> [equity.psu.edu]). If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.

Warm-up homework set: Friday, August 31st

- Read sections 1.1 and 1.2 of the book.
- From Section 1.1. Do exercises 1, 2, 4, 5 to turn in.
- From Section 1.1. Be prepared to present Exercise 6.