MATH 504 – Graduate algebra; Fall 2020

Instructor: Julia Pevtsova
Class time: MWF 10:30-11:20
Class website: canvas (you need to be registered)
Class location: **PDL C-38**
Office hours: Friday after class and by appt – feel free to contact me to schedule if you'd like to talk
e-mail: julia@math.washington.edu

Teaching assistant: Curtiss Lyman
Collaborative space/Office hours: Monday, TBD, and by appointment
e-mail: lymanc@uw.edu

Course Description. This is the first quarter of the first-year graduate algebra sequence.   See the general algebra syllabus for the quarter-by-quarter content and recommended texts.

Course structure. The learning process will consist of four major parts:
- Class time – lectures, discussions, questions and presentations by the students
- Independent study: reviewing lecture notes, reading, working on homework assignments and preparing for presentations
- Office hours: informal time for questions/discussions with the instructor/TA
- Collaborative space/ Homework study groups: virtual or physical space to come together to collaborate on homework assignments/study for exams/preparing for presentations.

Grading policy.
- 40% weekly homework assignments (both regular assignments and worksheets)
- 20% class participation and presentations
- 10% midterm (written)
- 30% final (written)
- 60% of the total will guarantee a 2.0 or higher.
- 70% of the total will guarantee a 3.0 or higher.
- The grading policies described above apply to students in good standing; students who engage in misconduct will be reported to the office of Community Standards & Student Conduct. Their grades will be handled differently.

Important dates.
- Midterm (written, in class): **Nov 15, Monday**, 9:30-11:30am
- Final (written, in class): **Dec 13, Monday**, 8:30 – 12:30pm

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- Nov 26, Friday – Thanksgiving holiday

Textbooks. Please refer to the general syllabus for the list of recommended books. If you could get *one textbook*, I recommend
[DF] D. Dummit and R. Foote, *Abstract Algebra.*

Online resources.
There is a proliferation of online resources including some excellent algebra notes, especially in the last year. Here are the links to a couple popular ones but there are certainly others! We shall keep a running list on canvas, please share if you come across good ones!

K. Conrad's notes
P. Garrett's notes

Homework.
- Written homework assignments. Problems to be submitted in written form will be posted on canvas on a weakly basis. They'll be due on **Tuesday, by 10pm**. No late homework will be accepted. The lowest homework score will be dropped.
- Worksheets. This is a special homework assignment. It counts towards the total homework grade. The format is different from the regular homework. The worksheet is designed as an independent study (or review) of a particular topic. You'll get a short written introduction the topic with all the proofs missing. You'll need to ``fill in the blanks", that is, supply the proofs. Once the worksheet is graded and returned to you, it should be added to your notes. You may attach your proofs to the original worksheet or download the tex file and add the proofs right where they belong so that you get a nice and continuous exposition. The material from the worksheets will be used later in the course and relied on in exams in the same way as the material presented in lecture.

Class presentations. Some problems will be assigned as presentation problems (marked with **P** on the homework). These problems don't need to be carefully written for submission although you are encouraged to write your own notes. They'll be presented in class by the students; this will count towards you class participation grade. The material covered in presentation problems will be used later in the course and relied on in exams in the same way as the material presented in lecture and covered by other homework assignments.

Homework submission/tex. All homework will be submitted and graded on **Gradescope.** You are encouraged to tex your homework especially if you did not take a calligraphy course in the past. Some tex resources/tips are discussed on the tex page on the class canvas site. If you prefer to handwrite homework assignments you'll need to scan them for submission. Please make sure it is easily readable in the scanned version. If you need help with scanning apps **don't hesitate** to contact instructor or TA.

Religious Accommodations. Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form.

The UW Food Pantry. A student should never have to make the choice between buying food or textbooks. The UW Food Pantry helps mitigate the social and academic effects of campus food insecurity. They aim to lessen the financial burden of purchasing food by providing students with access to food and hygiene products at no-cost. Students can expect to receive 4 to 5 days' worth of supplemental food support when they visit the Pantry. For information including operating hours, location, and additional food support resources visit The UW Food Pantry. They can be found on the North side of West Campus' Poplar Hall at the corner of Brooklyn Ave NE and 41st.