MATH 307-01 Abstract Algebra
FALL 2017

Lecture: MWF 1–1:50, Morton 37
Instructor: Eric Swartz
E-mail: easwartz@wm.edu
Office hours: MWF 11–12 and by appointment, Jones 133.
Course homepage: We will use **Blackboard** as our course homepage.
Important dates: Sept 8 (Add/drop deadline), Oct 27 (Withdraw deadline)

Content: Groups, rings, fields, isomorphisms; polynomials. Additional topics chosen from group theory and ring theory, as time permits.

Textbook: We will (roughly) follow *Contemporary Abstract Algebra* by Joseph Gallian, Ninth Edition. However, older editions of this text are acceptable!

Homework: Homework will be assigned each Friday. The definitive list of assigned homework will be posted on Blackboard. You may turn in homework the following Friday (one week after it was assigned), and it will be returned to you the following Monday with comments. There is absolutely no penalty for turning in an assignment early! The homework is due two weeks after it was assigned (or at the final exam for the last homework). Only your grade on the work you turn in on the due date matters. While you are not required to turn in an attempt after one week, it is highly recommended!
Late homework will only be accepted under truly extraordinary circumstances (e.g., major surgery).
In order to be counted correct, a proof must be written in clear, correct English.
While you may discuss the problems with your classmates (and you are in fact encouraged to do so!), copying someone else's work is strictly prohibited and will result in scores of zero for *everyone* involved. In particular, you may not use another student's final work as a "model," and you may not allow other students to study your final work. Everyone must hand in final proofs separately. Needless to say, copying or adapting a proof from another source (e.g., book or internet) is strictly prohibited as well.

LaTeX: Your homework assignments must be typeset using LaTeX. Being able to use this software is a useful skill to have, and the programs are available for free.
  Windows:

- Download the MikTex program from `http://miktex.org/download`

- Download the Texmaker program from `http://www.xm1math.net/texmaker/download.html`

- Open the program "texmaker"

- Copy (or download and open) the file "sample.tex" to the Texmaker window

- Select "LaTeX" from the "Quick Build" menu

- Click the "⇒" on the left of "Quick Build" to get the pdf output

Mac:

- Download MacTex from `http://tug.org/mactex/`

- Open the "texshop" program

- Copy (or download and open) the file "sample.tex" to the Texmaker window

- Change "PlainTex" to "LaTeX" at the "Typeset" menu

- Click the "Typeset" icon to get the pdf output

Linux: I use a program called Kile. Once Kile has been installed and opened:

- Copy (or download and open) the file "sample.tex" to the Texmaker window

- Click "QuickBuild" to get the pdf output

You may also use the online editor available at `https://www.overleaf.com/`. Simply up for free, start a new project, and paste the text from "sample.tex" into the source side.
It is easy to google commands/techniques that you don't know, but a list of common symbols is available at `http://cklixx.people.wm.edu/TeX-symbol.pdf`

Tests: There will be a midterm on Friday, October 13. The final exam will be comprehensive and will take place Wednesday, December 20, from 2 PM – 5 PM.

Grading:

$$\text{Homework: } 50\%$$
$$\text{Midterm: } 20\%$$
$$\text{Final: } 30\%$$

Final letter grades are assigned using the scale: A 93–100, A- 90–92, B+ 87–89, B 83–86, B- 80–82, C+ 77–79, C 73–76, C- 70–72, D+ 67–69, D 63–66, D- 60–62, F <60

Honor code: Students are expected to uphold the honor code in this class. Any suspected infraction will be reported. Rest assured, I am older and more experienced than you are. **I will catch you if you cheat!**