SYLLABUS for Math 503: Algebra I

Instructor: Dr. Joseph Brennan **Classroom:** OW 100E
Time: MWF 9:40 - 10:40am **Office:** OW 136
https://www2.math.binghamton.edu/p/people/jbrennan/math503/start

The required textbook is **Abstract Algebra**, 3rd edition, by D.S. Dummit and R.M. Foote.

http://www.amazon.com/Abstract-Algebra-Edition-David-Dummit/dp/0471433349

This book is considered standard for those interested in algebra and can be found much cheaper than the link; be sure to browse the internet for a more affordable option!

In this course we will introduce basic ideas and results about groups. We will cover a selection of material from Chapters 1-6 of the textbook. Note that the order and exposition of the material in class will often differ from the presentation in the book. The students are strongly encouraged to consult other books, some of which will be suggested during the lectures.

Students are expected to attend **every** scheduled class and are responsible for behaving in class, taking class notes, doing homework problems, asking for and coming in for help, etc.; in the end, you are responsible for your success in this class so work hard! Besides holding class MWF, I will also hold a problem solving session Tuesdays 12-1pm and Thursdays 1-2pm in room 309. Both class attendance and systematic work on the homework problems are crucial for the success in this class.

Students will earn points through regularly assigned homework and two exams. There will be an oral midterm examination during the week of March 16th and an oral final examination during the week of May 4th; each exam will be worth 50 points. Students will be organized into teams expected to collaborate internally. Each team member will submit their own solution. Homework **must** be formatted with LaTeX and submitted through **Google Drive**. Students will have the opportunity to submit each problem twice but the second submission must be before the final submission deadline. There will be a total of 100 homework questions each worth 4 points:

1pt: Team Point: earned if there is a correct answer submitted by any member of the team.

1pt: Correct: Earned if your first submission is correct.

2pt: Accuracy: From the set $\{0, 1, 2\}$. Incorrect submissions due to major errors will be awarded 0 points. Incorrect submissions due to minor errors or submissions written up poorly will be awarded 1 point.

Students interested in becoming algebraists should consider solving every problem in Chapters 1 - 6. Suggested homework will correspond with sections from the textbook. Each suggested homework problem will be worth 1 point to the first student who completes it; individual students will be limited to 2 problems per section. To claim credit for a problem, be the first to upload a solution to **Google Drive** and present the problem at the next problem solving session.

Grade	F	C	B	A
Point Range	[0,250)	[250, 325)	[325,400)	[400,∞)

I am often sitting in my office with my door open. I really would love to discuss group theory during those hours and highly encourage you to seek me out when you have lost hope in solving a problem, I promise to work with you and not steal the fun!