

**MATH 421 TuTh 10:00 - 11:15,  
Room: MSC W304**

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**Instructor:** David Zureick-Brown, W430 Math and Science Center, dzb@mathcs.emory.edu

**Office Hours:** F 1:30-3 in MSC E408; see website for occasional changes

**Textbook:** “A Visual Guide to group theory”, Carter

**Website:** <http://www.mathcs.emory.edu/~dzb/teaching/421Fall2014/>

**Course details:** Group theory is the branch of mathematics that studies symmetry, found in crystals, art, architecture, music and many other contexts. This course will be a very detailed introduction to group theory and related topics.

This class will meet 28 times. and we will cover more or less the entire textbook. The textbook is short and beautifully written; the expectation is that, in addition to the weekly written homework, you will read every word of the textbook.

**Grade Policy:** Grades will be set according to the following table

Homework	40%	weekly, due Friday at 5pm in my mailbox
Midterm Exam	30%	Tue. Oct 28 (TENTATIVE)
Final Exam	30%	Th. Dec 11, 3:00-5:30pm (Room TBD)

The final letter grades will be curved, a lower bound on your grade is 85% – A, 70% – B, 55% – C.

The midterm date is tentative (and may be adjusted if the pace of the course is adjusted), but the date of the final exam is set in stone; make your winter travel plans accordingly. If you have a conflict with the final exam (e.g., another final) please let me know ASAP.

**Homework:** There will be homework assigned every other week, due on Friday at 5pm (in my mailbox). There will be many simple problems, checking your understanding of the definitions, that will be collected and graded for completeness but not correctness. Most weeks there will be a number of proofs assigned. You are expected to write them up very carefully. 3-6 of problems will be carefully graded, and you will receive an additional 20 for completing the assignment. Homework assignments will typically be worth 100 points (20 for completeness, and 80 for graded problems).

The homework assignments are available at the course web page, and will be updated after each lecture. **Please check the webpage for changes before beginning the assignment.**

Additionally, the expectation is that, in addition to the weekly written homework, you will read every word of the textbook and any additional notes.

**Overloads:** Ken Mandelberg handles all overloads for the department. The overload form is available at <http://mathcs.emory.edu/overload/>.

**Honor Code:** Remember that copying another student's work is a violation of the Honor Code and will be treated as such. If you must leave class during an exam for **any reason**, please leave all of your belongings (**including your handheld supercomputer phone!**).

For homework: you are free to consult any sources (animate or inanimate) while doing your homework (working in groups is encouraged!), but if you use anything (or anyone) other than your class notes or the texts listed above, you should say so on your homework – please state at the end of every problem any sources used.

On the other hand, you are expected to make an honest attempt to do every problem on your own before consulting other sources. Remember that copying another student's work is a violation of the Honor Code and will be treated as such.

A good rule of thumb to avoid plagiarism is the following – when doing the final write up of a problem, do not have any text books, web pages, or classmate's write up in front of you. If you get stuck when writing up an assignment, go back and look again; just make sure that you organize the mathematics in your head before writing a proof rather than copying a solution from some source. **This is a generous homework policy. Please do not abuse it.**

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