Schedule of the course and HW – This is a link to detailed schedule of the course, HW assignments, Quizzes, Practice quizzes, Solutions, etc.

Group Theory - MATH 3175 01 - CRN 38818, 9:15 am - 10:20 am MWR, Forsyth Building 150

Instructor: Gordana Todorov

Email: g.todorov@northeastern.edu, Office: 531 Lake Hall

Office Hours: M 1:30-2:30, W 12-3, Th 11-12 and by appointment

Textbook:

Abstract Algebra, 4th edition, by John A. Beachy and William D. Blair, 2019, Waveland Press, Inc (Long Grove Illinois), ISBN 978-1-4786-3869-8

Information about the course: will be posted also on my web page http://www.northeastern.edu/gtodorov/

Course Description:

The course presents basic concepts and techniques of group theory: axiomatic definition of groups, important classes of groups (abelian, cyclic, additive and multiplicative groups of residues, permutation groups), Cayley table, subgroups, group homomorphisms, cosets, the Lagrange theorem, normal subgroups, quotient groups, direct products. Studies structural properties of groups. Possible applications include geometry, number theory, crystallography, physics, and combinatorics.

Grading Policies:

There will be 6 quizzes. You will be allowed to drop your lowest quiz grade. Your grade is computed as: 60% in-class quizzes, 40% final exam. Course letter grades require the following minimum percent grades: A (95%), A-(90%), B+(86.7%), B(83.4%), B-(80%), C+(76.7%), C(73.4%), C-(70%), D+(66.7%), D(63.4%), D-(60%)

Drop, Incomplete:

The last day to drop a course without receiving a 'W' grade is January 27.

The last date to drop a class with a W grade is April 15.

Math Department policy: The I grade (incomplete) will be given only rarely. It is intended to cover emergency situations in which a student who is doing reasonably well (C- or better) is unable, due to circumstances beyond the student's control, to complete all course requirements (e.g., is unable to take the final exam due to hospitalization). It requires a written agreement with the instructor as to how to make up the missing work. An incomplete may not be used to rescue a failing grade.

Course Policies:

1. You are responsible for ALL information and announcements given in the class even if you were absent.

2. If you must leave class early, please, let me know before class.

3. All cell-phones should be turned off in order to pay full attention to the discussions in the class. If you are expecting important phone call, please, let me know before the class.

4. It is University policy that no grade, including an incomplete, can be changed after one year. Exceptions must be authorized by the Academic Standing Committee.

Conflict Final:

All students without legitimate conflicts (approved by the instructor) should take the final exam at the scheduled time. Please, do not make travel plans that conflict with the final exam: Thursday, April 16 - Friday, April 24, 2020. Only two finals at the same time or three in one day constitute a University recognized legitimate reason to be excused from taking the final at the scheduled time. Students with such a conflict should complete a final exam conflict form, available on the registrar's website.

About the course and you!

This is a very beautiful course, with a lot of theory together with both examples and strict proofs. You will be expected to write proper mathematical proofs!

You are expected to do a lot of work in this course!

You are expected to do HW regularly. HW will be discussed at the beginning of each class.

PLEASE REMEMBER, YOUR SUCCESS DEPENDS ON YOUR WORK!!!

Issues with the Course/Instructor:
If you have a concern about the course or the instructor that is not or cannot be solved by speaking with the instructor, please contact the Mathematics Department Teaching Director, Professor Robert McOwen, 445 Lake Hall, x-5678 r.mcowen(at)northeastern.edu.

Tutoring:
http://www.math.neu.edu/undergraduate-program/mathematics-tutoring-services available Room 540B Nightingale, sign up on your myneu account (tutoring link). I will identify some tutors at the Math Department tutoring center with experience in group theory. For College of Sciences peer tutoring see www.northeastern.edu/csastutoring/

Academic Honesty:
The University's policies on cheating and related disciplinary actions are detailed in the Student Handbook. Incidents of cheating will be reported to the Office of Judicial Affairs. These incidents are investigated and adjudicated. The judicial process is a fair one with procedures for appealing decisions, and leads to substantial consequences: a deferred suspension and a fine of up to $200 for the first offense, expulsion from the University for a second offense.

TRACE:
At the end of the semester you are expected to fill in the TRACE evaluation form.

Schedule and Homework: Schedule & HW

Additional Resources and Applications: Additional Resources