SYLLABUS
GROUP THEORY (MATH 110B)
SPRING 2018

GENERAL INFORMATION

• Lectures: Monday, Wednesday, Friday, 11:00-11:50 AM at MS 5127.

• Instructor: Omprokash Das, Email: das@math.ucla.edu.

• Office Hours: Office hours will be held at my office at MS 6617F. On Monday from 1:00-3:00 PM and Wednesday from 1:00-2:00 PM. If none of these time work for you, then you can make an appointment by sending me an email.

• Course Webpage: https://www.math.ucla.edu/~das/110b.1.18s

• TA: Eilon Reisin-Tzur, Email: ereisint@math.ucla.edu.

• TA Meetings: MS 5127/Tuesday/11:00am-11:50am.

COURSE STRUCTURE

  – Topics in algebra by I. N. Herstein.
  – Abstract Algebra by Dummit and Foote. This is the ‘ultimate’ algebra book and also my most favorite one.
  – Contemporary abstract algebra by Gallian.

Lot of the homework problems will be assigned from the exercises of the first two references. However, you don’t need or expected to buy any of the reference books, get only the main textbook (by Hungerford).

• Course Outline: This is a course in group theory. We will do a rigorous study of the structure of finite groups, for example, Lagrange’s theorem, Cauchy’s theorem and Sylow’s theorem etc. Proofs and proof techniques will be emphasized. For more detailed description of the course and tentative lecture schedule follow this link: https://www.math.ucla.edu/ugrad/courses/math/131A. We will cover Sections from Pages 169-320 of the textbook.

• Homework:
  – There will be Homework but no quizzes.
  
  – Homework problems will be posted on the Course Webpage.
  
  – Collaboration: Collaborating on homework is not only allowed but encouraged for this class. However you must abide by the following rules of collaboration:

    * The First Rule of Collaboration (on contrary to the first rule of ‘Fight Club’) is, you must talk about your collaborators, i.e., you must acknowledge your collaborators in your homework.
* Make sure you understand how a particular problem is being solved. Don’t just copy solutions from your friends, discuss among yourselves about possible strategies on how to solve a particular problem and exchange ideas.

* Finally, write the solutions in your own words, do not copy word for word from someone else, doing so will be considered as cheating.

* No collaboration is allowed for the midterm and the final exam.

- **Exams**: There will be one **Midterm** (50 minutes) and one **Final exam** (3 hours).

  - **There will be No make up Exams**.

- **If you do not take the Final Exam, you will get an ‘F’**.

- Your homework and exam grades will be posted regularly on the myUCLA Gradebook.

- **Laptops and Cell Phones**: Use of Laptops, Cell Phones or any type of electronic gadgets is strictly prohibited during the lecture. In case of an emergency please take your ‘conversation’ out of the class.

**Grading**

- **Grading Policy**: Letter grades will be assigned based on the following scheme:

  \[
  20\% \text{ Homework} + 30\% \text{ Midterm} + 50\% \text{ Final Exam.}
  \]

**Exams**

- **Exam Dates**:
  - Midterm: Monday, May 7, 11:00-11:50 AM.
  - Final Exam (Cumulative/comprehensive): Wednesday, June 13, 11:30AM-2:30PM.

- **Important Note**: If you believe a problem on homework or exam has been graded incorrectly, or that your score was not correctly recorded in the MyUCLA gradebook, you must bring this to the attention of the instructor within 7 calendar days of the due date of the assignment in question, or the date of the exam, and before the date of the final exam. Grading complaints not initiated within this period of time will not be considered. Please verify in a timely manner that your scores are correctly recorded on MyUCLA.