Introduction to Abstract Algebra (Math 412)
Course Information – Summer 2014

INSTRUCTOR: Professor Karl Heinz Dovermann
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TEXT & MATERIAL: Topics in Algebra by: I. N. Herstein
OFFICE HOURS: MTWRF 9:30 – 10:20. Other hours are available by appointment.

TOPICS: We will cover topics from basics group theory, including the Sylow theorems and the classification of finite abelian groups. The material in covered in Chapter 2 of the text book.

COURSE OBJECTIVES: Groups are a basic algebraic structure. It is interesting in itself and it is used in many other areas of mathematics. There are application in many other sciences, such as physics and chemistry. Beyond this, groups are a topic that can be covered in high school in an intuitive manner.

Program Objectives. In this senior level course students learn basics of one of the foundational topics in matheamtics

EXAMS: There will be at least one midterm (the date will be announced in class), and shorter quizzes, and a final exam during the last class period. Make-up exams will be given only under excruciating circumstances such as serious illness or family emergencies. Proof may be required. If you are a student athlete, or you need to travel for academic reason, then you must make arrangements in advance to take tests at an alternate time, possibly early.

HOMEWORK: I will assign homework every lecture. It is due during the next lecture.¹ Homework should be cleanly written, and you may have to revise it before it is in an acceptable form. Your solutions should show the steps of your solution in a logical order and end with a proper formulation of the final answer.

¹If you have to miss class, then you may hand in homework early.
Students are encouraged to collaborate on homework, but final write-ups must be done individually.

**GRADING:** Your grade will be determined by the number of points earned throughout the semester. The midterm is worth 70 points, quizzes 50 points, and the final 120 points. The maximal number of points you can earn on homework is 200 points. Unsatisfactory homework may be returned for revision. Late or revised homework earns at most 70% of the possible number of points. There will be no credit for second revisions or very late homework.

Cut-offs for letter grades will be decided at a later time. Throughout the semester you may ask me what your approximate standing is.

**ABSENSES:** It is expected that you attend every class. If you are absent, then you are responsible for the material covered. Arrange to copy another student’s notes and be informed of any announcements.

**ACADEMIC EXPECTATIONS:** Please read the statement about the academic expectations on the Mathematics Department webpage. Go to http://www.math.hawaii.edu, pick ‘Undergraduate’ and click on Academic Expectations.

**ACADEMIC HONESTY:** No student shall claim or submit the work of another as one’s own. No dishonesty will be tolerated.

**IMPORTANT DATES:** It is your responsibility to know about the important dates, such as deadlines to drop or withdraw from a course, holidays, final exam, etc.