MATH 350 – Fall 2010
Geometry

Instructor: Jack Calcut
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Class: MWF 3:30–4:20 in King 237
Office Hours: M 1:30–2:30, TR 9:00–10:30, or by appointment.

Course Description
This course will consist of three interrelated sections:

- Geodesics: one answer to the question “what is a line?” with applications to physics.
- Erlangen Programm: a modern approach to geometry based on group theory making possible the survey of a wide spectrum of geometries.
- Axiomatics: Euclidean and non-Euclidean geometries are developed based on certain axioms. We will study several parallel postulates, their logical dependencies, and various models satisfying different axiom systems.

Prerequisite
MATH 220 (Discrete Mathematics) or consent of instructor.

Textbook

Grading
Grades will be given based on the following scale and your overall percentage in the course.

<table>
<thead>
<tr>
<th>Letter</th>
<th>A+</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D</th>
<th>F</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point</td>
<td>4.33</td>
<td>4.00</td>
<td>3.67</td>
<td>3.33</td>
<td>3.00</td>
<td>2.67</td>
<td>2.33</td>
<td>2.00</td>
<td>1.67</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>%</td>
<td>93–100</td>
<td>90–92</td>
<td>87–89</td>
<td>83–86</td>
<td>80–82</td>
<td>77–79</td>
<td>73–76</td>
<td>70–72</td>
<td>66–69</td>
<td>0–59</td>
<td>0</td>
<td>0</td>
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Pass/No Pass: all passing work (A+ to C-) is given the uniform grade of Pass (P). Work below C- is considered not passing, and is given a grade of No Pass (NP).

40% Homework
Homework will be assigned approximately weekly on Blackboard. The lowest score will be dropped. Homework should be written up neatly with multiple pages stapled. Students are encouraged to work together to learn the material, but each student must independently write up his/her own solutions. Homework is a major part of the course. No late homework will be accepted.

10% Quizzes
Given in lecture unannounced with the two lowest scores dropped. No makeup quizzes.

20% Midterm Exam
Friday, October 22 in class. No calculators, notes, or books are allowed on exams.

10% Project
Assigned on Monday, November 1 and due Monday, November 21 at the beginning of lecture. Students will choose a topic and may work in small groups. There is a written component and a presentation in class.

20% Final Exam
Tuesday, December 21, 9–11. No calculators, notes, or books are allowed on exams.
Disabilities
The college will make reasonable accommodations for persons with documented disabilities. Students should notify the Office of Disability Services located in Peters G-27/G-28 and their instructor of any disability related needs within the first two weeks of class.

Honor Code
The College requires that students sign an Honor Code for all assignments. This pledge (which is written out on the assignment) states: “I affirm that I have adhered to the Honor Code in this assignment.” For further information, see the student Honor Code, which you can access via Blackboard>Lookup/Directories>Honor Code.

Important Dates

- First Day of Classes: Tuesday, September 7.
- Midterm Exam: Friday, October 22 in class.
- Fall Recess: Saturday, October 23 – Sunday, October 31.
- Project Assigned: Monday, November 1.
- Midterm grades available via PRESTO: Thursday, November 4.
- Last day to declare P/NP or to withdraw: Tuesday, November 9.
- Project Due: Monday, November 21 at the beginning of lecture.
- Project Presentations: week of November 21.
- Last Day of Classes: Tuesday, December 14.
- Final Exam: Tuesday, December 21, 9–11.