Course Syllabus

Course: Mathematics 0271.001.
Course Title: Modern Geometry.
Time: Wednesdays, 17:00–19:30.
Place: Barton Classrooms, BB 407.
Instructor: Conrad, Bruce P.
Instructor Office: Wachman Hall, Room 616.
Instructor Email: conrad@temple.edu.
Instructor Phone: 215-204-2896.
Office Hours: M,W 9:40–10:30; F 14:00–15:00.
Prerequisites: Linear algebra. I will accept any upper division mathematics course as an alternative.
Textbook: There are two texts:


- *The Elements*, by Euclid of Alexandria. This text is online at
  http://aleph0.clarku.edu/~djoyce/java/elements/toc.html

Course Goals: Students should learn to appreciate the three millenia of history of the subject, and be able to prove geometric propositions, in written and oral form.

Topics Covered: Geometry of Euclid; non-Euclidean geometry. Intuitive discussion of projective, differential, and classical algebraic geometry.

Course Grading: Homework: 30%; Midterm exam 20%; Presentation and class participation, 10%; Project: 10%; Final Exam, 30%.

Exam Dates: Midterm Exam: October 18, 17:00–18:00 (class resumes at 18:10); Final Exam: December 13, 17:00–19:30.

Attendance Policy: Attendance is required. Please send me an e-mail if you have an emergency that prevents you from getting to class.

Blackboard: This course is on Blackboard. You can see my entries for you in the gradebook, and I will post important information in “Course Documents.” All assignments will be posted in “Assignments,” and links to useful web sites will be found in “Course Links.”

Letter Grades:

<table>
<thead>
<tr>
<th>Grade</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>
</tr>
</thead>
<tbody>
<tr>
<td>Range</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>60–69</td>
<td>0–59</td>
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Homework: The class will be divided into groups of three or four students; each group hands in its solution to the weekly homework exercises. All students in a group will receive the same grade. One group will be selected each week to present its solutions to the homework to the class.
Students in the same group may receive different presentation grades.

**Group project:** Each homework group will do an extended project. The last class of the semester (Dec. 6) will be a symposium for the presentation of these projects. Each student must present part of his/her group’s project. Within a group, project grades may vary, because the quality of presentation, as well as the project results, is evaluated. No written report of the project is to be submitted. PowerPoint is available if your group wishes to use it.

**The Incomplete Grade:** The grade I is reserved for extreme circumstances. It is necessary to file an *Incomplete Contract* specifying what is left for you to do. To be eligible for an I grade you need a good reason and to have missed not more than two of the first nine classes. You must also have been an active participant in your homework group, and you must have taken the midterm, with a score of at least 55. The I grade is accompanied by a default grade that will be used if the I grade is unresolved after 12 months.

**Calendar Adjustment:** The University has adjusted the calendar to ensure that each weekday occurs exactly 14 times in the semester. There will be no class on Wednesday, Nov. 22 because on that day we are to follow our Friday schedules.

**Research in Education:** This class has been selected as a subject of a federally funded research project on the training of future teachers. There will be observers present at times, and you will be asked to fill out some survey forms. There will also be a pre-test to assess your knowledge of geometry before the course began.

Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at (215) 204-1280, 100 Ritter Annex, to coordinate reasonable accommodations for students with documented disabilities.

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed at [http://policies.temple.edu](http://policies.temple.edu).

Students will be charged for a course unless a withdrawal form is processed by a registration office of the University by the Drop/Add deadline date. The Drop/Add deadline date is published in the Class Schedule each semester and is at the end of the second week of the semester or the third day of each summer session. For this semester, the crucial dates are as follows:

- The last day to drop (tuition refund available) is Monday, September 11.
- The last day to withdraw (no refund) is Monday, October 30.
- The last day of classes is Wednesday, December 6.

During the first two weeks of the fall or spring semester or summer sessions, students may withdraw from a course with no record of the class appearing on the transcript. In weeks three through nine of the fall or spring semester, or during weeks three and four of summer sessions, the student may withdraw with the advisor’s permission. The course will be recorded on the transcript with the instructor’s notation of “W,” indicating that the student withdrew. After week nine of the fall or spring semester, or week four of summer sessions, students may not withdraw from courses. No student may withdraw from more than five courses during the duration of his/her studies to earn a bachelor’s degree. A student may not withdraw from the same course more than once. *Students who miss the final exam and do not make alternative arrangements before the grades are turned in will be graded F.*