Course Information

Course: Euclidean Geometry - 15457 - MATH 45021-001-201910.
Meeting Times: Monday, Wednesday, Friday, 9:55 - 10:45 AM.
Meeting Place: Henderson Hall HND 107

Professor

Professor: Prof. Laura Smithies
Office Hours: Mon.- Fri. 8:00 - 8:50 AM,
Tue., Thur. 9:40 AM - 11:00 AM,
by appointment.
Office: 204 Mathematical Sciences Building
Office Phone: (330) 672-9027 (Email is better)
E-Mail: lsmithie@kent.edu (email me from your kent.edu email)
Website: www.math.kent.edu/~smithies

Course Goals and Overview

The geometry of Euclid is developed from axioms using only compass-and-straight-edge constructions and formal logic. This is extended to advanced topics of triangles, circles and quadrilaterals. Topics will include: triangle congruence, triangle inequalities, parallel lines and traversals, area, Pythagorean Theorem, similar triangles, arcs, inscribed angles and tangent lines to a circle. Important advanced Euclidean geometry results will include: the Euler Line, the Nine-point Circle Theorem and Ceva’s Theorem.

Course Calendar

MLK Day: Mon. Jan. 21st (Holiday)
Midterm: Wed. March 6th
Spring Break: March 25 - 31 (Holiday)
Final Exam: Friday May 10th 10:15 AM - 12:30 PM (HND room 107)

Course Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Midterm</td>
<td>100 points</td>
</tr>
<tr>
<td>Final Exam</td>
<td>100 points</td>
</tr>
<tr>
<td>Homework</td>
<td>200 points (SCALED)</td>
</tr>
<tr>
<td>Total</td>
<td>400 points</td>
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</tbody>
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The test dates are fixed. The final exam is mandatory and comprehensive. Homework is due every Wednesday - except 1/16, 1/23 and 3/6. Your best 10 of these 12 homeworks will be the basis for your SCALED homework score.
### Grade Scale

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
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<th>Percent</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93 - 100</td>
<td>A</td>
<td>83 - 86</td>
<td>B</td>
<td>73 - 76</td>
<td>C</td>
<td>63 - 66</td>
<td>D</td>
</tr>
<tr>
<td>90 - 92</td>
<td>A-</td>
<td>80 - 82</td>
<td>B-</td>
<td>70 - 72</td>
<td>C-</td>
<td>60 - 62</td>
<td>D</td>
</tr>
<tr>
<td>87 - 89</td>
<td>B+</td>
<td>77 - 79</td>
<td>C+</td>
<td>67 - 69</td>
<td>D+</td>
<td>0 - 59</td>
<td>F</td>
</tr>
</tbody>
</table>

Attendance and class participation will be considered in determining borderline grades. The grade scale may be curved up (in students’ favor) but will not be curved down.

### Attendance and make up policy

All students are expected to attend essentially every class. If missing a class is unavoidable, you are still responsible for all material covered and all announcements and assignments made during your absence. Students are also expected to complete assigned reading and home exercises, and to participate in class discussions.

**Full credit make up exams will not be given** except to those students who provide adequate documentation of a true emergency or appropriate university excused absence. See www.kent.edu/policyreg/administrative-policy-regarding-class-attendance-and-class-absence. If you will miss an exam, contact me as soon as possible at lsmithie@kent.edu. Full credit late homework is only accepted for university excused absences. However, your two lowest homework scores will be dropped before your scaled homework score is calculated (See course requirements above.)

### Prerequisites

You should have completed Math 21001 (Linear Algebra) with a C or better. If you are enrolled in 55021, you must have graduate standing.

### Required Material

The KSU bookstore carries the following required material for this class:

- **TITLE:** Geometry: Theorems and Constructions
- **AUTHORS:** Berele & Goldman
- **EDITION:** 01
- **ISBN:** 9780130871213
- **PUBLISHER:** Pearson

Also Needed: Compass and straight edge (ruler).

### Student Accessability Services

University policy 3342-3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Student Accessability Services (contact 330-672-3391 or visit www.kent.edu/sas for more information on registration procedures).
General Expectations

Each student is responsible for attending class regularly, carefully completing daily reading and homework assignments, coming to class on time and prepared, and actively participating in class. Any student having trouble with the material is responsible for seeking help from the instructor, tutors, or fellow students. Regardless of where you find help with this material, make sure that you write up each homework problem without aid from any source including your book or notes, as you will need to be able to do this on our midterm and final.

Reading is required before each class meeting. The lectures are designed to supplement and amplify your reading, not replace it. That means that you are expected to complete the reading assignment before class so that you can engage in a discussion of the material. Also, you will be accountable for information in the book that will not be covered explicitly in class. You need to spend 10 to 15 hours per week reading our textbook or working on this material outside of our classroom.

Additional Information

- Every class has its own schedule of deadlines and considerations. To view the add/drop schedule and other important dates for this class, go to the Students Tools and Courses tab in FlashLine and choose either View or Print Student Schedule. To see the deadlines for this course, click on the CRN or choose the Drop or Add a Course link and click on the green clock next to the course under Registration Deadlines.

- The official registration deadlines can be found at https://www.kent.edu/registrar/calendars-deadlines. This site also gives the dates for the last day to withdraw from this class without receiving a grade of 'W' and the last day to withdraw from this class and recieve a grade of 'W'. University policy requires all students to be officially registered in each class they are attending. Students who are not officially registered for a course by published deadlines should not be attending classes and will not receive credit or a grade for the course. Each student must confirm enrollment by checking his/her class schedule (using Student Tools in FlashLine) prior to the deadline indicated. Registration errors must be corrected prior to the deadline.

- University policy 3342-3-01.8 deals with the problem of academic dishonesty, cheating, and plagiarism. None of these will be tolerated in this class. The sanctions provided in this policy will be used to deal with any violations. If you have any questions, please read the policy at http://www.kent.edu/policyreg/administrative-policy-regarding-student-cheating-and-plagiarism and/or ask. A condensed version of these policies is on our class website.

This syllabus is a guideline but changes may be announced in class.