Mathematics 3420: Geometry for Secondary School Teachers
Spring 2020. LCB 219, MW 3:00-4:20 pm

Credit Hours: 3
Instructor: Michael van Opstall
Email: opstall@math.utah.edu

Prerequisites: C or better in MATH 1210
Office: JWB 313
Office Hours: MW 12:15-1:15 or appointment

Textbook: none, class notes

Course Description: This course covers the geometry content of middle school and high school from an advanced perspective, with a view towards teaching. The content is based on the Utah secondary mathematics core standards and includes various approaches to congruence, construction, transformation, trigonometry, area, and volume.

Expected Learning Outcomes: See separate file.

Assessment:

Homework: 20%
Midterms (2/5, 3/4): 20% each
Presentations: 15%
Final Exam (4/24): 25%

Each day, a student from class will be assigned as the official scribe for the class. Each student will act in this capacity for two classes. One of the two times, the student will produce a set of notes for the class, the other time, the student will produce a short video highlighting one major point of the class. These notes and videos will be submitted to an in-service teacher, who will provide feedback and context for the lessons. Your notes/lesson should end with two questions for the teacher about the place of the material in the curriculum. The notes and videos will be graded on the following rubric:

- Appropriate topic: 10%
- Mathematical precision: 40%
- Clarity of language: 30%
- Questions for teacher: 20%

Grades will be calculated using the standard scale:

93-100%: A 90-93%: A- 87-90%: B+
83-87%: B 80-83%: B- 77-80%: C+
73-77%: C 70-73%: C- 67-70%: D+
63-67%: D 60-63%: D- 0-60%: E
ADA Statement:
The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability and Access, 162 Olpin Union Building, 801-581-5020. CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability and Access.

Addressing Sexual Misconduct:
Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran’s status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

Policies and expectations:
In order to ensure a vibrant learning environment in which we may discuss coursework, no late assignments or labs will be accepted. Similarly, quizzes and exams may not be made up in advance or after the fact without serious extenuating circumstances. The University of Utah student code allows for making up quizzes or exams in advance for “officially sanctioned University Activities ..., or government obligations, or religious obligations”. Please contact me at least one week in advance of any such obligations to arrange accommodation.

In general, keep your devices put away during class. Take active part in class discussions and activities. Calculators, but not smart devices are allowed on quizzes and exams.

Academic misconduct will not be tolerated. The Student Code for the University of Utah can be found at: http://regulations.utah.edu/academics/6-400.php

Official Dates:
The last day to drop classes is January 17; the last day to withdraw from this class is March 6. Please check the academic calendar for more information pertaining to dropping and withdrawing from a course. Withdrawing from a course and other matters of registration are the student’s responsibility.
Wellness Statement:
Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student’s ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801-581-7776.