

Projective Geometry

Course: MATH 3331

Semester: Winter 2020

Instructor: Yorck Sommerhäuser

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Class meetings: Tuesday, Thursday 3:30 pm–4:45 pm, HH 3015

Office hours: Tuesday, Thursday 5:00 pm–6:00 pm, Friday 2:15 pm–4:15 pm and by appointment.

Textbook: H. S. M. Coxeter: Projective Geometry, 2nd ed., Springer, Berlin, 1987

Course description: The course examines triangles, quadrangles, and quadrilaterals, the duality principle, the theorems of Pappus and Desargues, projectivities, perspectivities, and polarities, conics and quadrics, and the introduction of coordinates in projective geometry.

Coverage: We cover the entire textbook.

Examinations: There will be a midterm examination and a comprehensive final examination. The midterm examination takes place on Tuesday, February 25, during class time in our usual classroom. The final examination takes place during the examination period from April 8 to April 18 at a time and place determined by the registrar's office.

Homework: Beginning Tuesday, January 14, a weekly exercise sheet will be handed out. This has to be submitted in class on the following Tuesday. There will be no exercise sheet during the week of the midterm exam and no exercise sheets during the last two weeks of the semester. In addition, a reading assignment from the textbook will be given in every lecture.

Prerequisite: MATH 2051 (Linear Algebra II)

Policies: Eating, drinking, and smoking is not permitted in the classroom. You are expected to be present at every class meeting, from the beginning to the end. The use of electronic devices, especially cellphones, calculators, and laptop computers, is not permitted without explicit permission of the instructor. Electronic devices have to be turned off completely.

Memorial University accommodates students with disabilities and demands academic integrity. The corresponding university policies can be found at <http://www.mun.ca/policy/site/policy.php?id=239> and in the Academic Calendar in Paragraph 6.12, respectively.

Marking weights:

Homework:	25 %
Midterm exam:	25 %
Final exam:	50 %