

The University of Western Ontario
Department of Mathematics

Math 9053B/4153B
Algebraic Geometry
Winter 2018

1. GENERAL COURSE INFORMATION

1.1. **Lectures.** MWF 9:30am-10:30am at MC 108

1.2. **Prerequisite requirements.** Math 9023AB/4123AB Rings and Modules

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. INSTRUCTOR INFORMATION

Pál Zsámboki, pzsambok@uwo.ca, MC 133, X86531, Office hours: by appointment

3. SYLLABUS

Affine and projective varieties, coordinate rings and function fields, birational correspondences, sheaves, dimension theory, regularity.

4. COURSE MATERIALS

Textbook:

Daniel Perrin, *Algebraic geometry. An introduction*, Springer-Verlag London Ltd., London, 2008.

Note that it is available online on `lib.uwo.ca`.

Recommended reading: Chapter 1 and Section 2.1 of
Robin Hartshorne, *Algebraic geometry*, Vol. 52, Springer-Verlag, 1977.

5. METHODS OF EVALUATION

5.1. **Written assignments.** There will be four written assignments. Each of them will be worth 15% of the final grade. The deadlines are

- I) February 5
- II) February 26
- III) March 19
- IV) April 9

Homework will be due by the end of class on the due date. The preferred way is to send me a LaTeX-ed pdf. Alternatively, you can hand it in in person. If you miss the deadline, you can hand in your homework by the end of the class after the one on the due date for a 20% penalty. I will not accept homework after the late deadline unless arranged in advance for a good reason.

5.2. **Final exam.** There will be one 3-hour long final exam. It will be worth 40% of the final grade. It will be a closed book exam. Date TBA.

6. ACCOMMODATION AND ACCESSIBILITY

Note that if documentation (medical or otherwise) is required, it can only be collected by the students Deans Office/Academic Counselling unit.

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or supporting documentation to the Academic Counselling Office of your home faculty as soon as possible. If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in WSC 140, and can be contacted at scibmsac@uwo.ca.

For further information, please consult the universitys medical illness policy at http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

If you miss the Final Exam, please contact your facultys Academic Counselling Office as soon as you are able to do so. They will assess your eligibility to write the Special Exam (the name given by the university to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a Multiple Exam Situation (see http://www.registrar.uwo.ca/examinations/exam_schedule.html).

7. ACADEMIC POLICIES

The website for Registrarial Services is <http://www.registrar.uwo.ca>. In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html>, the centrally administered e-mail account provided to students will be considered the individuals official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

8. SUPPORT SERVICES

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 if you have questions regarding accommodation.

The policy on Accommodation for Students with Disabilities can be found here: www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_disabilities.pdf

The policy on Accommodation for Religious Holidays can be found here: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf