

Instructor: Dr. W.L. Yee
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Lectures: TR 10:00-11:20, Erie Hall 2137

Office hours: TW 11:30-12:30, or by appointment

Webpage: <http://web2.uwindsor.ca/math/wlyee/AlgDiffGeoF08/index.html>

Prerequisites: MATH 220, MATH 314

Required Text: Complex Algebraic Curves, by Frances Kirwan

Supplementary Texts: Undergraduate Algebraic Geometry, by Miles Reid
Elementary Differential Geometry, by Andrew Pressley
Compact Riemann Surfaces, by Juergen Jost

Outline: Generally, pure mathematics is divided into three main areas of study: algebra, analysis, and geometry/topology. The goal of this course is to introduce students to geometry and to explore its many connections to other branches of mathematics through the study of complex algebraic curves and Riemann surfaces. This will help students to develop a road map for mathematics by exposing them, at a basic level, to material which appears in greater generality in advanced courses (complex analysis, algebraic topology, algebraic geometry, differential geometry) and by tying these subjects together. The course will be based roughly on parts of chapters 2-6 of Kirwan's book with some material from the supplementary textbooks. We will explore geometric objects (mainly complex algebraic curves) from algebraic (Chapters 2-3), topological (Chapter 4), and complex analytical (Chapters 5-6) points of view.

Evaluation: Use of calculators is prohibited during testing and examination. You may learn from one another and work on assignments together (the point of the assignments is to learn the material), but write them up on your own—do not copy someone else's assignment.

Assignments	Five, due throughout the term	30%
Test 1	Tuesday October 7, 50 min	15%
Test 2	Tuesday November 18, 50 min	15%
Final Exam	Thursday December 18 th , 12:00-15:00	40%

NO MAKEUP TESTS WILL BE GIVEN. If a test is missed for legitimate documented reason, the weight of the final exam will be increased by the weight of the test missed. If the final is missed for a legitimate reason, the student will be expected to write the final exam at the time of the next official writing.

WEIGHTS OF ASSIGNMENTS WILL NOT BE TRANSFERRED.

Remarks:

1. Last day for late registration, course change, full tuition refund: September 17th
2. Last day for reversal of incidental fees for course withdrawal: September 30th
3. Last day for voluntary withdrawal from courses and partial tuition refund: November 7th
4. Students will be penalized for cheating. All cheating cases will be referred to the Dean's Office.
5. The Student Evaluation of Teaching will be administered during the last week of class.
6. **WRITING THREE OR MORE EXAMS ON THE SAME DAY:** A student scheduled to write three invigilated final examinations in one calendar day may apply to have one

examination rescheduled on an alternate examination day. The determination of which examination shall be rescheduled and the date of the alternate examination (may be the last possible day of the examination period) shall be made by the Vice-Provost, Students and Registrar. Please download the appropriate form from <http://www.uwindsor.ca/registrar> and submit to the Office of the Registrar.

7. **EXAM CONFLICTS DUE TO OBSERVANCE OF RELIGIOUS HOLY DAYS:** Students who are unable to write a final examination(s) during the regularly scheduled time slot because of a conflict with religious conviction must apply for the alternative examination(s) in the course(s) involved by the end of the normal add/drop period for the particular session. The Registrar's Office will schedule the alternative examination(s) for those students in another slot(s) within the regular examination period. Please download the appropriate form from <http://www.uwindsor.ca/registrar> and submit to the Office of the Registrar. Note: These applications must be submitted by the end of the fourth week of classes.
8. The raw final scores may be adjusted. The final letter grade from the final adjusted scores will be as follows:

Raw Score	Grade	Raw Score	Grade	Raw Score	Grade	Raw Score	Grade
93-100	A+	86-92.9	A	80-85.9	A-	77-79.9	B+
73-76.9	B	70-72.9	B-	67-69.9	C+	63.66.9	C
60-62.9	C-	57-59.9	D+	53-56.9	D	50-52.9	D-
35-49.9	F	0-34.9	F-				