

**MATH 720-1, Algebra II, 3 credits, Spring 2008**

MWF 10:00-10:50 AM, Morrill Hall 101

INSTRUCTOR: Sean Sather-Wagstaff

OFFICE: Minard Hall 310D

E-MAIL: Sean.Sather-Wagstaff@ndsu.edu

PHONE: 231-8105

OFFICE HOURS: Mon 11:00–11:50, Wed 12:00–1:50, Fri 2:00–2:50, and by appointment

PREREQUISITE: MATH 720

USEFUL WEBPAGES:

Course webpage: <http://math.ndsu.nodak.edu/faculty/ssatherw/sp08/alg2/>

Instructor webpage: <http://math.ndsu.nodak.edu/faculty/ssatherw/>

Math department webpage: <http://math.ndsu.nodak.edu/>

NDSU webpage: <http://www.ndsu.edu>

NDSU blackboard site: <https://bb.ndsu.nodak.edu/>

NDSU webpage on academic responsibility/conduct: <http://www.ndsu.nodak.edu/policy/335.htm>

SUGGESTED TEXT: *Algebra*, by T. Hungerford

COURSE DESCRIPTION: Graduate level survey of algebra: groups, rings, fields, Galois theory, and selected advanced topics. MATH 720 meets for 150 minutes of lecture each week.

COURSE GRADES: Student grades are based on weekly homework assignments, attendance and participation, and one (1) comprehensive final examination covering students' understanding of topics covered in MATH 720. Weights are summarized in the following table along with grade ranges.

		A	90–100%
Homework	60%	B	80–89.9%
Attendance and Participation	10%	C	70–79.9%
Final Exam	30%	D	60–69.9%
		F	0–59.9%

I will update your grades throughout the semester at the university Blackboard site.

HOMEWORK: I will assign homework on a weekly basis. Exercises will be assigned in class on Fridays and solutions will be due at the beginning of class on the following Friday. Assignments will also be listed on the course webpage. Each section of homework will be worth the same amount. Late homework will only be accepted under extreme circumstances. If you have a conflict with any of the homework due dates, make alternative arrangements with me beforehand.

Students are encouraged to work on assignments in small groups, but each member of the class is required to turn in a neatly written, organized set of solutions. Students will receive no credit for solutions with no work or justification. I reserve the right to deduct points for messy papers. You may even consider using  $\text{\LaTeX}$  to typeset your solutions.

ATTENDANCE: While attendance is not explicitly required, it is worth 10% of your grade. In addition, your presence, attention, and participation in lecture will greatly help your performance in this class. For these reasons, I will take attendance each class period. Officially excused absences will not be counted against you, but you must document such situations with us personally.

EXAMS: I have decided to give a final exam because I feel that the practice will help you when it comes time to prepare for and take the qualifying exam in Algebra. The final examination will be comprehensive and will last 2 hours. Books, notes, and calculators will not be allowed during the exams. If you have a conflict with the exam date, you are responsible for making alternative arrangements with me beforehand.

TENTATIVE SCHEDULE: I reserve the right to make reasonable changes to the schedule.

Last day for No Record Drop of classes	Wed 16 Jan, 11:59 PM
Martin Luther King Jr. Day holiday:	Mon 21 Jan
President's Day holiday:	Mon 18 Feb
Spring Break Week:	Mon 03 Mar to Fri 07 Mar
Holiday/recess:	Fri 21 Mar to Mon 24 Mar
Last day to Drop Classes (W)	Fri 18 Apr, 11:59 PM
Classes end	Fri 02 May
Final Exam	Tue 06 May, 1:00-3:00 PM

LECTURE NOTES: Clear and thorough course notes will provide you with a basis for your preparations for homework assignments, and exams. You are responsible for taking notes during class, as I will not be posting my lecture notes online.

ANNOUNCEMENTS: Periodically, I will send course announcements to your ndsu.edu email account. It is your responsibility to check this email account regularly.

QUESTIONS: If something I say or write in lecture is unclear, raise your hand and ask a question. I will try to clarify the point I am making.

GROUP STUDY: You should find at least one person in the class with whom you can study. Not only does this help you study better, but also, in the event you miss a lecture, you can get the notes and assignments from this person. In addition, this will help you immensely when you are studying for the qualifying exam in Algebra.

READING: Before each lecture, read through your notes from the previous class. This will help you follow lecture considerably. You also may find it helpful to read relevant sections of the text before class.

OFFICE HOURS: Come to my office hours for help. This gives me the opportunity to focus on specific problems you may be having and to explain things in a more personal manner. If the scheduled times are bad for you, make an appointment with me.

INSTRUCTOR FEEDBACK: At the course webpage, there will be a link to an anonymous evaluation form where students can submit comments or suggestions for me at any time during the semester.

ADA STATEMENT The Americans with Disabilities Act requires that reasonable accommodations be provided for students with physical, cognitive, systemic, learning and psychiatric disabilities in order to ensure their equal access to course content. If you have a documented disability and require accommodations, please let your instructor know as soon as possible. For more information, please contact Disability Services at 231-7671 or go to <http://www.ndsu.edu/counseling/disability.shtml>.

ACADEMIC HONESTY All work in this course must be completed in a manner consistent with NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct. Violations of this policy in this course will result in a 0 for the quiz or exam on which academic misconduct occurred. You can read the Senate Policy at <http://www.ndsu.nodak.edu/policy/335.htm>.

TENTATIVE COURSE OUTLINE:

Galois Theory  
Module Theory  
Homological Algebra