

MATH 790, Semidualizing Modules, 1–3 credits, Fall 2011

MWF 9:00-9:50 AM, Minard Hall 336

INSTRUCTOR: Sean Sather-Wagstaff

OFFICE: Minard Hall 428E

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

PHONE: 231-8105

OFFICE HOURS: MWF 12:00-12:50, or by appointment

PREREQUISITE: MATH 721

USEFUL WEBPAGES:

Course webpage: <http://www.ndsu.edu/pubweb/~ssatherw/fa11/790-2/>

Instructor webpage: <http://www.ndsu.edu/pubweb/~ssatherw/>

Anonymous evaluation form: <http://www.ndsu.edu/pubweb/~ssatherw/ssw-eval.html>

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: <http://www.ndsu.nodak.edu/policy/335.htm>

TEXT: Course notes will be available on the course website. You may also consider purchasing:

“Gorenstein Dimensions” by Christensen

“Cohen-Macaulay Rings” by Bruns and Herzog

“Commutative Ring Theory” by Matsumura

“An Introduction to Homological Algebra” by Rotman

COURSE DESCRIPTION: An introduction to the theory and applications of semidualizing modules. Topics will include the following: introduction, background, semidualizing basics, Foxby classes, totally C -reflexive modules, G_C -dimension, applications, examples, semidualizing complexes.

COURSE GRADES: Student grades are based on weekly homework assignments, attendance, and participation. Weights are summarized in the following table along with grade ranges.

Homework	90%	S	50–100%
Attendance and Participation	10%	U	0–49.9%

I will update your grades throughout the semester at the NDSU 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 next 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 \LaTeX to typeset your solutions.

With permission of the instructor, students may give a 50-minute in-class presentation in place of a homework assignment. The date and topic of each such presentation must be chosen in consultation with the instructor.

ATTENDANCE: While attendance is not explicitly required, it is worth 10% of your grade. I will take attendance each class period. Officially excused absences will not be counted against you, but you must document such situations with me personally.

COURSE NOTES: I will be typing course notes during the semester. I will periodically update the notes on the course webpage. I will give extra credit to people who find typos in the notes; credit will be given to the first person who tells me about a given typo.

TENTATIVE SCHEDULE:

Labor Day holiday (no class)	Mon 05 Sep
UNL AMS meeting (no class)	Fri 14 Oct
Veteran's Day holiday (no class)	Fri 11 Nov
Thanksgiving holiday (no class)	Thu 24 Nov–Fri 25 Nov
Classes end	Fri 09 Dec

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

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 or cognitive 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 Student Disability Services at 231-7671 or go to <http://www.ndsu.edu/counseling/disability.shtml>.

ACADEMIC HONESTY: The academic community is operated on the basis of honesty, integrity, and fair play. NDSU Policy 335: Code of Academic Responsibility and Conduct applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the Office of Registration and Records. Informational resources about academic honesty for students and instructional staff members can be found at <http://www.ndsu.edu/academichonesty>.

VETERANS: Veterans and student soldiers with special circumstances or who are activated are encouraged to notify the instructor in advance.