

MATH 491, Senior Seminar, 2 credits, Spring 2009

MF 4:00–4:50 PM, Minard Hall 135

INSTRUCTOR: Sean Sather-Wagstaff
E-MAIL: Sean.Sather-Wagstaff@ndsu.edu
OFFICE HOURS: TBA

OFFICE: Minard Hall 310D
PHONE: 231-8105

PREREQUISITE: MATH 270

REQUIRED TEXT: none

USEFUL WEBPAGES:

Course webpage: <http://www.ndsu.edu/pubweb/~ssatherw/sp10/491/>

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

COURSE DESCRIPTION: Under the guidance of an approved mathematics faculty advisor, students will conduct a research project in mathematics. Students will write a short paper (11–16 pages, 11 pt. font) and will give a presentation (10–15 minutes long) describing the research conducted.

COURSE GRADES: Student grades are based on the following rubric:

submit valid research proposal	2 pts.	
submit first draft paper	2 pts.	
participate in peer-review of draft papers	2 pts.	A 90–100%
submit second draft paper	2 pts.	B 80–89.9%
give practice presentation	2 pts.	C 70–79.9%
participate in peer-review of practice presentations	2 pts.	D 60–69.9%
give final presentation	2 pts.	F 0–59.9%
submit final paper	2 pts.	
<hr/>		
total	16 pts.	

Your grades will be updated periodically at the NDSU Blackboard site.

RESEARCH PROPOSAL: Submit the following information to the instructor by email: name of advisor, research project topic, title and author of book(s) to be used for project.

Make sure that your advisor has agreed to work with you. Your advisor should be a mathematics professor at NDSU, preferably one from whom you have taken a 400-level course. The topic should involve a problem of mathematics that was not directly part of a course that you took at NDSU.

Proposal Rubric:

2 pts.: proposal submitted on time with advisor's approval, acceptable topic, and bibliography

1pt.: proposal submitted late or without advisor's approval, acceptable topic, or bibliography

0 pts.: no proposal submitted

DRAFT PAPERS: You are expected to make progress on writing your paper throughout the semester, not just at the end. You will be required to submit two (2) drafts of your paper during the semester. The first draft must be submitted by email to the instructor; it must demonstrate adequate progress on the project. The second draft must be submitted by email to instructor; it should be a version of the paper that is nearly complete.

First Draft Rubric:

2 pts.: draft submitted on time and demonstrating reasonable progress on project

1pt.: draft submitted late or not demonstrating reasonable progress on project

0 pts.: no draft submitted

Second Draft Rubric:

2 pts.: draft submitted on time, demonstrating reasonable progress on project and appropriate revision

1pt.: draft submitted late or not demonstrating reasonable progress on project or appropriate revision

0 pts.: no draft submitted

PEER REVIEW OF DRAFTS: Students will exchange draft papers and read them critically. Students will provide thoughtful feedback on each others' papers.

Peer Review Rubric:

2 pts.: feedback is relevant, thoughtful, and thorough, and is submitted on time

1pt.: feedback is not relevant, thoughtful, and thorough, or is submitted late

0 pts.: no feedback submitted

PRESENTATIONS: Each student will give a final presentation. Each student will give a practice presentation before the final presentation.

Practice Presentation Rubric:

2 pts.: presentation is organized, covers the relevant material, and is given on time

1pt.: presentation is disorganized, covers irrelevant material, or is given late

0 pts.: no presentation is given

Final Presentation Rubric:

2 pts.: presentation organized and appropriately revised, covers relevant material, and given on time

1pt.: presentation disorganized, inappropriately revised, not revised, covers irrelevant material, or late

0 pts.: no presentation is given

PEER-REVIEW OF PRACTICE PRESENTATIONS: Students will provide written and possibly oral feedback on at least two practice presentations other than their own.

Peer-Review of Practice Presentations Rubric:

2 pts.: appropriate and timely feedback given on at least two presentations

1pt.: feedback is inappropriate, late, or only given on one presentation

0 pts.: no feedback is given

ATTENDANCE: Attendance is not compulsory for most days of class.

WORKLOAD: You should plan to spend 8–10 hours per week working on this course outside of class.

ANNOUNCEMENTS: Course announcements will be sent to your ndsu.edu email account. It is your responsibility to check this email account regularly.

INSTRUCTOR FEEDBACK: At the webpage

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

there is an anonymous evaluation form where students can submit comments or suggestions for me at any time during the semester.

COURTESY: Cellular telephones, pagers, and other similar devices are not to be used and are to be turned off or set to vibrate-mode during class-time. Students violating this policy will receive one warning per semester. After the warning, violations will result in loss of credit.

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 item on which academic misconduct occurred. You can read the Senate Policy at <http://www.ndsu.nodak.edu/policy/335.htm>.

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

Course policies and research proposals	Mon 11 Jan, 4:00 PM	Minard Hall 135
Martin Luther King, Jr. holiday	Mon 18 Jan	
Last day for No Record Drop of classes	Thu 21 Jan, 11:59 PM	
Using L ^A T _E X, pt. 1	Fri 29 Jan, 4:00 PM	Minard Hall 135
Research Proposals due	Mon 01 Feb, 5:00 PM	by email
Using L ^A T _E X, pt. 2	Fri 05 Feb, 4:00 PM	Minard Hall 135
Using L ^A T _E X, pt. 3	Fri 12 Feb, 4:00 PM	Minard Hall 135
Presidents' Day holiday	Mon 15 Feb	
Using L ^A T _E X, pt. 4	Fri 19 Feb, 4:00 PM	Minard Hall 135
Using L ^A T _E X, pt. 5	Mon 01 Mar, 4:00 PM	Minard Hall 135
Using L ^A T _E X, pt. 6	Fri 05 Mar, 4:00 PM	Minard Hall 135
Spring Break week	Mon 15 Mar to Fri 19 Mar	
First draft papers due	Fri 26 Mar, 5:00 PM	by email
Peer-reviews of first draft papers due	Wed 31 Mar, 5:00 PM	
Holiday/Recess	Fri 02 Apr to Mon 05 Apr	
Preparing presentations, using Beamer	Fri 09 Apr, 4:00 PM	Minard Hall 135
Preparing presentations, using Beamer	Fri 16 Apr, 4:00 PM	Minard Hall 135
Second draft papers due	Fri 16 Apr, 5:00 PM	by email
Practice presentations	Wed 28 Apr, 4:00–6:00 PM	Minard Hall 340
Practice presentations	Thu 29 Apr, 4:00–6:00 PM	Minard Hall 340
Practice presentations	Fri 30 Apr, 4:00–5:00 PM	Minard Hall 135
Final presentations	Mon 03 May, 4:00–5:00 PM	Minard Hall 135
Final presentations	Wed 05 May, 3:30–5:00 PM	Minard Hall 346
Final presentations	Thu 06 May, 4:00–5:00 PM	Minard Hall 340
Final presentations	Fri 07 May, 4:00–5:00 PM	Minard Hall 135
Classes end	Fri 07 May	
Final papers due	Mon 10 May, 5:00 PM	by email