

**Marshall University**  
**Math 491: Senior Seminar**

<b>Course Title/Number</b>	MTH 491 (CRN: 3105 ) <i>Senior Seminar</i>
<b>Semester/Year</b>	Fall 2015
<b>Days/Time</b>	MW 10-10:50 AM
<b>Location</b>	Smith Hall 513
<b>Instructor</b>	Dr. Elizabeth Niese
<b>Office</b>	Smith Hall 721
<b>Phone</b>	(304)696-3609
<b>Email</b>	niese@marshall.edu Please include your name and subject line MTH 491 in your email.
<b>Office/Hours</b>	<b>Mondays&amp; Wednesdays 11:00 AM - 12:00 PM, Tuesdays &amp; Thursdays 9:30 AM - 11:00 AM, Fridays by appointment only</b> To make an appointment, please email 24 hours in advance when possible.
<b>University Policies</b>	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to <a href="http://www.marshall.edu/academic-affairs">http://www.marshall.edu/academic-affairs</a> and clicking on “Marshall University Policies. Or, you can access the policies directly by going to <a href="http://www.marshall.edu/academic-affairs/?page_id=802">http://www.marshall.edu/academic-affairs/?page_id=802</a> Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

**Course Description:** MTH 491 - Senior Seminar

Capstone experience in reading, doing, writing and speaking mathematics. Students will explore topics related to a theme chosen by the instructor. (PR: Permission). 2 hours

**Course Webpage**

All important course information will be posted on our class MUOnline page. Assignments will be posted on and submitted through overleaf.com

**Required Texts:** None

**Technology**

Cell phones may not be used in class for texting or other social media. We will frequently use computers during class time for research and writing. Computers will be provided, or you may bring your own laptop if you prefer.

<b>Student Learning Outcomes</b> for this course	How students will practice each outcome in this course	How student achievement of each outcome will be assessed in this course
Students will improve written and oral communication skills with respect to mathematics	In class activities, Homework	Capstone paper, poster presentation
Students will improve ability to reason rigorously in mathematical arguments	In class activities, Homework	Capstone paper, poster presentation
Students will develop ability to undertake independent work	In class activities, Homework	Capstone paper, poster presentation
Students will advance their level of critical sophistication	In class activities, Homework	Capstone paper, poster presentation
Students will gain perspective on interplay of applications, problem-solving, and theory	In class activities, Homework	Capstone paper, poster presentation
Students will conduct research and make oral and written presentations on various topics	In class activities, Homework	Capstone paper, poster presentation

### Course Requirements:

**Homework and In-class Work:** Homework assignments will be posted on our class MUOnline page and should be submitted there.

- Reading & writing mathematics (3 assignments - 10 Points each)
- Research proposal (10 Points)
- Annotated Bibliography (10 Points)
- Class discussion on AMS statement of ethics (10 Points)
- Major Field Test (30 Points)

Quality rough drafts are important – **no significant changes from the previous draft will count as no submission.**

**Capstone paper:** You will present the results of your capstone research in a paper of at least 10 pages, written in the typesetting program L<sup>A</sup>T<sub>E</sub>X (using overleaf.com). Your research paper is due **Monday, December 7, 2015, by 5:00pm**. Please submit the .tex file, along with any other necessary files (graphics, etc), electronically to overleaf.com.

**Capstone poster:** You will present the results of your capstone research in a poster. Your poster is due electronically, in pdf format, on **Wednesday, November 18**, one academic week prior to the poster presentation.

The poster session will be **Wednesday, December 2, 4:00 - 5:30pm**. Please mark this date and time on your calendar today!

**External judges:** The poster presentation will be reviewed by external judges (not me). The results of the judges' scores will be included in your final grade. **Grading Policy**

All drafts of your paper and poster will be submitted on-line and each will be checked for plagiarism. Any student who has any plagiarism on any draft will receive a 0 on the assignment and Academic Affairs will be notified.

Assignment	Points	Final Grade, Percent	Letter Grade
Homework	90	90 - 100	A
Paper	145	80 - 89	B
Poster	130	70 - 79	C
		60 - 69	D
		0 - 59	F

### Attendance Policy:

Attendance at all scheduled class times is expected. Late work will only be accepted in the event of an excused absence.

### Major Due Dates (Tentative) (Have not been updated yet)

Week 2	Sept 2	Writing Assignment #1
Week 3	Sept 9	Research Proposal, Writing Assignment #2
Week 4	Sept 16	Writing Assignment #3
Week 5	Sept 23	Annotated Bibliography
Week 6	Sept 30	4+ Page Draft of paper
Week 7	Oct 7	Major Field Test
Week 8	Oct 14	
Week 9	Oct 21	7+ Page Draft of Paper
Week 10	Oct 28	Layout draft of Poster
Week 11	Nov 4	
Week 12	Nov 11	Complete draft of paper and poster due
Week 13	Nov 18	Poster due
Week 14	Dec 2	Poster Presentation - 4pm
Finals Week	Dec 7	Paper due

### Paper Recommended and Required Lengths

Week 4	Sept 16	Recommended 2+ pages
Week 5	Sept 23	Recommended 3+ pages
Week 6	Sept 30	<b>Required:</b> 4+ pages
Week 7	Oct 7	Recommended 5+ pages
Week 8	Oct 14	Recommended 6+ pages
Week 9	Oct 21	<b>Required:</b> 7+ pages
Week 10	Oct 28	Recommended 8+ pages
Week 11	Nov 4	Recommended 9+ pages
Week 12	Nov 11	<b>Required:</b> 10+ pages