

**Marshall University**  
**Math 490/491: Internship/Senior Seminar**

<b>Course Title/Number</b>	MTH 490/491 (CRN: 4160/4161) <i>Internship/Senior Seminar</i>
<b>Semester/Year</b>	Spring 2017
<b>Days/Time</b>	MW 10-10:50 AM
<b>Location</b>	Smith Hall 518
<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 9:00 AM - 9:50 AM, 2:00-2:50 PM, Tuesdays &amp; Thursdays 11:00 AM- 12:00 PM</b> If you can't make my scheduled office hours, please make an appointment for another time. 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 by 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 - 5 Points each)
- Research proposal (5 Points)
- Annotated Bibliography (10 Points)
- Class discussion on AMS statement of ethics (10 Points)
- Major Field Test (10 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 **Wednesday, May 3, by 5:00pm**. Please submit the .tex file, along with any other necessary files (graphics, etc), electronically via email.

**Capstone poster:** You will present the results of your capstone research in a poster. Your poster is due electronically, in pdf format, on **Wednesday, April 12**, one academic week prior to the poster presentation.

The poster session will be **Friday, April 21, 8 am-12pm**. Please mark this date and time on your calendar today!

**External judges:** The poster presentation will be reviewed by external judges and the instructor. The results of the judges' scores will contribute to 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	50	90 - 100	A
Paper	100	80 - 89	B
Poster	100	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

Week 2	Jan 18	Writing Assignment #1
Week 3	Jan 25	Research Proposal
Week 4	Jan 30 Feb 1	Writing Assignment #2 Writing Assignment #3
Week 5	Feb 8	Annotated Bibliography
Week 7	Feb 22	4+ Page Draft of paper
Week 8	Feb 27 Mar 1	Major Field Test Major Field Test
Week 10	Mar 15	7+ Page Draft of Paper
Week 11	Mar 29	Poster Layout
Week 12	Apr 5	Draft of poster
Week 13	Apr 12	Final poster due
Week 14	Apr 19 Apr 21	10+ Page Draft of Paper <b>Poster Presentation - 8 AM-12 PM</b>
Finals Week	May 3	Paper due - 5 PM

### Paper Recommended and Required Lengths

Week 5	Feb 8	Recommended 2+ pages
Week 6	Feb 15	Recommended 3+ pages
Week 7	Feb 22	<b>Required:</b> 4+ pages
Week 8	Mar 1	Recommended 5+ pages
Week 9	Mar 8	Recommended 6+ pages
Week 10	Mar 15	<b>Required:</b> 7+ pages
Week 11	Mar 29	Recommended 8+ pages
Week 12	Apr 5	Recommended 9+ pages
Week 14	Apr 19	<b>Required:</b> 10+ pages