

**Marshall University**  
**Syllabus**  
**MTH 427/527**

<b>Course Title/Number</b>	MTH 427 (CRN: 3270) & MTH 527 (CRN: 3287) <i>Advanced Calculus</i>
<b>Semester/Year</b>	Fall 2014
<b>Days/Time</b>	TH 2:00-3:15 PM
<b>Location</b>	Smith Hall 509
<b>Instructor</b>	Dr. Elizabeth Niese
<b>Office</b>	Smith Hall 743C
<b>Phone</b>	(304)696-3609
<b>Email</b>	niese@marshall.edu Please include your name and subject line MTH 427/527 in your email.
<b>Office/Hours</b>	<b>MW 1-2:30 PM, TH 9:30-10:30 AM, other hours by appointment</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 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:** A rigorous study of the real number system, continuity and differentiability of functions of a single variable, integration of functions of a single variable, infinite series. PR: MTH231 and MTH300. CR: MTH331 .

Course Student Learning Outcomes:	How students will practice each outcome:	How student achievement of each outcome will be assessed
Students will be able to write clear, concise, formal proofs of results from mathematical analysis.	Students will complete weekly problem sets and participate in boardwork in class, low-stakes writing assignments, and students will engage in peer review of written and oral explanations of concepts.	Students' understanding will be assessed by three midterm exams and a comprehensive final exam.
Students will be able to devise techniques to solve particular problems as they arise.	Students will complete weekly homework assignments and participate in boardwork in class.	Students will be assessed by three midterm exams and a comprehensive final exam.

### Required Course Materials:

- **Textbook:** *An Introduction to Analysis, 2nd Edition* by James R. Kirkwood
- **MUOnline:** Assignments, announcements, and other course materials will be posted regularly on MUOnline.

### Course Requirements:

- **Homework:** Homework will be assigned once or twice a week and will be posted on MUOnline. Late homework assignments are not accepted, except in extenuating circumstances or University-approved absences.
- **Classwork:** There will be problem sets done during class in small groups. To receive credit for these sets, you must be in class and participating fully in the groupwork. Make-ups will not be given except in the event of University-approved absences.
- **Tests:** There will be three midterm exams during the semester and a comprehensive final exam. If you know in advance that you will have an excused absence on a test date, please make arrangements to take the test early. In the event of an excused absence on test day, your final exam grade will also substitute for the missed test. Tentative test dates are: September 25, October 23, November 20, **Final Exam:** Thursday, December 11, 12:45-2:45 PM.

### Grading Policy:

Your final course grade will be calculated as follows:

<b>Homework/Classwork:</b>	40%
<b>Midterm Exams:</b>	45% (15% per exam)
<b>Final Exam:</b>	15%

> 90%	<b>A</b>
80% – 89%	<b>B</b>
70% – 79%	<b>C</b>
60% – 69%	<b>D</b>
< 60%	<b>F</b>

**Attendance Policy:**

Attendance at all scheduled class times is expected. Make-up tests will only be given in the event of an excused absence. If you know in advance that you will be absent, please make arrangements to take the test early if possible. If you are ill and cannot make it to class, it is courteous to send me an email notifying me. You are responsible for all material missed and should try to get a copy of a classmate's notes.

**Tentative Schedule:**

Week 1: 1.1-1.2

Week 2: 1.2-1.3

Week 3: 1.3,2.1

Week 4: 2.1-2.2

Week 5: 2.2, Review, Test 1

Week 6: 2.3,3

Week 7: 3

Week 8: 3

Week 9: 4.1,Review, Test 2

Week 10: 4.1

Week 11: 4.1-4.2

Week 12: 4.2

Week 13: 4.2,Review, Test 3

Week 14: Review