# MATH 290: Introduction to Advanced Mathematics <br> <br> Syllabus for Summer Session A of 2016 

 <br> <br> Syllabus for Summer Session A of 2016}

Instructor: Prof. Flavia Colonna
Office: 4215 Exploratory Hall
Phone: (703) 993-1465 or (703) 993-1461 (Math. Dept. Office)
E-mail: fcolonna@gmu.edu
Homepage: http://mason.gmu.edu/~fcolonna/
Office Hours: MTWR 12:40 p.m. - 1:10 p.m., or by appointment.
Prerequisite: Math 114.
Textbook: D. Smith, M. Eggen, R. St. Andre, A Transition to Advanced Mathematics, $7^{\text {th }}$ ed. Brooks/Cole, 2010. An older edition is acceptable.

Math 290 video by Dr. Singman:
http://www.youtube.com/channel/UCl6rFxcXdFlbiBvoENAqy5Q
Course Content: Chapters 1-5.
Homework: You are expected to solve all recommended homework problems, but your work will not be collected.

Tests: All tests are closed book. There will be three midterm tests on Mon. May 23, Wed. June 1, Thur. June 9, and a comprehensive final on Thur. June 16,10:30 a.m.-1:15 p.m. There will be no make-up tests. If you miss a test, your final exam will count $1 \frac{1}{2}$ times. If you miss another test, the second missed test will be given a score of 0 . If you have a dispute about a grade on a test, you must talk to me immediately after getting back your test.

Attendance: Each student is expected to come to class regularly. I will keep records of students' attendance and use these and class participation to decide grades at the end of the semester.

Percentages of final grade: Midterm tests: $60 \%$
Final exam: $30 \%$
Attendance and Class Participation: 10\%
Grading Scale: A+: 97-100, A: 94-96, A-: 90-93; B+: 87-89, B: 84-86, B-: 80-83; C+: 77-79, C: 74-76, C-: 70-73; D: 60-69; F: <60.

Final Exam: A student arriving after one hour from the beginning of the final exam will not be allowed to take it and will fail the class. To take the final a picture ID is required.

## MATH 290: Introduction to Advanced Mathematics

## Summer of 2016 Homework Assignments

| Section | Problems |
| :---: | :---: |
| 1.1 | 1(a-e),2(a-f), 3(a-g), 4(a-g),5(a-c), 6(a,d),8(a,b), 10(a-c) |
| 1.2 | $\begin{aligned} & \text { 1(a-e), } 2(\text { for parts a-e of } 1 \text { only), } 3(a-d), 4(a-e), 5(a-d), 6(a-c), 8(a-e), 9(a, c), \\ & 12,13(a-e), 14(a) \end{aligned}$ |
| 1.3 | 1(a-e),2(for parts a-e of 1 only),5(a-d), 6(a-c), 8(a-e), 9(a-d), 10(a-e) |
| 1.4 | 2(b),3,5(a,b),6(a-c),7(a-e), $8,9(\mathrm{a}, \mathrm{b})$ |
| 1.5 | 2(a-c), 3(a-d), 4(a),5(a),6(a,b), 7(a), 9 |
| 1.6 | 1(a-e),2(a,b),4,5(a-d),6(a,b),7(a-d) |
| 1.7 | 1(a-c),2(b), 3(a,b),4(a),5(a,b),6(a), 7(b), $8(a), 9(b), 11(a, c)$ |
| 2.1 | 1(a-c),2,4(a-e),5(a,b,i-1), 7, 8, 9,10, 13,14(a,d),15(a-d), 16,17(b,d,f) |
| 2.2 | $\begin{aligned} & \text { 1(a-e),2(a-e),3(a-g),4,5(for parts a-e of } 2 \text { only), } 6(a-c), 10(a-c), 11(a-c), 12(a-c), \\ & 13(a-c), 16(a, b) \end{aligned}$ |
| 2.3 | 1(a-f),2(for parts a-f if 1 only),6(b),8(a,d),11(a,b),17(a-c) |
| 2.4 | 1(a-c),2(a,b),4(a-e),5(a,b),6(a,b,d,g),7 (a-e,m,q),8(a,b) |
| 2.5 | 2,5(a,b),6(a,b),11 |
| 2.6 | 1(a,b),2(a,c,e),4(a,b),6,9(a,b),15,16(a,b),18,22(d) |
| 3.1 | $\begin{aligned} & \text { 1(a,b),2(a,c),4(a,b),5,6(a-d),8(a-d),9(a-d),10(for parts a-d of } 8 \text { only), } 11(a-c), \\ & 13(a-c) \end{aligned}$ |
| 3.2 | 1(a-e),2(a-d), 5(a-c, g), 7(a-c), 8(a,b), $9(\mathrm{a}, \mathrm{b})$ |
| 3.3 | 2(a-c),3(a-d), 6(a-c), 7,8(a,c) |
| 3.4 | 1(a-c, f), 2, 4,5,7,9,10(a,b) |
| 3.5 | 1,2(a-c),3(a,b),6,7,10 |
| 4.1 | 1(a-e),2(a,b),3(a-e),4(a-c),6(a,b),7(b,c),8(a-c),9(a,b),10 |
| 4.2 | 1(a-e), 3(a),5(a-d),8,14(a-c),15(a),16(a,b),18(a,b) |
| 4.3 | 1(a-f),2(for parts a-f of 1 only), 4,8(a-c), $9(\mathrm{a}, \mathrm{b}), 10,11(\mathrm{a}, \mathrm{b}), 12(\mathrm{a}, \mathrm{b}), 13(\mathrm{a}-\mathrm{c})$ |
| 4.4 | 1(a,b,d), 2(a,b,c),3(a,c,d),5(b),7(b,c) |
| 4.5 | 1,3,5,6,8(b,c),10(a,e),13 |
| 4.6 | 1(a-c),2(for parts (a-c) of 1 only),3(a-e),5(a-f),6(a-c), 8(a-c) |
| 5.1 | 2(a-f), 6,9,11(a,b), 12,16 |
| 5.2 | 2(b,c),3(c-f),4(a-d),5(a-c), 7(a-e) |
| 5.3 | 8,9(b-e),10(a-c),12(a),13(a) |
| 5.4 | 1,3,5(a-c), 8(a,c),11 |
| 5.5 | 1(a-d),4,6 |

