# MATH 290: Introduction to Advanced Mathematics <br> <br> Syllabus for Summer Session B of 2020 

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Instructor: Prof. Flavia Colonna
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Prerequisite: Math 114.
Textbook: D. Smith, M. Eggen, R. St. Andre, A Transition to Advanced Mathematics, $8^{\text {th }} \mathrm{ed}$. Brooks/Cole, 2015. An older edition is acceptable.
Course Content: Chapters 1-5.
Course Format: I plan to post on Blackboard (BB) my lectures in written and video format on MWF. Please, make sure to follow the recommendations below:

- Check frequently your email and any announcements posted on Blackboard. You will be held responsible for any missed assignment, course, participation, quiz or test, even in case of announced rescheduling.
- Make a short list of questions you wish me to address. I will do my best to respond promptly.
- To be awarded participation points, please, consider submitting work to share with the class. As there are 35 students presently registered, I will have to select which works to make available. My hope is to give each of you an opportunity to share your work several times. If you wish to remain anonymous for shared work, make sure to send me your name so that I can give you the proper credit.
- I will post worksheets before each test or quiz. Make sure to work on these on your own before accessing the solutions, which will be posted at a later time (of course, before the actual test or quiz).
Tests: There will be 3 midterm tests every other week plus a final exam.
- The dates of the midterms are set tentatively for Fri. June 12, Fri. June 26, Fri. July 10. Unless you receive a notification of a change, the exams will be posted at 12:00 p.m. and you will be given 1 hour and 30 minutes to post your tests as a single file in PDF format. Make sure to have a good scanning app that allows me to read your work easily. Before posting, make sure the quality is good. On top of the first page of the test include your GMU photo I.D.
- The comprehensive final is scheduled for Fri. July 24, 10:30 a.m.-1:15 p.m. On top of the first page of the test include your GMU photo I.D.
- There is a no make-up policy. 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 .
Quizzes: There will be 4 quizzes due on Fridays during the weeks when there is no test. The quizzes will be based on the homework problems on the material covered within the last week, but not on the material covered during the previous lecture.
Homework: You are expected to solve all recommended homework problems, but your work will not be collected.
Percentages of final grade: Midterm tests: 60\%
Final exam: $30 \%$
Quizzes 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.


# MATH 290: Introduction to Advanced Mathematics Summer of 2020 Homework Assignments 

## Section Problems

| 1.1 | $1(a-f), 2(a-c), 3(a-g), 4(a-g), 5(a-c), 6(a, d), 8(a, b), 10(a-c), 11(a, g, j)$ |
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| 1.2 | $1(a-e), 2(f o r a-e ~ o f ~ 1), 3(a-d), 5(a-d), 6(a-c), 8(a-e), 9(a, c), 12(a-d)$ |
| 1.3 | $1(a-e), 2(f o r a-e$ of 1$), 3(a-c), 5,6(a-c), 8(a-e), 9(a-d), 10(a-e)$ |
| 1.4 | $2(b), 3,5(a, b), 6(a-c), 7(a-e), 8,9(a, b)$ |
| 1.5 | $2(a-c), 3(a-d), 4(a, d), 5(a), 6(a, b), 7(a), 9$ |
| 1.6 | $1(a-e), 2(a, b), 4,5(a-d), 6(a, b)$ |
| 1.7 | $1(a-e), 2(b), 3(a-c), 5(a, b), 6(a), 7(a), 9(a)$ |
|  |  |
| 2.1 | $2,4(a-e), 5(a, b, i-1), 7,8,9,10,13,14(a, d), 15(a-d), 16,17(b, d, f)$ |
| 2.2 | $1(a-e), 2(a-e), 3(a-g), 4,5,6(a-c), 10(a-c), 11(a-c), 12(a-c), 13(a-c), 16(a, b)$ |
| 2.3 | $1(a-f), 2(f o r a-f o f 1), 7(b), 9(a, d), 12(a, b), 17$ |
| 2.4 | $1(a-c), 2(a, b), 4(a, b, d, g), 5(a-e, m, q), 6(a, b)$ |
| 2.5 | $3,6(a, b), 7(a, b), 12$ |
| 2.6 | $1(a, b), 2(a, c, e), 4(a, b), 6,9(a, b), 14,15(a, b), 21(d)$ |
|  | $2(a, b), 3(a, c), 6(a, b), 7(a, c, e, g), 8(a-d), 10(a-d)$ |
| 3.1 | $1(a-e), 2(a-d), 4,5,6(a-c, g), 8(a-c), 9(a, b), 10(a, b)$ |
| 3.2 | $2(a-c), 4(a-d), 7(a-c), 8$ |
| 3.3 | $1(a-c, f), 2,4,5,7,9,10(a, b), 11(a, b)$ |
| 3.5 | $1(a-e), 3(a-e), 4(a, b), 8,9(a-c), 11(a), 13$ |
| 4.1 | $2(a-e), 4(a), 5(a-d), 8,14(a-c), 15(a), 16(a, b)$ |
| 4.2 | $1(a-f), 2(f o r a-f o f 1), 4,9(a-c), 10(a, b), 11,12(a, b), 13(a, b), 14(a-b)$ |
| 4.3 | $1(b, c, e), 2(a-c), 3(a, c, d), 5(b), 7(b, c)$ |
| 4.4 | $1,3,5,7,10(b, c), 12(a, e), 14(c)$ |
| 4.5 | $2,3(b-d), 7,9,11(a, b), 12,16$ |
| 5.1 | $2(b, c), 3(c-f), 4(a-d), 5(a-c), 7(a-e)$ |
| 5.2 | $8,9(b-e), 10(a-c), 12(a), 14(a)$ |
| 5.3 | $1,3,4(a-c), 6(a, c), 9(a-c)$ |
| 5.4 |  |

