# MATH 300: Introduction to Advanced Mathematics Syllabus for Summer Session A of 2021 

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Prerequisite: Math 114.
Textbook: D. Smith, M. Eggen, R. St. Andre, A Transition to Advanced Mathematics, $8^{\text {th }}$ 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 immediately before the lectures using Zoom. 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, class 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 more than 20 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.
- 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 two midterm tests and a final exam.
- The dates of the midterms are Thu. May 27, and Tues. June 8. Unless you receive a notification of a change, the exams will be posted on Blackboard 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 Thu. June 17, 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.
- There will be weekly class discussions on assigned homework problems that will count toward participation points.
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: $30 \%$
Class Participation: $\quad 10 \%$
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 300: Introduction to Advanced Mathematics Summer of 2021 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) |
| :---: | :---: |
| 1.2 | 1(a-e), 2(for a-e of 1), $3(\mathrm{a}-\mathrm{d}$ ), 5(a-d), 6(a-c), $8(\mathrm{a}-\mathrm{e}), 9(\mathrm{a}, \mathrm{c}), 12$ (a-d) |
| 1.3 | 1(a-e),2(for 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), $3(\mathrm{a}-\mathrm{c}), 5(\mathrm{a}, \mathrm{b}), 6(\mathrm{a}), 7(\mathrm{a}), 9(\mathrm{a})$ |
| 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), $3(\mathrm{a}-\mathrm{g}), 4,5,6(a-c), 10(a-c), 11(a-c), 12(a-c), 13(a-c), 16(a, b)$ |
| 2.3 | 1(a-f),2(for a-f of 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) |
| 3.1 | 2(a,b),3(a,c),6(a,b),7(a,c,e,g), 8(a-d), 10(a-d) |
| 3.2 | 1(a-e),2(a-d), 4,5,6(a-c, g), 8(a-c), 9 (a,b), 10(a,b) |
| 3.3 | 2(a-c), 4(a-d), $7(\mathrm{a}-\mathrm{c}$ ), 8 |
| 3.5 | 1(a-c,f), 2, 4, 5, 7, $9,10(\mathrm{a}, \mathrm{b}), 11(\mathrm{a}, \mathrm{b})$ |
| 4.1 | 1(a-e),3(a-e), 4(a,b), 8,9(a-c), 11(a), 13 |
| 4.2 | 2(a-e),4(a),5(a-d),8,14(a-c),15(a),16(a,b) |
| 4.3 | 1(a-f), 2(for a-f of 1), 4,9(a-c), 10(a,b), 11,12(a,b), 13(a,b), 14(a-b) |
| 4.4 | 1(b,c,e),2(a-c), 3(a,c,d),5(b),7(b,c) |
| 4.5 | 1,3,5,7,10(b,c),12(a,e),14(c) |
| 5.1 | 2,3(b-d), 7,9,11(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),14(a) |
| 5.4 | 1,3,4(a-c),6(a,c),9(a-c) |

