How to pass Math 199E: A Step-by-Step Guide

Your grade in Math 199E is determined by the number of weeks that it takes you to pass all five Gateway Tests in the proctored Friday evening sessions. This step-by-step guide will help you pass Math 199E and develop the skills that you need to succeed in your calculus course as quickly and efficiently as possible. If you work hard and set aside time now, you can be finished with Math 199E in the first 2-3 weeks of the semester.

- Enroll: Register for Math 199E on MyMadison, purchase an access code for MyMathTest, and join our online course. See the Math 199E syllabus for detailed instructions.
- 2. Learn how to enter answers: Within MyMathTest, click on "Take a Test" and then click on "Qualifier 1". Before starting the test, click on the tutorial for "how to enter your answers" and watch all sections of the screencast tour. Remember that Math 199E is an independent online course, so you will need to know how to use MyMathTest to learn the material to pass your Qualifiers and Gateways.
- 3. Attempt Qualifier 1: Within MyMathTest, click on "Take a Test" and then on "Qualifier 1", and then on "I am ready to start". Make sure that you set aside enough time so that you can go through the problems carefully and do your best, because your performance on this Qualifier will determine your Study Plan. Do not use any outside materials or calculators because those will not be permitted on the Gateway tests.
- 4. Wait, don't try it again...yet: You may not have passed Qualifier 1 with 8/10 or above on your first attempt. That is okay, because you can take Qualifier 1 as many times as you like. However, we recommend that you do NOT retake this qualifier until you have spent time studying and learning within your "Study Plan" in MyMathTest. The main way that you will learn in this course is by going through the problems and resources in your Study Plan. This independent online learning is what replaces traditional classroom lectures in Math 199E, and you must take advantage of it. You won't magically know how to do the problems in the qualifier on the second or third attempt unless you first set aside some time to study and learn the material that you missed.
- 5. Don't try any other qualifiers either...yet: We also recommend that you do not attempt Qualifier 2 until you have successfully passed Qualifier 1 or at least worked through your Study Plan questions from Qualifier 1, because each qualifier that you attempt will add items to your Study Plan. If you take too many qualifiers at once then your Study Plan will get very crowded and it will be difficult for you to figure out which problems to review for each of the qualifiers.
- 6. Use your Study Plan: Within MyMathTest, click on "Study Plan" and look for the items marked with purple thumbtacks. These items are selected for you in MyMathTest based on the problems that you answered incorrectly on Qualifier 1. Open up the sections marked with thumbtacks and attempt the problems marked with thumbtacks. There is a "Watch Section Video" for each section. In addition, within the problems themselves you can make use of resources on the right side of the screen such as "Help Me Solve This", "View an Example", or even sometimes "Video" help. You can also use "Check Answer" at the bottom of the screen to see if you are on the right track and to get hints about how to proceed. When you have successfully solved a problem, it will be listed with a green check-mark next to its thumbtack. Take your time and try to check off all of your thumbtack problems before returning to take Qualifier 1 again.

- 7. **Retake Qualifier 1:** When you feel confident about all of the thumbtacked problems in your Study Plan, go to "Take a Test" in *MyMathTest* and retake Qualifier 1. If you pass with an 8/10 or better then congratulations—you qualify for taking Gateway 1 in the next Friday evening testing session! If you still don't have 8/10 or better on Qualifier 1 then return to the previous step and go through your Study Plan again; there will be new problems marked with thumbtacks and in addition you can review your previous thumbtacked problems again.
- 8. Study for Gateway 1: Gateway 1 has similar material to Qualifier 1. Even after you have qualified for Gateway 1 you can study by taking Qualifier 1 additional times and by reviewing Study Plan problems. Your highest qualifier score is what qualifies you for the Friday Gateway test, so don't worry about scoring less than 8/10 on the qualifier tests while you are reviewing. Once you have qualified you can't get "un-qualified".
- 9. Now move on to more Qualifiers: Repeat Steps 3-8 for Qualifier 2. then move on to Qualifiers 3, 4, and 5 if you can. You will be allowed to take each qualified Gateway up to two times on any given Friday. Note that to get a grade of 'A' in Math 199E you will need to pass all five Gateways in the first two Friday testing sessions. If it takes you the first three weeks to pass all five Gateways then you will get an 'A-' in Math 199E. If you pass in the first four weeks you will get a 'B+', and so on. This means that you should try to qualify for as many Gateways as possible before each Friday evening testing session.
- 10. **Take Gateways on Friday night:** Gateway Tests are available only in the Friday evening proctored sessions, from 5:00-8:00pm in Roop 127. When you get to the testing room please wait at the door until the proctor seats you at a computer. After you log in, the proctor will review the Gateways that you are qualified for and allow you to start taking a Gateway test.

Rinse and repeat: Go through steps 3-10 as many times as needed until you have completed the course. Once you have passed all five Gateway Tests in the proctored Friday sessions, you are done with Math 199E! We hope that by passing Math 199E as quickly as possible you will obtain the skills that you need to succeed in your calculus course this semester.

What to do if you need additional help:

- Math 199E tutoring sessions: You can get help using the MyMathTest software and with the mathematical material in the qualifiers during the Tuesday and Wednesday evening Math 199E tutoring sessions, from 5:30-8:00pm in Burruss 030. Please note that the tutor will not help you pass a qualifier test during these sessions, because you need to show that you can qualify for the Gateways on your own. However, the tutor will be very happy to help you with any of the material in your Study Plan and with any other questions you have.
- Science and Math Learning Center: You can also get help on any mathematical topic from the tutors at the SMLC, now located in the Student Success Center, first floor, room SSC 1100. Their regular operating hours are Sun 5-8pm, Mon-Thur 10am-8pm, Fri 10am-2pm. There is even a satellite location in the Rose Library. See http://www.jmu.edu/smlc for more information.
- Clearing your Study Plan: If your Study Plan gets too cluttered then you can have it cleared by the coordinator by emailing a request to duceyje@jmu.edu. Clearing your Study Plan will not affect your progress in the Qualifiers or Gateways; it will only clear out the thumbtack marks.

• Using MyMathTest throughout Math 205 or Math 231: If you click "Show All" in your Study Plan, you will see a long list of topics that you can review within MyMathTest. These topics include many things that you will be learning in your calculus course, so if you like you can use MyMathTest to study topics and skills through differentiation and integration that might help you later in your calculus course.