

Emerging Scholars Program – Fall 2007 M210E – Calculus Workshop

Assistant Instructor: Cody L. Patterson (**Note:** Please just call me “Cody.”)

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Office hours: TTH 11:00 – 12:00

Note: These will be my “formal” office hours this semester, but I am willing to make myself available anytime between 11:00 AM and 2:00 PM on Tuesday and Thursday. Please make an appointment with me if you want to meet outside of the hours advertised above. In rare cases, I can make myself available before 9:30 AM Tuesday/Thursday or on Monday afternoons.

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Welcome to the Emerging Scholars Program!

The purpose of this twice-a-week workshop is to explore various mathematical ideas in depth and gain a deeper, more rigorous understanding of calculus and its role in the natural sciences. We will do this by working on interesting problems from various areas of mathematics. We’ll also engage in group discussions from time to time, listen to student presentations, and occasionally take part in other activities meant to introduce you to the rich culture that mathematics offers.

Our mission

The ESP workshop is designed to go above and beyond the typical calculus curriculum, and challenge you to solve problems that are outside your intellectual “comfort zone.” My hope is that this will not only deepen your understanding of the mathematics you’ll encounter this year, but also help you discover abilities that you have not previously realized.

Our community

Arguably the most important aspect of the Emerging Scholars Program – and the most essential to our success – is the building of a learning community among students. Being part of a community has many benefits, but it also entails certain responsibilities. First and foremost, please be considerate and respectful of your classmates. Give them your full attention when they are sharing their ideas, and expect them to give you the same courtesy in return. Be proud of your classmates when they are victorious and share in their joy; conversely, offer a helping hand when they are struggling and do what you can to make things better. Remember, *one person’s success is everybody’s success, and one person’s struggle is everybody’s struggle.*

Expectations and grading policy

This workshop is graded on a pass/fail basis. In order to earn a passing grade, you must meet all of the following requirements:

1. **Attendance:** Your attendance in class is vital to the entire group's success. Therefore, I require that you attend class on a consistent basis. You are allowed **up to three absences** for the semester. This includes both excused and unexcused absences, so please do not waste your allotment on days when you're able to come to class. If you are significantly late to class, or slightly late on a regular basis, I reserve the right to "charge" you an absence. (If your class schedule prevents you from getting to class on time, please let me know as soon as possible so I'll be aware of your situation. Also, if something unforeseen happens and you are required to take more than three *excused* absences, I will accommodate you; please talk to me.)
2. **Effort:** In this class, you'll be exploring problems that are likely to be more challenging than anything you've encountered before. There will be some problems that you won't immediately know how to do. There will be some problems that you know how to do, but will take time and effort to solve. **Do not give up!** If you get stuck on a problem, feel free to try another problem, or ask your classmates for help. Keep in mind that I do not expect you to complete the problem sets in class. All I ask is that you try to stay focused during class and accomplish as much as you can.
3. **Teamwork:** During class, we'll work on the problem sets in groups. It is very important for you to be an active participant in your group – this means giving input, listening actively to your partners, and making sure that everybody's voice is heard. Before you come to class on Tuesday, I ask that you read the attached handout on working in groups.
4. **Presentations:** From time to time, I will ask you to present a solution (or possibly an interesting mathematical topic not covered in class) to the entire group. I will try to arrange this so that you'll be able to present a solution that you're particularly proud of. The goal of this exercise is to help you hone your mathematical communication skills and practice explaining ideas to others.
5. **Reviews:** Prior to an exam, I will ask each student to come up with a few problems over the material you have covered in your calculus class. I will then compile these problems into one or more "practice exams," one of which we will take during workshop prior to the actual exam. This will give you an opportunity to review what you've learned over the previous few weeks, and gauge your readiness for the exam. I may also ask students to prepare and present reviews over topics covered in class.

A note on courtesy

Being an active participant in this class means not only being fully engaged in the problem-solving process, but also being engaged in the learning process of your entire group. Therefore, I will not allow phones, music players, and computers to be used in class, except for emergencies. Also, please do not have your work/materials from other classes out during class (this includes your M408D homework).

Students with disabilities

The University of Texas at Austin provides, upon request, appropriate academic accommodations for qualified students with disabilities. For more information, contact the office of the Dean of Students at 471-6259, TTY 471-4641.

One more thing...

As your AI and mentor, I am committed to doing everything I can to help you make the most of this semester. If you have questions, comments, or suggestions regarding the ESP math workshop, please do not hesitate to contact me.