Math 285 Merit Workshop/Math 199 JMD
Fall 2015, R 3:00-4:50 p.m., 136 Burrill Hall

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The Merit Philosophy Merit discussions provide a great opportunity for you to attain a high level of understanding of the course material and to learn to think critically about math in general. The Merit section is not a review session or tutoring session. We will incorporate aspects of lecture material into the questions that we consider, but this is not meant to be a repeat of lecture nor is it intended to take the place of time you should be studying outside of class. During this time (where you will be receiving Math 199 credit), you will learn to think critically about complex problems and work with others in small groups to solve them. You will learn new ways to tackle problems, feel more comfortable about sharing your ideas, make new friends, and realize what you do and don’t understand in a comfortable, supportive environment. You are encouraged to share your opinions in class, but please be aware and respectful that others may have different opinions. You don’t have to agree, but must learn to attack ideas, not people. The biggest benefit of Merit will be gained by students who come to class already familiar with the material and prepared to discuss it, hear new ideas from peers, and apply their understanding to novel situations.

But the format is not a traditional one with an instructor giving information that you are to learn and reproduce. I will be a “non-traditional” instructor for much of the time. I will often not answer questions directly, but will ask you to consider them further in your groups or to find the information on your own. We will all need to think in new ways about our roles in this class. While there is the possibility for frustration inherent in this, I’m confident that we can work together to make this a remarkably valuable experience.

This course will be like learning how to find your way in the forest of mathematics. Showing you the way won’t do as helping you learn the signs of the forest when you are placed somewhere new in the forest on the exam. At times, you may feel lost and overwhelmed by the forest, but remember that we are in this journey together. Acknowledge your mathematical demons (such as the vampire of math confusion), but then go to war with them. When you conquer them, it will be all the more satisfying. Just as you cannot be a great athlete by watching ESPN, you cannot become a great mathematician by watching others – you must actively engage the mathematics. You and your classmates will form a team in your discovery of mathematics. I serve as your coach – I know the subject and am there to guide you, to challenge you, and to root for you, but ultimately you must work hard and play the game.
The Importance of Being Wrong
You are a human being. So am I. Therefore, we will all be wrong at different points throughout the semester. This is a wonderful opportunity. I repeat: this is a wonderful opportunity. I challenge you to welcome this opportunity to be wrong and learn to embrace it, to embrace knowing you do not know something. Being wrong gives you the opportunity to grow: I expect you to take it. The sooner you acknowledge that you might be wrong, the less time you will spend being wrong. The only consequence of being wrong in this classroom is increased understanding. Being wrong now (and realizing it) will help keep you from being wrong on the exam.

Because This Class is Once a Week
Since we only meet once a week, it will not be possible to cover all course material in merit. The material I have chosen is the material I have found in past semesters to be most important for the course and/or most difficult for students to master. You are responsible for all material covered in lecture, whether or not we cover it in merit. If you have questions about other material from lecture or homework, please ask me either in class or in office hours.

When exams are on Wednesdays, we will probably move class from Thursday to Tuesday. Class on Tuesday will be optional but attending can help make up for an unexcused absence (past or future). If you have a conflict when the moved class is scheduled, you can talk to me about a different opportunity to make up absences.

Solutions Policy
Solutions will not be given out except at my (rare) discretion, however, I will have solutions to the worksheets. If you ask in class if your answer is correct, I will tell you. If you just have an algebra/arithmetic error, I will point it out if I see it. If you have a conceptual error, I will try to guide you so you can find it.

In order to best optimize time, I plan to have answers (not solutions) to the questions on notecards at the table in the “front” of the room. When your group has an answer to a question, you may send a representative to the “card table” and check it. Leave the card there. If it is correct, move on. If it is not, go back to your group and discuss where the error might be. You are not allowed to write down the answer from the notecard. Different members of the group should go up to check answers for different problems.
Merit Discussion Session Grades
Each student may earn up to 20 points for their performance in each Merit session. The points will be assigned on the basis of Attendance, Preparation and Participation. These points count towards the MATH 199 grade, not the MATH 285 grade.

Attendance: Attendance is required and will be counted as follows:
- **0-5 minutes late** lose up to 6 points (TA’s decision)
- **5-15 minutes late** 14 points maximum possible for that session
- **15-30 minutes late** 10 points maximum possible for that session
- **Unexcused absence or > 30 minutes late** 0 points for session

These guidelines also apply in returning from break and for any student who leaves class early for an unexcused absence. Apart from exceptional circumstances, excused absences should be communicated in advance and documentation provided of the circumstances.

Preparation: You will be expected to come to class having studied your notes from lecture, read the text materials assigned, and completed any homework due that day. By studying the material before each class you will be ready to discuss the material in more depth and have specific questions to ask about material that may be giving you difficulty. This will help you immensely during your time in the Merit sessions. Preparation will be checked in a variety of ways and counts for 2 points of your daily grade. Please bring your notes to class each day.

Participation: A large part of how the Merit program will benefit you comes from how you interact with the class. You are expected to contribute your ideas and insights as well as your questions. Please use this opportunity to its greatest advantage. The remaining 12 points come from participation, and these points are awarded based on my observations and on your participation on in-class activities. Because they serve as a distraction to working with your group, electronics (including cell phones) may not be used in class. If you expect an essential phone call, please talk to me before class. Other exceptions may be made on an individual basis if you provide me with a good reason and come discuss it outside of class.

Examples of good participation: (these things are expected)
- Engaging in discussion
- Helping others in your group
- Staying on task and being relevant
- Asking questions when confused
- Sharing with members of the group
- Encouraging each other

Examples of bad participation: (these things will lose you points)
- Not saying anything
- Not working as a group
- Being on phone or other electronics
- Giving up or not trying
- Fighting or being disrespectful
- Being judgmental of others or yourself
Grading Scale: The anticipated grading scale for this course is below. At my discretion, this scale may be adjusted, but only in your favor.

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>92-100</td>
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<tr>
<td>A-</td>
<td>90-91</td>
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<tr>
<td>B+</td>
<td>88-89</td>
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<tr>
<td>B</td>
<td>82-87</td>
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<tr>
<td>B-</td>
<td>80-81</td>
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<tr>
<td>C+</td>
<td>78-79</td>
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<td>C</td>
<td>72-77</td>
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<td>C-</td>
<td>70-71</td>
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<td>D+</td>
<td>68-69</td>
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<td>D</td>
<td>62-67</td>
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<td>D-</td>
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Mock Exams We will have a mock exam approximately two days before each midterm. I will write the mock exam to be my best guess of what the exam will look like. We will schedule two hours in the evening – one hour for taking the exam and one hour for going over the answers. If you cannot make a mock exam, you can email me for a copy.

Course Website The course website is there as a resource to you. Worksheets from each Merit workshop will be posted (so if you miss Merit you may access the worksheet), as well as any additional resources. Mock exams and their solutions will be posted to the website after the mock exam session.

Additional Course Policies

- You are expected to work as a group. Please do not rush ahead or leave group members behind. Encouraging good participation in your group members is itself good participation.

- The problems in this class are long. Please do not attempt to do them in the margins of the worksheet.

- Merit discussion time is not for homework or catching up on lecture material. You may ask me questions about homework before class, after class, in the break, or in office hours. Talking about homework during class time will cause you to lose participation points.

- You will be asked to leave, with an unexcused absense, if you are rude, hurtful, racist, sexist, intolerant, or generally uncivilized.

If You Have Concerns If you are having trouble or concerns with any aspect of the course (either with merit or with the course in general), please seek help as soon as you recognize a problem. You may visit me in my office hours or set up an appointment. Email is the easiest way to contact me, and I will respond to emails promptly. You are also welcome to leave a note in my mailbox in 250 Altgeld Hall. This may be done anonymously, but I may be better able to address your concerns one-on-one. I will not necessarily be able to solve your problem, but am always willing to listen to your concerns and will try to explain my policies. I want you to succeed, and so please let me know if there is something I can do to help you with that.

I reserve the right to make changes as necessary throughout the semester. Any changes will be announced in class and posted to the course website.