# Analysis II MATH 5210/6210
# Syllabus

Instructor: Dr. Michel Smith
Office: Parker Hall 310
Office hours: MWF 11:00
Class Web Site: http://webhome.auburn.edu/~smith01/Math5210Sp26/

Students will be expected to present their proofs of theorems or solutions to assigned homework exercises during class. An integral part of the learning process for mathematics is solving mathematics problems. You will be challenged to solve problems, develop techniques and prove theorems that are new to you; an important purpose of this course is to develop analytical problem-solving techniques that can be applied to a broad range of problems. The techniques of mathematics are retained much more firmly if students can discover their own solutions to problems.

**Some comments about working on theorems for this course.**

The level of difficulty of the problems and exercises in this class range from easy to very hard. By "easy'' I mean a problem that I would expect the majority of the class to be able to prove in a day or two; that is, by the next class after it was stated or considered. A medium problem may take two to three class meetings before a proof is produced and a "hard" problem even longer. There will be a range of difficulty among the problems assigned in class. For some of the harder problems I may state some hints. So, do not be surprised if you do not figure out the solution to a problem immediately.

I expect students, on their honor, not to present or submit work that is not entirely their own work. Please read my short essay *MyModifiedSocraticMethod* online about my teaching pedagogy where I discuss this in more detail.

I think of the class problems as interesting puzzles and I find an incredible joy in figuring them out. So, much like reading a murder mystery, it's not as much fun hearing someone exclaim, "The butler did it!" than it is to figure out who-dun-it for yourself. Also, once you've figured out the solution to an exercise, I guarantee that you will not forget it! So I strongly urge each one of you to work on each theorem for some time (at least a number of hours and in some cases days) before you ask someone in your study or discussion group what they figured out about it. If you don't figure it out for yourselves, this preparatory work will make it easier for you to understand the solutions once they are presented during class because you will already have found out some of the "clues."

In addition I ask that you not lookup theorems or proofs on the internet – in particular: this means that you may not use any type of AI.

## Grade Calculation

The standard 10 point scale will be used:

90 to 100 =A; 80 to <90 = B; 70 to < 80 =C; 60 to <70 = D; <60=F.

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|---|---|---|
| Participation grade | | 25% |
| Blackboard presentations ……. | 10% | |
| Homework (including any projects) ….. | 10% | |
| Attendance, quizzes (pop or announced) …….. | 5% | |
| Hour Tests (At least two hour tests will be administered during the semester) | | 40% |
| Final Exam (As scheduled by the University): | | 35% |

Attendance Requirement.

Attendance and class participation are a critical part of this course. Students are permitted one unexcused absence. More than one unexcused absence (an excused absence is any University excused absence) will result in percentage points taken off the final grade as follows:

1 missed class results in a total of zero points subtracted,
2 missed classes results in a total of 2 point subtracted,
3 missed classes results in a total of 5 points subtracted,
4 missed classes results in a total of 10 points subtracted,
More than 4 missed classes will result in a grade of "F" assigned for the class.

**ACCADEMIC HONESTY:** Plagiarism (work presented as your own that is not your own) and giving or receiving aid on exams in whatever form will result in action by the University Honesty Committee. Refer to the Tiger Cub for more specific details.

**ABSENCE FROM EXAMS:** Refer to the Tiger Cub for a list of acceptable reasons for being absent from an exam, quiz or class. Any absence from the final exam must be cleared with your Dean's office.

**Accommodations for Disabilities:** Students who require such considerations should make an appointment with me during the first week of classes. They should discuss with me the specifics of their accommodations at this meeting. If you are not sure of your needs or of the accommodations process, it is recommended that you make an appointment with a member of the professional staff in the **Office of Accessibility, 1244 Haley Center (844-2096).**