Math 114 Summer Session II 2013 Course Information

Instructor : Soumyashant Nayak Class Schedule : M-T-W-Th 1:00 p.m. - 3:10 p.m. In DRL 4C8 Office : DRL 3C15 Office Hours : Monday 3:10 p.m.-4:10 p.m., Wednesday 3:10 p.m. - 4:10 p.m. or by appointment email id : nsoum@math.upenn.edu

Textbook : *Thomas' Calculus Early Transcendentals*, Revised Custom Edition for the University of Pennsylvania (ISBN : 978-1-256-44288-2)

Course Description:

We will be studying multivariable calculus which deals with the extension of concepts and techniques familiar to us in calculus, to multiple dimensions. This is also otherwise known as vector calculus and is a very important tool in studying vector fields which arise naturally in the context of electricity and magnetism, fluid mechanics. For instance, Maxwell's four equations of electromagnetism are formulated in the language of vector calculus. In this course, most of our attention will be devoted to 2 and 3 dimensions with occasional stray remarks pertaining to higher dimensions.

For a more detailed description of the syllabus. Please visit the official university Math 114 page at www.math.upenn.edu/ugrad/calc/m114

<u>Grading:</u>

- Homework (20 %) : Homework will be due at the beginning of class every Wednesday, except for the first week. Late homework will not be accepted. Each assignment set will consist of 5 problems out of which you have to hand in any 4. But you are strongly encouraged to attempt all the problems. The lowest score in your assignments will be dropped.
- Quizzes (15 %) : There will be three 20 minute quizzes in total on 3 July (Wednesday), 18 July (Thursday), 1 August (Thursday) based on the material covered in the class in that week. The quiz starts at the beginning of the class and no extra time will be provided if you are late.
- Midterm (30 %) : There will be one mid-term exam on July 22 (Monday) from 1:00 p.m. 3:10 p.m. in the same classroom where we have lectures (4C8). It will be based on the material covered in class prior to the exam.
- Final (35 %): The final exam will be held on August 8 (Thursday) from 1:00 p.m. 3:10 p.m. in the classroom (4C8). It will be based on the material covered in the whole course.

Some General Comments :

- We will have a short break of 10 min (2:00 p.m. 2:10 p.m.) during the lectures. Please make sure you are back in the classroom in time.
- There will be no class on July 4 (Thursday)
- If you expect to miss a quiz/test, you must inform me beforehand. No excuses will be entertained afterwards.

- Calculators are not permitted for any of the quizzes or exams.
- The University of Pennsylvania code of academic integrity is applicable to all students.

General Advice :

- This class is a whole semester's course compressed into 6 weeks. So you will have to work proportionately harder. Falling behind even a day can prove detrimental to your overall progress.
- You should make it a point to attend all classes. Even if you zone out, just hearing some fancy terms or staring at some diagrams on the blackboard might help you connect the dots faster when you study later on your own.
- You should spend at least 1.5 hour on self-study for every hour of lecture. So your investment in the course should be at least 20 hours per week including the lectures.
- If you need help, feel free to come see me during my office hours.
- Understanding mathematical concepts is important. Being able to use them at will is equally important and such skill can only be obtained through solving different kinds of problems. The more problems you solve, the more comfortable you will feel.

Some Important Websites:

- The course webpage is maintained at <u>www.math.upenn.edu/~nsoum/teaching/114-</u> <u>SUMR2013.html</u> Assignments will be posted here.
- More information about the Math 114 course may be viewed at the official university webpage. <u>www.math.upenn.edu/ugrad/calc/m114</u> You can find the syllabus and old final exam questions there.
- Code of Academic Integrity www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html