

MAT 517- M001 Fall 2015

Catalogue Description: (3 credits) Partial differential equations, boundary value problems, Fourier series and orthogonal expansions, Bessel functions and Legendre polynomials.

Prerequisites: MAT 414(514) or MAT 485

Instructor: Dr. G. C. Verchota, Professor of Mathematics, 443-1579, gverchot@syr.edu.

Class Time and Location: MW 3:45-5:05 pm, Carnegie 200

Office Hours: Carnegie 316C

- M 8-9:30
- T 8:30-10:00
- At other times by appointment

Text: *Partial Differential Equations*, 2nd edition by Walter A. Strauss, Wiley, Hoboken, NJ, 2008.

Homework: Each week there will be a **quiz** based on assigned exercises from the section(s) covered in previous classes. You are encouraged to ask questions about problems you are having trouble with the day after they are assigned. There should be ample class time to discuss any difficulties with homework problems. **Working many problems is essential for learning mathematics!** We may also assign and collect problems for grading. No late homework will be accepted. In this case you are encouraged to discuss assigned problems with your classmates and work together. However, the solutions you submit for grading must be written (completely) by you, and not copied from any source. You must write solutions neatly, literately, and in a logical coherent manner on standard 8.5x11 paper.

Quizzes: Weekly.

Exams: There will be two midterm exams and a final exam. No make-up exams will be given. The midterm exams are scheduled for **September 30** and **November 4**. The **final exam** is scheduled for **Friday, December 18, 10:15am-12:15pm**. Do not make plans to leave campus before this time.

Grading: The following grading scheme will be used. Homework/quizzes 25%, each midterm exam 25%, final exam 25%. Each midterm exam will be given a letter grade. A letter grade for the quizzes/homework will be computed at semester's end.

Attendance and Participation: You are expected to attend class. If you miss a class you are responsible for obtaining notes for that class from a student who attended. It is also your responsibility to find out about any announcements made in class.

Disability-Related Accommodations. If you believe that you need accommodations for a disability, please contact the Office of Disability Services(ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations.

Academic Integrity Statement. The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see <http://academicintegrity.syr.edu>. Or just remember that cheating is forbidden.

Religious observances policy. SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class.