

MAT 517- M002 Fall 2017

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 119

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 27** and **November 1**. The **final exam** is scheduled for **Friday, December 15, 10:15am-12:15pm** in Carnegie 119. 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: Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice.

The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level. For more information and the complete policy, see <http://class.syr.edu/academic-integrity/>

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.