

# MAT 517 (Partial Differential Equations and Fourier Series) Course Info – Spring 2016

1. **Lecture Time and Place:** 11:00am–12:20pm, TuTh, *Carnegie Hall, Room 110*
2. **Instructor:** Lixin Shen. Office: Carnegie Hall, Room 206D
3. **Office Hours:** 2:00–3:00 pm, TuTh, or by appointment
4. **Contact Information:**
  - (a) **Office Telephone Number:** (315)443-2889
  - (b) **E-mail Address:** lshen03@syr.edu
5. **Textbook:** “*Partial Differential Equations. An Introduction*” by W.A. Strauss, John Wiley, 2nd edn.
6. **Prerequisites:** MAT 414 or MAT 485.
7. **Course Description:** The course discusses the basic material on partial differential equations and on the use of Fourier series in the solution of partial differential equations. Boundary value problems in rectangular, cylindrical and spherical coordinates are studied. We will cover select sections (marked with a star) from Chapters 1,2,4,5,6 of the text.
8. **Homework:** Homework will be assigned after each class. It will be the basis for weekly quizzes. The best way to learn course material is to do problems.
9. **Exams:** There will be two in-class examinations and one final examination during the semester. Answers without supporting work will receive **LESS or NO CREDIT**. There will be absolutely no make-ups for any reason. If you miss a test for a valid reason, the final exam grade will count correspondingly. The examinations are tentatively scheduled as follows:

Date	Exam/Final Exam
02/18	<b>Midterm Exam</b>
04/07	<b>Midterm Exam</b>
<b>05/06</b>	<b>Final Exam</b>

Each exam counts for 25% of your course grade, with the remaining 25% coming from your quizzes and homework assignments. Your letter grade for the term then comes from the following table.

93–100	A	77–79	C+
90–92	A-	73–76	C
87–89	B+	70–72	C-
83–86	B	60–69	D
80–82	B-	0–59	F

## 10. Homework:

Section	Strauss Problems
1.1	2,5,7,10,11,12
1.2	1,2,5,6,8,9
1.5	3,5,6
2.1	1,2,3,5,8,9
2.2	2,3,5
2.3	1,4,5,6
2.4	1,4,7,8,11,16
4.1	2,3,4
4.2	1,2,3,4
5.1	1,2,4,8,9
5.2	1,2,7,11,15
6.1	1,2,5,6,11
6.2	1,3,7
6.3	1,2,3

11. **Disability-Related Accomodations:** Students who are in need of disability-related academic accommodations must register with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498. Students with authorized disability-related accommodations should provide a current Accommodation Authorization Letter from ODS to the instructor and review those accommodations with the instructor. Accommodations, such as exam administration, are not provided retroactively; therefore, planning for accommodations as early as possible is necessary. For further information, see the ODS website, Office of Disability Services <http://disabilityservices.syr.edu/>
12. **Academic Integrity:** 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>
13. **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.

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Any suggestions and comments from you are **highly appreciated**.