

MATH 412: Theory of Partial Differential Equations

Lecturer: Prof. Wolfgang Bangerth
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Office hours: Wednesdays, 9:00–11:30am

Lecture: Tuesdays + Thursdays, 11:10am-12:25pm
Blocker Bldg., Room 163

Textbook

R. Haberman: Applied Partial Differential Equations, 4th edition, Prentice Hall

Course Outline

Formulation and solution of partial differential equations of mathematical physics; solution by separation of variables, Fourier series and transform methods; methods of characteristics and first order equations.

Prerequisites

Prerequisites: MATH 308 or 451 or approval of instructor.

Webpage

Homework assignments and other course information will be posted at the course webpage

<http://www.math.tamu.edu/~bangerth/teaching.html>

Exams + Grading

Final course grades will be computed from homework (40%) and exams (60%).

One midterm exam (10/17/2006, counts 30%) and one comprehensive final exam (12/8/2006, 30%).

Grades will be A: 90-100%, B: 75-90%, C: 60-75%, D: 45-60%.

Make-up exams: Students must make arrangements in advance if they will not be handing in homework on time or will miss an exam. Absences due to recognized University-related activities, religious holidays, verifiable illness, and family/medical emergencies will be dealt with on an individual basis, but require a written excuse. Please let your instructor know about this as soon as possible, and preferably in advance.

Incompletes: I will consider giving an incomplete if you have successfully completed all but a small portion of the work of the course, and are prevented from

completing the course by a severe, unexpected event. Simply being behind work is not a reason for an Incomplete, though; in that case you should consider dropping the course.

S/U grades: If you are registered S/U your grade will be 'S' if your letter grade is C or above, and 'U' otherwise.

Policies

Academic integrity: The usual rules of academic integrity apply. In particular, the Aggie Honor Code "An Aggie does not lie, cheat or steal, or tolerate those who do" should be self-evident, see

<http://www.tamu.edu/aggiehonor.html>

Students may, and are encouraged to, work together and discuss homework problems with each other. However, copying work done by others is an act of scholastic dishonesty and will be persecuted to the full extent allowed by University policy.

Absences: Let your instructor know if you have to miss a class in the future. If you missed a class without telling, let him know as soon as possible afterwards. In general, Rule 7 of the Texas A&M University Student Rules applies, as do the other rules.

Disabilities: If you have a disability and need special assistance, please contact me so we can make accommodations. The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please also contact Services for Students with Disabilities, Koldus 126, 845-1637.

For other policies and other information, please read

<http://www.math.tamu.edu/teaching/operationspg.html>