

Continuous Mathematical Models

Mathematics 761

Section: G100

Term: 2012 Summer

Instructor: Adam Oberman

Discussion Topics: Nonlinear partial differential equations from a theoretical and numerical point of view. Exact solution formulas for Hamilton-Jacobi equations, non-linear diffusions, differential and probabilistic games. Applications to control theory, mathematical finance, and image processing/registration.

Grading: Homework: 25%Quizzes: 25%Final Exam: 50%

Required Texts: Notes will be provided by the instructor

Recommended Texts:

Materials/Supplies:

Prerequisite/Corequisite: MATH 310 and MACM 316. MATH 418 PDEs (suggested)

Notes:

THE INSTRUCTOR RESERVES THE RIGHT TO CHANGE ANY OF THE ABOVE INFORMATION.

Students

should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester.

Students may not take a 700 division course if it is being offered in conjunction with a 400 division course which they have taken previously.

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.