Course Outline - PMath 450/650
Spring 2015

Instructor Information
Prof. Kathryn E. Hare
Office: MC 5306
Email: kehare@uwaterloo.ca
Office Hours: Tentatively Wed. 3:00-4:00, Thur. 3:30-4:30

Course Information
Course Outline: Lebesgue measure on the line, the Lebesgue integral, monotone and dominated convergence theorems, $L^p$ spaces: completeness and dense subspaces. Separable Hilbert spaces, orthonormal bases, Parseval’s theorem. Fourier analysis on the circle, Dirichlet kernel, Riemann Lebesgue lemma, Fejer’s theorem and convergence of Fourier series.

Lectures: Monday, Wed., Friday 10:30-11:20 in MC 4041

Textbook: There is no required text.

Marking Scheme: Assignments 20%, Midterm 20%, Final Exam 60%. Graduate students taking the course for credit will need to do an extra project.

Midterm: Will be held in class at a date to be announced.

Assignments: There will be assignments approximately every 10 days. They will be due by the end of the lecture on the day they are due. Late assignments will not be accepted. Unclaimed assignments and midterms will be held for one month after they have been returned and then will be destroyed following university policy.

Academic Integrity

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. Check

http://www.uwaterloo.ca/academicintegrity/

for more information.
Grievances: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4,

http://wwwadm.uwaterlooca/informationsec/Policies/policy70.htm.

When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline: A student is expected to know what constitutes academic integrity to avoid committing academic offenses and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about 'rules' for group work/collaboration should seek guidance from the course professor, academic advisor, or the undergraduate associate Dean. For information on categories of offenses and types of penalties, students should refer to Policy 71, Student Discipline,


For typical penalties check Guidelines for the Assessment of Penalties,


Appeals: A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals,


Note for students with disabilities: AccessAbility Services, located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.