

Math 7360 Section 1, Fall 2009  
Monday, Wednesday, Friday 10:40am-11:30am

**Course Description:** Introduction to the fundamental concepts, techniques, and results in probability theory. Here is a brief list of topics: (i) measure and integration tools, (ii) probability measures and expected values, (iii) independence, (iv) Borel-Cantelli lemmas, (v) conditional expectation, (vi) laws of large numbers, (vii) central limit theorems, (viii) convergence concepts and results, (ix) infinitely divisible processes, (x) introduction to stochastic processes.

**Text:** There is no specific text, but useful books to consult include *Probability: Theory and Examples* by Durrett.

**Evaluation:** Assignments/Quizzes 50%, Tests 25%, and Final Examination 25%. Grading scale will be indicated on Moodle.

Professor: Ambar Sengupta  
Office: Lockett 324, Hours: Mon and Wed 9am-10am, and by appointment  
Telephone: 225-578-1607  
Email: [sengupta@math.lsu.edu](mailto:sengupta@math.lsu.edu)  
<http://www.math.lsu.edu/~sengupta>