Title: Numerical Solution of Integral Equations


Topics in order:

1- Types of integral equations  
2- Compact integral operators  
3- The Fredholm alternative theorem  
4- Degenerate kernel methods  
5- Projection methods (including Collocation and Galerkin)  
6- Nystrom method  
7- Iteration methods  
8- Discontinuous Galerkin methods for VIDEs

Grading Policy:

1. Assignments: 30 %  
2. Midterm Exam: 30 %  
3. Final Exam: 40 %