MATH 206 Complex Calculus and Transformations

Semester: Spring 2002

Instructor: Ali Sinan Sertöz   **email:**   sertoz@fen.bilkent.edu.tr

Office: SA-121 (Faculty of Science)   **Phone:**   1490

Web Page: http://www.fen.bilkent.edu.tr/~sertoz

Course Web Page: http://www.fen.bilkent.edu.tr/~sertoz/courses/math206.htm

Exams & Grading:
- **1ˢᵗ Midterm Exam** (25%)   16 March 2002, Saturday
- **2ⁿᵈ Midterm Exam** (25%)   27 April 2002, Saturday
- **Final Exam** (30%)
- **Quizzes** (20%)

Course Schedule: **Section-01**

Tuesday 08:40-10:30   Room BZ-08

Thursday 09:40-10:30   Room BZ-08

Section-02

Tuesday 10:40-11:30   Room EB-167

Thursday 10:40-12:30   Room EB-167

Office Hours: Wednesday 13:40-15:30

Textbook: Brown & Churchill, *Complex Variables and Applications,*
(McGraw-Hill International Editions, 1996)

	Week	Subject	
#1	Feb 7	Complex numbers (1-8)	
#2	Feb 12-14	Functions of a complex variable (9-16)	
#3	Feb 19-21	Analytic functions (17-22)	Q
#4	Feb 26-28	Elementary functions (23-29)	
#5	Mar 5-7	Complex integration (30-42)	Q
#6	Mar 12-14	Power series (43-52)	M1
#7	Mar 19-21	Residues and poles (53-59)	
#8	Mar 26-18	Applications of residues ((60-65)	Q
#9	Apr 2-4	Laplace Transform (66-67,+)	
#10	Apr 9-11	LDE with Laplace transform (+)	Q
#11	Apr 16-18	z-transform (+)	
#12	Apr 25	z-transform (+)	M2
#13	Apr 30-May 2	Mappings by elementary functions (68-78)	
#14	May 7-9	Conformal mapping (79-83)	Q
#15	May 14-16	Applications of conformal mappings (*84-92*)	
#16	May 21	Review	

Numbers in brackets denote the sections from the book around which the discussions will proceed. Italic numbers indicate that some selections will be made. + means that the Lecture Notes from the course web page will be used. Q denotes that a quiz is scheduled for that week. M1 and M2 denote the week of the midterm exams.