

**Syllabus      MA 433      S08      11 am in CB 341      Instructor: John Lewis**

**The Course:** The book we shall use for this course is entitled *Complex Variables and Applications* by Brown and Churchill, seventh edition. During the semester we will cover parts of

- Chapter 1: Complex Numbers
- Chapter 2: Analytic Functions
- Chapter 3: Elementary Functions
- Chapter 4: Integrals
- Chapter 5: Series
- Chapter 6: Residues and Poles
- Chapter 7: Applications of Residues
- Chapter 8: Mapping by Elementary Functions

**Tests:** There will be two tests during the semester and a final test at the end of the semester. Tests will be in class, given at the following times:

First Test: Monday February 11, in class.

Second Test: Wednesday March 19, in class.

Final Test: Monday April 28 in class at 10:30 am.

**Homework and Quizzes:** Suggested homework problems will be assigned in class from the homework problems, listed at the beginning of each testing period. Homework will not be collected during the first part of the semester but instead a quiz (worth 20 points) based on the homework will be given each Friday (except on a test week) beginning January 18. During the second part of the semester homework will be collected and graded (essentially this homework will be a take-home test). At the end of the semester, several of your lowest quiz and/or homework scores will be thrown out and the remaining scores will be counted as two tests. Makeup for late quizzes will not be given for any reason. Also very late homework will not be accepted.

**Important Dates:** Monday January 21 is an academic holiday because of Martin Luther King's birthday. The last day to withdraw in this course without a grade is March 7. Spring break begins on March 10. The last day of classes is April 25.

**Grades:** Points will be given as follows:

Hour Tests	=	200
Final Test	=	125-150
Quiz Scores	=	100
Homework Scores	=	100

At the end of the semester each student's points will be added and his/her percentage of the total points will be calculated. You are guaranteed that if your percentage is the university standard, then you will get at least that grade:

- 90-100 percent = A
- 80 - 89 percent = B
- 70 - 79 percent = C
- 60 - 69 percent = D
- 0 - 59 percent = E.

However there may also be a slight curve given after the percentages are figured.

**Office Hours:** My office and office hours are

765 Patterson Office Tower  
MWF 9-10 am, 12-1 pm, 3-4 pm

The following homework problems are recommended for you to work on. Quiz problems often will be chosen from this homework.

**Suggested Problems MA 433** (not to hand in)

Section 1.2 (page 4) 1 (a), 2, 4.

Sections 1.3 (page 7) 1.

Section 1.4 (page 11) 1 (a),(d), 4 (b),(c), 5.

Section 1.5 (page 13) 1 (a),(d), 7, 10.

Section 1.7 (page 21) 1 (a),(b), 5 (a), 10.

Section 1.9 (page 28) 1 (a), 2 (b), 3 (a), 6, 7.

Section 1.10 (page 31) 1 (a),(c), 2, 3, 4 (d), 5, 7 (a),(b).

Section 2.11 (page 35) 2, 3, 4.

Section 2.13 (page 42) 2, 3 (b),(c), 5.

Section 2.17 (page 53) 3, (a),(b), 5, 10.

Section 2.19 (page 59) 1 (b),(c), 2, 8 (a), 9.

Section 2.22 (page 68) 1 (a),(c), 2 (b),(c), 3 (b), 4 (b),(c), 6.

Section 2.24 (page 73) 1 (b),(c), 2 (a), 4 (b),(c), 5, 6.

Section 2.25 (page 78) 1 (b),(c), 2, 6.

Section 3.28 (page 89) 1 (b), 4, 8 (a),(c), 13.

Section 3.30 (page 94) 1 (b), 2 (a),(c), 3 (b), 7, 9 (a), 10.

Section 3.31 (page 96) 1, 6.

Section 3.32 (page 99) 1, 2 (a),(c), 3.

Section 3.33 (page 103) 2, 11, 18.

Section 3.34 (page 107) 1, 7 (b), 15 (a).

Section 3.35 (page 110) 1 (a), 2 (b), 7.