

**MAT 342, Applied Complex Analysis,  
Stony Brook University, Fall 2016**

**Times and places:**

Lectures: MWF 10:00-10:53, Math P-131, Prof. C. Bishop  
(Note room change from originally listed Physics P-112.)

**Text:** *Complex Variables and Applications*, J.W. Brown and R.V. Churchill, 9th edition.

**Class Webpage:** <http://www.math.sunysb.edu/~bishop/classes/math342.F16>

**Tentative Schedule:** The table lists the chapters and sections we will cover each day in each lecture. Changes may be made during the semester depending on our progress. Midterm dates are not finalized; I will let you know when they are. I have left the last week for discussing additional applications of complex analysis (unless we need to catch up). This material will not be on the final.

WEEK	STARTING	Monday	Wednesday	Friday
1	Aug 29	FIRST CLASS	I:1-6	I:7-12
2	Sept 5	NO CLASS	II:13-16	II:17-20
3	Sept 12	II:21-22	II:23-25	II:26-29
4	Sept 19	III:30-32	III:33-36	III:37-40
5	Sept 26	IV:41-42	IV:43-45	IV:46-49
6	Oct 3	IV:50-51	IV:52-53	IV:54-57
7	Oct 10	IV:58-59	review I-IV	Midterm 1
8	Oct 17	V:60-63	V:64-66	V:67-69
9	Oct 24	V:70-71	V:72-73	VI:74-76
10	Oct 31	VI:77-79	VI:80-82	VI:83-84
12	Nov 7	VII:85-88	VII:89-92	VII:93-94
13	Nov 14	review V-VII	Midterm 2	VIII:96-98
14	Nov 21	NO CLASS	NO CLASS	NO CLASS
15	Nov 28	LFM's and topology	review midterm	finance
16	Dec 5	conformal mapping	root finding	course review

**Important Dates:**

- August 29: first day of class
- Sept 5, 6 : Labor Day, no classes
- Sept 13: last day to drop without a W
- Oct 7: last day for adjustment of approved MAT classes
- Oct 28: last day for section changes, to P/NC, to withdraw from a course with a W
- Oct 31: Winter/Spring registration begins
- Nov 23-27: Thanksgiving break, no classes
- Dec 9: last class
- Dec 20: MAT 342 Final Exam, 2:15pm-5:00pm, location TBA
- Dec 22: Commencement

**Grades:** Homework, two midterms, final exam. We will use the ten highest problem sets. A selection of problems will be chosen each week by the grader for correction and comments. Some final exam questions will be chosen from the assigned homework problems.

**Homework:**

Due	Problems
Wed Sept 7	2.4, 2.11, 6.15, 9.6, 9.10, 11.6, 11.8a
Mon Sept 12	14.1cd, 14.3, 14.8, 18.5, 20.1, 20.2
Mon Sept 19	24.1cd, 24.5, 24.8b, 26.3, 26.6, 26.7
Mon Sept 26	30.1abc, 30.4, 33.1ab, 33.6, 34.1, 36.1a, 36.3, 38.2ab
Mon Oct 3	42.3, 42.4, 43.5, 46.1a, 46.3, 46.10, 47.2, 49.2abc, 49.4
Mon Oct 10	no problem set, first Midterm this week
Mon Oct 17	53.1abc, 53.4, 57.1abc, 57.4, 57.7, 57.10
Mon Oct 24	61.4, 61.9ab, 65.1, 65.3, 65.8a, 68.1, 68.4, 68.7ab
Mon Oct 31	72.1, 72.3, 72.6, 72.11, 73.1, 73.3, 73.6ab, 73.8ac,
Mon Nov 7	77.1ab, 77.2ab, 77.7, 81.4, 81.5, 83.5, 83.6
Mon Nov 14	no problem set, second Midterm this week
Mon Nov 21	86.1, 86.3, 86.7, 86.9, 88.2, 88.8, 88.12, 91.1, 91.2, 93.1, 93.2, 94.6abc, 94.8
<b>canceled</b>	98.3, 98.12, 98.13, 100.1, 100.4, 100.6, 100.10

I am cancelling the last problem set on sections 98 and 100, but I will ask a few questions on this material on the final.

**Contact information and office hours:**

Prof. Bishop: Math 4-112, [bishop@math.sunysb.edu](mailto:bishop@math.sunysb.edu)

Office hours MW 9-10, M 2-3; other times by appointment.

Grader, Jack Burkart [jack.burkart@stonybrook.edu](mailto:jack.burkart@stonybrook.edu)

Office hours W 11-12 in 5-125b Math Tower, TuTh 1-2 in Math Learning Center

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