

Week	Date	Section	Topic	Calculations	Proofs
1	1/11	1.1	Complex Numbers	7, 9, 22	2, 4, 14, 23, 25, 26
	13	1.2	Moduli & Conjugates	4, 6, 7	8–17
	15	1.3	Polar Form	3, 5, 7, 12, 13	2, 4, 10, 15, 16, 22, 25, 27a
	18		MARTIN LUTHER KING DAY		
	20	1.4	Exponential Function	1, 3, 11	7–10, 12, 13
2	22	1.5	Powers & Roots	4, 5, 10	1, 12, 18
	25		Review, Quiz #1, and Take-Home Test #1 on Complex Numbers		
3	27	2.1	Complex Functions	1–3, 5, 7–10	
	29	2.2	Limits	7, 11	3–6, 9
4	2/1	2.2	Continuity	13	10, 12, 14–16
	3	2.3	Analytic Functions	7, 9, 13, 16	3–5, 10
5	5	2.4	Cauchy-Riemann Equations	1–3	6–8, 10–12, 15
	8	2.5	Harmonic Functions	1, 3	4–6, 10, 18
5	10		Review, Quiz #2, and Take-Home Test #2 on Complex Functions		
6	12	3.2	Trigonometric Functions	5, 9, 15, 20, 21	6–8, 12, 13, 18
	15	3.3	Logarithm Function	1, 3, 5, 8, 9, 15	2, 4
7	17	3.5	Inverse Trig Functions	1–5, 15	6, 9, 13
	19		Review, Quiz #3, and Take-Home Test #3 on Transcendental Functions		
8	22	4.1	Contours	1–3, 5, 7–11	
	24	4.2	Contour Integration	3, 6–8, 10, 11, 14	15, 18
9	26	4.3	Independence of Path	1, 2, 4, 5	7, 8, 11, 12
			SPRING BREAK		
10	3/7	4.4a	Cauchy's Integral Theorem	1, 3, 9, 11, 13–15	
	9	4.5	Cauchy's Integral Formula	1, 3, 4, 6, 7	2, 8–10
11	11	4.6	Bounds on Derivatives	1	2, 3, 5, 6, 8, 13, 14
	14		Review, Quiz #4, and Take-Home Test #4 on Integration		
12	16	5.1	Sequences and Series	1, 2, 7, 14	3, 5, 8ab, 9
	18	5.2/5.3	Taylor Series	1, 2, 5, 11ab, 13, 14 / 3, 4	3, 8ab, 9, 15 / 2, 10
13	21	5.5	Laurent Series	1, 3, 4, 6, 9	
	23	5.6	Singularities & Poles	1, 3, 5	4, 6, 10, 13
14	25		GOOD FRIDAY		
	28		Review, Quiz #5, and Take-Home Test #5 on Series		
15	30	6.1	Residue Theorem	1abcd, 2, 3abcd	4, 6
	4/1	6.2	Trig Integrals	1–5	
16	4	6.3	Improper Integrals	2–6	11
	6	6.4	Improper Trig Integrals	1–3, 5–8	
16	8		Review, Quiz #6, and Take-Home Test #6 on Real Integrals		
17	11	3.4	Washers, Wedges & Walls	1–6	
	13	7.3	Möbius Transformations	3–5, 7, 8, 10, 11	6, 15
18	15	7.6	Physics Applications	1–4, 6, 7, 10	
	18	7.6	Steady-State Temperature	worksheet #1	
19	20	7.6	More Temperature	worksheet #2	
	22	7.6	Fluid Flow	worksheet #3	
20	25		Review		
	27		Quiz #7, and Take-Home Test #7 on Physics Applications		