

**NANO 705 - Spring 2017**  
**Nanoelectronics**  
**Course Schedule**

WEEK	DATE	LECTURE & READING	ASSIGNMENT
1	M-1/9	Introduction; <b>Ch. 1: Prologue</b> ; 1.1	
	W-1/11	1.2	HW 1 assigned
	F-1/13	1.3	
2	W-1/18	1.4	
	F-1/20	1.5	
3	M-1/23	1.6	
	W-1/25	<b>Ch. 2: Schrödinger Equation</b> ; 2.1	
	F-1/27	2.2	HW 1 due
4	M-1/30	2.2	HW 2 assigned
	W-2/1	2.3	
	F-2/3		
5	M-2/6	<b>Ch. 3: Self-Consistent Field</b> ; 3.1	
	W-2/8	3.2	
	F-2/10		HW 2 due
6	M-2/13	3.3	HW 3 assigned
	W-2/15	3.4	
	F-2/17		
7	W-2/11	<b>Ch. 4: Basis Functions</b> ; 4.1	
	F-2/24		
8	M-2/27	4.2	HW 4 due
	W-3/1	4.3	HW 4 assigned
	F-3/3		
9	M-3/13	<b>Ch. 5: Bandstructure</b> ; 5.1	
	W-3/15		
	F-3/17		
10	M-3/20	Review	HW 4 due
	W-3/22	5.2	Midterm Exam: 5:00 PM-6:50 PM, EP 251B
	F-3/24	<b>Ch. 6: Subbands</b> ; 6.1	HW 5 assigned
11	M-3/27	6.2	
	W-3/29	6.3	
	F-3/31		
12	M-4/3	<b>Ch. 7: Capacitance</b> ; 7.1	
	W-4/5	7.2	
	F-4/7	7.3	
13	M-4/10	<b>Ch. 8: Level Broadening</b> ; 8.1	HW 5 due
	W-4/12	8.2	HW 6 assigned
14	M-4/17	8.2	
	W-4/19		
	F-4/21	<b>Ch. 9: Coherent Transport</b> ; 9.1	
15	M-4/24	9.2	
	W-4/26	9.3	HW 7 due
	F-4/28	Review	Final Exam assigned (take home)

TEXT: Quantum Transport: Atom to Transistor, S. Datta, Cambridge (2005) ISBN-13 978-0-521-63145-7  
 FINAL: Final Exam due by 5:00 PM, F-5/5