

Schedule (reference only)

	Topics	Homework
1	1. Introduction to MATLAB, General plotting	
2	2. MATLAB fundamental	
3	3. MATLAB programming 1	
4	4. MATLAB programming 2	Homework 1 due
5	5. MATLAB review	
6	6. Error analysis	
7	7. Application & review	
8	TEST1	Homework 1 due
9	8. Root finding - bracketing methods	
10	9. Root finding - open methods	
11	10. Linear algebra review	
12	11. MATLAB row operation, Gauss elimination	Homework 3 due
13	12. Matrix inverse and conditions	
14	13. Iterative method and eigenvalues	
15	14. Application & review	
16	TEST2	Homework 4 due
17	15. Polynomial, interpolation	
18	16. Curve fitting - line regression & least square method	
19	17. Curve fitting - other functions	
20	18. Numerical integration - trapezoid & Simpson methods	Homework 5 due
21	19. Numerical integration - other methods	
22	20. Numerical differentiation	
23	21. Application & review	
24	TEST3	Homework 6 due
25	22. ODE 1 - Euler and modified Euler	
26	23. ODE 2 - Runge-Kutta method	
27	24. ODE 3 - Higher order and system equations	Homework 7 due
28	25. Symbolic math processing	
29	26. Application & review	
30	FINAL TEST 2:45-4:45	Homework 8 due