

Spring 2026 course calendar - draft version

Date	Day of week	Day of course	Topic	Major deadlines (semester project deadlines are tentative)	Notes
1/13	Tues		1 Class intro/plan for semester/basics of programming practice		
1/15	Thurs		2 Numerical integration and differentiation/floating-point precision		
1/20	Tues		3 Root finding and Interpolation		
1/22	Thurs		4 Linear algebra, I		
1/27	Tues		5 Linear algebra, II + Debugging		
1/29	Thurs		6 Software development with GitHub, pull requests, etc.		
2/3	Tues		7 Initial value ODEs (RK4, adaptive solvers)		Brian out of town; Ben Wibking tentatively covering
2/5	Thurs		8 Boundary value ODEs (iterative methods)		
2/10	Tues		9 Hyperbolic PDEs, I (advection)		
2/12	Thurs		10 Hyperbolic PDEs, II (higher-order advection)	Homework #1 due Friday 2/13	
2/17	Tues		11 Hyperbolic PDEs, III		
2/19	Thurs		12 Elliptic PDEs, I (Poisson/Laplace equation)		
2/24	Tues		13 Elliptic PDEs, II (multigrid method)		
2/26	Thurs		14 Parabolic PDEs, I (Diffusion)		
3/3	Tues		No class - spring break		
3/5	Thurs		No class - spring break		
3/10	Tues		15 Fast Fourier transforms		
3/12	Thurs		16 Feigelson Ch. 2, 3.1-3.7 (Probability, Statistical inference)	Homework #2 due Friday 3/13	
3/17	Tues		17 Feigelson Ch. 5 and 6 (Nonparametric statistics, data smoothing)	Project proposal due Monday 3/16	
3/19	Thurs		18 Feigelson Ch. 7 (regression)		
3/24	Tues		19 Parallel computing with Python, 1 (on HPCC)		May move parallel computing before Feigelson Ch. 2
3/26	Thurs		20 Parallel computing with Python, 2 (on HPCC)		
3/31	Tues		21 Parallel computing with Python, 3 (on HPCC)	Project update #1 due Monday 3/30	
4/2	Thurs		22 Monte Carlo as a sampling tool (Owen Monte Carlo book ch. 1-2)		
4/7	Tues		23 Markov Chain Monte Carlo (Geyer MCMC handbook)		
4/9	Thurs		24 Andreon Ch. 1-5 (Intro to Bayesian stats)	Homework #3 due Friday 4/10	
4/14	Tues		25 No class - Brian's out of town!		Brian out of town
4/16	Thurs		26 Andreon Ch. 6, 10 (Bayes, II)	Project update #2 due Wednesday 4/15	
4/21	Tues		27 Feigelson Ch. 11 (Time series analysis)		
4/23	Thurs		28 Time series analysis, Part II; class wrapup.		
				Homework #4 due Friday 5/1 (last day of finals week)	
				Project presentations, code demos, writeup, etc. due finals week (immediately before final exam session)	
4/27-5/1	TBD		FINAL EXAM WEEK - Final presentations!		