DATASCI/STATS 531/631 W25. Provisional schedule

Wed Jan 08	Class 1. Chapter 1. Introduction
Sun Jan 12	Homework 0, due 11:59pm
Mon Jan 13	Class 2. Chapter 2. Trend and covariance
Wed Jan 15	Class 3. Chapter 3. White noise and basic time series models
Sun Jan 19	Homework 1 (needs chapter 2), Participation 1, due 11:59pm
Mon Jan 20	MLK
Wed Jan 22	Class 4. Finish Chapter 3, start Chapter 4. ARMA models
Mon Jan 27	Class 5. Chapter 4 continued. Start chapter 5.
Tue Jan 28	Homework 2 (needs chapter 3; chapter 4 to slide 15). Participation 2, due 11:59pm
Wed Jan 29	Class 6. Chapter 5. Parameter estimation for ARMA
Mon Feb 03	Class 7. Chapter 5 continued. Start Chapter 6
Wed Feb 05	Class 8. Chapter 6. Seasonality and trend. Start Chapter 7
Sun Feb 09	Homework 3 (needs chapters 5 and 6), Participation 3, due 11:59pm
Mon Feb 10	Class 9. Chapter 7. Introduction to the frequency domain
Wed Feb 12	Class 10. Chapter 8. Smoothing in the time and frequency domain
Sun Feb 16	Homework 4 (needs chapter 7), Participation 4, due 11:59pm
Mon Feb 17	Class 11. Chapter 8, continued
Wed Feb 19	Class 12. Chapter 9. Health economics case study
Fri Feb 21	Midterm project, due 11:59pm
Mon Feb 24	Class 13. Chapter 10. Introduction to POMP models
Wed Feb 26	Class 14. Chapter 10 continued
Fri Feb 28	Midterm peer review, due 11:59pm
Mon Mar 03	SPRING BREAK
Wed Mar 05	SPRING BREAK
Mon Mar 10	Class 15. Chapter 11. POMP models for ecology and epidemiology
Wed Mar 12	Class 16. Chapter 12. Simulation of stochastic models
Sun Mar 16	Homework 5 (needs chapter 10), Participation 5, due 11:59pm
Mon Mar 17	Class 17. Chapter 13. The particle filter
Wed Mar 19	Class 18. Chapter 13 continued
Sun Mar 23	Homework 6 (using pomp, needs chapter 11), Participation 6, due 11:59pm
Mon Mar 24	Class 19. Chapter 14. Parameter estimation by iterated filtering
Wed Mar 26	Class 20. Chapter 14 continued
Mon Mar 31	Class 21. Chapter 15. Polio case study
Tue Apr 01	Homework 7 (iterated filtering, needs chapter 14), Participation 7, due 11:59pm
Wed Apr 02	Class 22. Chapter 15 continued
Mon Apr 07	Class 23. Chapter 16. Stochastic volatility
Wed Apr 09	Class 24. Chapter 16 continued. Start of Chapter 17.
Mon Apr 14	Class 25. Chapter 17. Measles modeling and inference
Tue Apr 15	Homework 8 (POMP inference questions, needs chapter 15), Participation 8, due 11:59pm
Wed Apr 16	Class 26. Chapter 17 continued. Starting Chapter 18.
Mon Apr 21	Class 27. Chapter 18. Ebola, forecasting and diagnostics
Tue Apr 22	Final project, due 11:59pm
Wed Apr 30	Final peer review, due 11:59pm