

Fall 2016 - CMSE 201 day-by-day calendar

Note: this is the *tentative* course schedule for CMSE 201, Fall 2016. Several

Week 1:

Wed/Thurs. 8-31/9-1: Welcome to class/overview and expectations/thinking about models

Week 2:

Mon/Tues 9/5-6: no class, Labor Day (Tuesday section cancelled too)

Wed/Thurs 9/7-8: Thinking about models

Week 3:

Mon/Tues 9/12-13: Simple programs and order-of-magnitude estimation

Wed/Thurs 9/14-15: Numpy, pyplot, and Flint water quality data.

Week 4:

Mon/Tues 9/19-20: Flint water quality data - day 2

Wed/Thurs 9/21-22: Loops, Boolean logic, modeling radioactivity

Week 5:

Mon/Tues 9/26-27: Radioactivity Day 2

Wed/Thurs 9/28-29: More loops, modeling viral load

Week 6:

Mon/Tues 10/3-4: no class, CMSE Frontiers in Computational and Data Science meeting

Wed/Thurs 10/5-6: Modeling viral load - day 2

Week 7:

Mon/Tues 10/10-11: Random numbers, functions, modeling random walks

Wed/Thurs 10/12-13: Lab day. "What do I wish I was better at?"

Friday 10/28: Data analysis project: choice of dataset

Week 8:

Mon/Tues 10/17-18: Data exploration and visualization - day 1

Wed/Thurs 10/19-20: Data exploration and visualization - day 2

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Week 9:

Mon/Tues 10/24-25: The Schelling segregation model - day 1

Wed/Thurs 10/26-27: The Schelling segregation model - day 2

Friday 10/28: Data analysis project: Final version of questions and preliminary analysis due

Week 10:

Mon/Tues 10/31-11/1: The Schelling segregation model - day 3

Wed/Thurs 11/2-3: Text processing - analyzing Twitter data

Friday 11/4: Modeling project: proposal due

Week 11:

Mon/Tues 11/7-8: Text processing - digital humanities

Wed/Thurs 11/9-10: Numerical integration and differentiation: modeling kinematics
and terminal velocity

Friday 11/11: Data analysis project: final project due

Week 12:

Mon/Tues 11/14-15: More random numbers - Monte Carlo integration

Wed/Thurs 11/16-17: Optimizing solutions - the Traveling Salesman problem

Friday 11/18: Modeling project: initial research summary due

Week 13:

Mon/Tues 11/21-22: Agent-based modeling, 1: Econophysics

Wed/Thurs 11/23-24: No class, Thanksgiving (both Wed and Thurs sections cancelled)

Week 14:

Mon/Tues 11/28-29: Agent-based modeling, 2: topic TBD

Wed/Thurs 11/30-12/1: Agent-based modeling, 3: topic TBD

Friday 12/2: Modeling project: final presentations due

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Week 15:

Mon/Tues 12/5-6: Project presentations - day 1

Wed/Thurs 12/7-8: Project presentations - day 2

Week 16:

Mon-Fri 12/12-16: **Final exams**, with date and time scheduled by class session on Registrar's page.