**NSC 204 (CMSE 201) Course Calendar, Spring 2016**

Section 001 (Prof. Hirn) is on Tuesdays and Thursdays from 12:40-2:30 p.m.

Section 002 (Prof. O’Shea) is on Mondays and Wednesdays, from 10:20 a.m. -12:10 p.m.

Both sections are in room 019 Natural Resources Building.

Note: This calendar is subject to change, particular in the second half of the semester.

Week 1: Mon./Tues. 1/11: Course intro; what is a model?

Wed./Thurs. 1/13: Algorithms, computer programs, models.

Week 2: Mon./Tues. 1/18: no class (Martin Luther King day)

Wed./Thurs. 1/20: Python basics (variables, types, assignment,

expressions). More modeling.

Week 3: Mon./Tues. 1/25: Python modules, making plots.

Wed./Thurs. 1/27: Boolean logic and loops, I

Week 4: Mon./Tues. 2/1: Boolean logic and loops, II

Wed./Thurs. 2/3: Functions

Week 5: Mon./Tues. 2/8: Modeling simple motion (calculating integrals)

Wed./Thurs. 2/10: Calculating derivatives

Week 6: Mon./Tues. 2/15: Root-finding

Wed./Thurs. 2/17: Strings

Week 7: Mon./Tues. 2/22: Files and file manipulation, statistics

Wed./Thurs. 2/24: Thinking about (and working with) data

Week 8: Mon./Tues. 2/29: Fitting data to models

Wed./Thurs. 3/2: Random numbers

SPRING BREAK: Mon./Tues. 3/7: no class (Spring break)

Wed./Thurs. 3/9: no class (Spring break)

Week 9: Mon./Tues. 3/14: Monte Carlo

Wed./Thurs. 3/16: Agent-based modeling, I

Week 10: Mon./Tues. 3/21: Agent-based modeling, II

Wed./Thurs. 3/23: Semester project intro; Ant motion model

Week 11: Mon./Tues. 3/28: More complex agent-based models; semester

project proposal due

Wed./Thurs. 3/30: More complex models; global warming.

Week 12: Mon./Tues. 4/4: Empirical models, I

Wed./Thurs. 4/6: Empirical models, II

Week 13: Mon./Tues. 4/11: Zombie Outbreak, I

Wed./Thurs. 4/13: Zombie Outbreak, II; Semester project roundtable.

Week 14: Mon./Tues. 4/18: Topic driven by student interest, I

Wed./Thurs. 4/20: Topic driven by student interest, II

Week 15: Mon./Tues. 4/25: Student presentations, I

Wed./Thurs. 4/27: Student presentations, II

FINALS: Week of 5/2: Final exam (date/time/location depends on section;

may be used for further presentations)