STAT 4400/5400   Advanced Statistical Modeling   Spring 2020

Lectures: Tue/Thu 3:30–4:45 PM, ECCR 105

Professor: Vanja Dukic, ECOT 322

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Office Hours: Tuesdays and Thursdays, 2:30-3:20pm

Teaching Assistant

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Office Hours: Tue/Wed, 9-10am; Thusdays 11am-12pm

Course Goals: To learn the advanced concepts and techniques of statistical modeling.

Text: *Regression Analysis by Example*, by Chatterjee and Hadi and *An Introduction to Generalized Linear Models* by Dobson and Barnett. All editions are acceptable.

Course web page: http://amath.colorado.edu/faculty/vdukic/4590/index.html You will find useful information on the course web page, such as homework assignments and solutions and where to go if you are having trouble with course material. Please check it regularly.

Grade determination: There are a total of 100 points for the course. 50 points are distributed equally over the homework assignments, the midterm exam is worth 25 points, and the final report and presentation together are worth 25.

Traditional grading scale will be used for 4400 students: $A->90\%; B->80\%; C->70\%; D->60\%$. Any adjustments to this scale will be made in favor of the student. For 5400 students, grading standards will be higher: $A->93\%; B->83\%; C->74\%; D->65\%$.

Homework: The homeworks will be due at the beginning of the class on the due date via Canvas. Late homework will **not** be accepted or graded, except in extraordinary circumstances. In most homeworks, your analyses will be best done using a software package (such as R, Matlab, or Python); in those cases, turn in a write-up of your results, along with the interpreted computer output and commands you used. You can collaborate with your classmates on the programming part, but you must write up the results independently of each other.

Exams: There will be one midterm exam and one final project, which involves an in-class presentation (during the last week of classes), and the final project report. If you are sick and can't finish the final project, you must bring a note from your doctor or the Wardenburg Health Center verifying your illness. Your course grade will then be determined by the rest of your course work. If you have any unavoidable schedule conflicts with the presentations and exams, you must bring this to the attention of your professor by at least 2 weeks prior to the last week of classes.

Dropping the course: Getting advice from the Dean's office is recommended before dropping any course.

Extra help: You are encouraged to get extra help whenever you need it. The instructor and course assistants will have office hours, which are posted on the webpage. Also, the CU Residence Halls run regular Math Labs and tutoring is available through the dorms or the Engineering Peer Advocates.

Additional Important Syllabus Statements: For statements pertaining to Honor Code, Accommodation for Disabilities, Classroom Behavior, Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation, and Religious Holidays, please refer directly to the online document which can be found at: https://www.colorado.edu/academicaffairs/policies-customs-guidelines/required-syllabus-statements