Course Information and Syllabus Document

Contact information

Instructor: De Brabanter, Kris
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Office Hours: Wednesday 3pm-4pm

About this course

Lecture: M W F 9:00am-9:50am @ Morrill 2019
Course URL: https://canvas.iastate.edu/
Prerequisites: DS 201X, one of STAT 101, 104, 105, 201, 226, 231, 305, 322, 330
Computing: Matlab
Final Exam Calendar: http://www.registrar.iastate.edu/students/exams/springexams

Description:

Elements of predictive analysis such as training and test sets; feature extraction; survey of algorithmic machine learning techniques, e.g. decision trees, Naïve Bayes, and random forests; survey of data modeling techniques, e.g. linear model and regression analysis; assessment and diagnostics: overfitting, error rates, residual analysis, model assumptions checking; communicating findings to stakeholders in written, oral, verbal and electronic form, and ethical issues in data science. Participation in a multi-disciplinary team project.

Homework: Homework assignments will be posted on the Canvas course website. Discussion with friends and classmates is strongly encouraged, yet the final assignment you submit must be your own. Copying solutions from others is not a good way to learn and will not be tolerated. No late homework will be accepted. Solutions will be posted on the blackboard course website soon after the due dates.

Examinations: There will be 1 midterm during regular class time (Monday Feb. 19, 2018) and 1 final examination (Wednesday May 2, 2018, 7:30am-9:30am).

Grading: Your grade for the course will be determined by the homework assignments (30%), midterm (30%), and the final exam (40%). Students are guaranteed to receive the letter grade based on the scales shown below. However, the instructor reserves the right to modify the grading scale so as to improve the letter grade if warranted by circumstances (e.g. unusual high level of difficulty of problem sets).

- 92% -100% A
- 89% - 91% A-
- 85%-88% B+
- 80%-84% B
- 75%-79% B-
- 70%-74% C+
- 65%-69% C
- 60%-64% C-
• 55%-59%  D+
• 50%-54%  D
• 45%-49%  D-
• < 45%  F

Academic Dishonesty
The class will follow Iowa State University’s policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office. [http://www.dso.iastate.edu/ja/academic/misconduct.html](http://www.dso.iastate.edu/ja/academic/misconduct.html)

Disability Accommodation
Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact (instructor name) to set up a meeting within the first two weeks of the semester or as soon as you become aware of your need. Before meeting with (instructor name), you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-7220 or email disabilityresources@iastate.edu. Retroactive requests for accommodations will not be honored.

Dead Week
This class follows the Iowa State University Dead Week policy as noted in section 10.6.4 of the Faculty Handbook [http://www.provost.iastate.edu/resources/faculty-handbook](http://www.provost.iastate.edu/resources/faculty-handbook).

Harassment and Discrimination
Iowa State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, ethnicity, sex (including sexual assault), pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation, gender identity, genetic information, or status as a U.S. veteran. Any student who has concerns about such behavior should contact his/her instructor, Student Assistance at 515-294-1020 or email dso-sas@iastate.edu, or the Office of Equal Opportunity and Compliance at 515-294-7612.

Religious Accommodation
If an academic or work requirement conflicts with your religious practices and/or observances, you may request reasonable accommodations. Your request must be in writing, and your instructor or supervisor will review the request. You or your instructor may also seek assistance from the Dean of Students Office or the Office of Equal Opportunity and Compliance.

Contact Information
If you are experiencing, or have experienced, a problem with any of the above issues, email academicissues@iastate.edu.