

Instructor: Andrew Neel (aneel@memphis.edu)

Office hours: By Appointment only (Please arrange by email 2-3 days in advance)

Location: Online Only

Time: At your Discretion

Date: Term: Aug 26th – Dec 12th
Last Day: Dec 4th
Final Exam: Wed, Dec 11th @ 5:30PM

Text-1: C. Shag (2020). A Hands-On Introduction to Data Science, Cambridge U Press. ISBN: 978-1-108-47244-9.

Text-2: Advanced R by Hadley Wickham (<https://adv-r.hadley.nz>)

Text-3: **(Optional)** G.J. Myatt and W.P. Johnson (2014). Making Sense of Data II: A Practical Guide to Data Visualization, Advanced Data Mining Methods, and Applications, 1st ed, John Wiley & Sons. ISBN-13: 978-0470222805.

Course Description

The data life cycle; data collection, cleansing, visualization and storage; methods and models for data analysis and management; analysis tools, including statistical packages, experimental design software tools and computer simulations; evaluation and deployment of results; ethical and societal factors.

Professional Conduct

Students are expected to conduct themselves in a professional manner at all times. This expectation includes but is not limited to the showing respect to the instructor and students during class times, staying focused during class time, preparing yourself to learn, submitting assignments in a timely manner, asking questions, and attending class.

Each student is further held accountable to The University of Memphis's code of conduct.

For this online course, I expect you to set aside appropriate time for this course as a professional would for a meeting. I expect that you would do so in a quiet place which is isolated from distraction, and which is conducive to learning. This is no less that what is expected of a professional.

Classroom Expectations

I expect each student to come prepared to the activities of this course. Appropriate preparation includes but is not limited to reading the text, and reviewing recommended online materials, review of source code when needed. I further expect that each student will participate in classroom discussions.

Grading:

Mastery of this course’s material will be evaluated as follows:

Two (2) exams	50%
Class project	30%
Homework	20%

Limited Collaboration Policy:

Students are permitted and encouraged (but not required) to discuss the ideas and concepts of any classroom topic or assignment. Unless otherwise specified, the product of each assignment and test is expected to be sole, individual work each student. Specifically, students can discuss ideas and concepts; but one student is not permitted to write code or prose for another student. All help is expected to be documented and credited appropriately.

Warning 1: Each student should accept help with care. It is very easy to mislead yourself into believing that you understand a concept when others are providing aid or assisting. In a crunch (such as an exam), this error can prove fatal.

Warning 2: Please give help with care. Collaboration is intended to improve the classes understanding of a concept. If too much help is given, students may be enabled to fail!

Plagiarism or cheating behavior in any form is unethical and detrimental to proper education and will not be tolerated. All work submitted by a student (projects, programming assignments, lab assignments, quizzes, tests, etc.) is expected to be a student's own original work. The plagiarism is incurred when any part of anybody else's work is passed as your own (no proper credit is listed to the sources in your own work) so the reader is led to believe it is therefore your own effort. Students are allowed and encouraged to discuss with each other and look up resources in the literature (including the internet) on their assignments, but appropriate references must be included for the materials consulted, and appropriate citations made when the material is taken verbatim.

If plagiarism or cheating occurs, the student will receive a failing grade on the assignment and (at the instructor’s discretion) a failing grade in the course. The course instructor may also decide to forward the incident to the University Office of Student Conduct for further disciplinary action. For further information on U of M code of student conduct and academic discipline procedures, refer to: <http://www.memphis.edu/studentconduct/academic-misconduct/process.php>