

Dr. Alex Liebrecht
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**The University of Iowa
The College of Liberal Arts and Sciences
Fall, 2023**

STAT 1010:0AAA Statistics and Society

Course meeting time and place: MWF 3:30 – 4:20 p.m. LR2 VAN

Department of Statistics: <https://stat.uiowa.edu/>

Course ICON site: To access the course site, log into [Iowa Courses Online \(ICON\)](#)
<https://icon.uiowa.edu/index.shtml> using your Hawk ID and password

Instructor: Alex Liebrecht
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Office: 221 SH
Office Hours: MWF 12:30 – 1:30 p.m.
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TA: Erin Post
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Office Hours: T Th 2 – 3:30 p.m.

Graders: Jocelyn Horanituze

DEO: Kung-Sik Chan
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Description of Course: Statistical ideas and their relevance to public policy, business, humanities, and the social, health, and physical sciences; focus on critical approach to statistical evidence. Requirements: one year of high school algebra or [MATH:0100](#). GE: Quantitative or Formal Reasoning.

Textbook/Materials: *Statistical Reasoning for Everyday Life (RRPHE) 6th Edition*

Calculators: It is recommended that you get a TI-83 or TI-84 for this course. Demonstrations in this class will be done with a TI-84 and *Microsoft Excel*.

Academic Honesty and Misconduct: All students in CLAS courses are expected to abide by the [CLAS Code of Academic Honesty](#). Undergraduate academic misconduct must be reported by instructors to CLAS according to [these procedures](#). Graduate academic misconduct must be reported to the Graduate College according to Section F of the [Graduate College Manual](#).

Student Complaints: Students with a complaint about a grade or a related matter should first discuss the situation with the instructor and/or the course supervisor (if applicable), and finally with the Director or Chair of the school, department, or program offering the course.

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Undergraduate students should contact [CLAS Undergraduate Programs](#) for support when the matter is not resolved at the previous level. Graduate students should contact the CLAS [Associate Dean for Graduate Education](#) and Outreach and Engagement when additional support is needed.

Drop Deadline for this Course: You may drop an individual course before the deadline; after this deadline you will need collegiate approval. You can look up the [drop deadline for this course](#) here. When you drop a course, a “W” will appear on your transcript. The mark of “W” is a neutral mark that does not affect your GPA. Directions for adding or dropping a course and other registration changes can be found on the [Registrar’s website](#). Undergraduate students can find policies on dropping and withdrawing [here](#). Graduate students should adhere to the [academic deadlines](#) and policies set by the Graduate College.

Grades: Grade cutoffs will be no higher than the usual 90-80-70-60 breakdown. The course will use the +/- grading system. The A+ grade is used only in extraordinary situations.

Homework (25% of grade): Homework will be assigned and collected on Fridays at 11:59 p.m. using ICON. *Homework should be turned in as a pdf.* Points will be deducted for homework that is not the appropriate file type.

During the semester, there will be two presentations---one on regression and one on hypothesis testing. These will be counted as a “double” homework assignment.

Exams (25/25/25%): Three exams will be given: two midterms and a final. The dates of the exams are TBD.

Date and Time of the Final Exam

The final examination date and time will be announced by the Registrar generally by the fifth week of classes and it will be announced on the course ICON site once it is known. **Do not plan your end of the semester travel plans until the final exam schedule is made public. It is your responsibility to know the date, time, and place of the final exam.** According to Registrar’s final exam policy, students **have a maximum of two weeks after the announced final exam schedule** to request a change if an exam conflict exists or if a student has more than two exams in one day (see the [policy](#) here).

Calendar of Course Assignments and Exams

Week	Assignment	Due Date
1	Intro	8/25/2023
2	HW1	9/1/2023
3	HW2	9/8/2023
4	Project 1	9/15/2023
5	HW3	9/22/2023
6	Exam 1	9/29/2023
7	HW4A	10/6/2023
8	HW4B	10/13/2023
9	HW5	10/20/2023
10	Exam 2	10/27/2023
11	HW6	11/3/2023
12	HW7A	11/10/2023
13	HW7B	11/17/2023
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14	Project 2	12/1/2023
15	Final Review	12/8/2023

Course Content

Unit 1: Introduction

- Sampling Techniques and Types of Studies (Chapter 1)
- Measurement in Statistics (Chapter 2)
- Visual Displays of Data (Chapter 3)
- Summary Statistics and Shapes of Distributions (Chapter 4)

Unit 2: Regression

- Correlation and Causality (Chapter 7)
- Regression (Chapter 7)

Unit 3: Probability

- Probability in Statistics (Chapter 6)

Unit 4: Discrete Distributions

- Binomial and Geometric Distribution (Supplemented by Instructor)

Unit 5: Continuous Distributions

- Normal Distribution (Chapter 5)

Unit 6: Confidence Intervals

- Inferences from Samples to Populations (Chapter 8)

Unit 7: Hypothesis Tests

- Inference for Population Mean (Chapter 9 and 10)
- Inference for Population Proportion (Chapter 9 and 10)

College of Liberal Arts and Sciences (CLAS) Course Policies

[Attendance and Absences](#)

University regulations require that students be allowed to make up examinations which have been missed due to illness or other unavoidable circumstances. Students with mandatory religious obligations or UI authorized activities must discuss their absences with me as soon as possible. Religious obligations must be communicated within the first three weeks of classes.

[Exam Policies](#)

Communication: UI E-mail

Students are responsible for all official correspondences sent to their UI email address (uiowa.edu) and must use this address for any communication with instructors or staff in the UI community

University Policies

[Accommodations for Students with Disabilities](#)

[Basic Needs and Support for Students](#)

[Classroom Expectations](#)

[Exam Make-up Owing to Absence](#)

[Free Speech and Expression](#)

[Mental Health](#)

[Military Service Obligations](#)

[Non-discrimination](#)

[Religious Holy Days](#)

[Sexual Harassment/Misconduct and Supportive Measures](#)

[Sharing of Class Recordings](#)