STAT 1450: INTRODUCTION TO THE PRACTICE OF STATISTICS

General Information:
Term Spring 2014
Institution The Ohio State University
Credit Hours 3 credits.
Meeting Days/Times TR 8-8:55a (Smith 1153) - supplemented by a 1-hour recitation.
Prerequisite Completion of a baccalaureate-level mathematics course (e.g., Math 1116, 1130, or by similar placement)

Lecturer: Dr. Jonathan R. Baker baker.375@osu.edu
Office Information 408C/419 Cockins Hall; 688-4546
Office Hours TW 9a – 10a, RF 11a-12n, or by app
Optional Hours 7:20a – 7:50a before each lecture

Teaching Assistant
Office Information
Office Hours
Optional Hours

Learning Resources:
Required Text The Basic Practice of Statistics 6e (custom edition). David Moore, Bill Notz, Mike Fligner.
JMP (Software) JMP is the statistical software we will use in this course. JMP is free for you to download and similar to statistical packages you are likely to see later. Your TAs will use JMP during recitation as appropriate. Be prepared to use it as appropriate on your own for homework. To install JMP on your computer, click on “Order Services” at https://osuitsm.service-now.com/selfservice/ log in, click on “Site Licensed Software Request,” and select the version of JMP that is appropriate for your computer.
StatsPortal The virtual environment through which homeworks and quizzes will be administered.
Calculators Data analysis will be conducted via hand-held technology as well. The Texas Instruments TI-84 calculator is highly recommended. Other electronic devices are not allowed on exams.
Electronic Devices As a courtesy to fellow classmates, all cellular phones and other electronic devices must be silenced during lectures and recitations. Your engagement with the class will require an attentiveness for note-taking. If necessary, TAs and lecturers can request that students place these devices out of plain view if their usage is deemed irrelevant to instruction.

We will use the Top Hat software (at most $20 for the semester) to elicit student responses during lectures. Students will use their smart phones to text responses to questions posed.

Your Support System:
1450 Coordinator (Dr. Baker), keeps you abreast of updates and important developments with the course.
Lectures provide the overarching view of the clusters of concepts.
Recitations will reinforce and extend content covered in lecture. Expect to be an active participant in these sessions. They convene Wednesdays at 5:20p, or, Thursdays at 8:00a, 9:10a, 10:20a, 11:30a, or, 6:30p;
Tutor Hours provide you with additional support on a walk-in basis.
Virtual Communication In order to protect your privacy, all course e-mail correspondence must be done through a valid OSU name.n account. Expect a 24-hour response time when communicating with TAs and lecturers. We are here to support you, but just not quite in a true “on-demand” sense.
**Vision, Commitment, Purpose:**

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<th><strong>Personal Vision Statement for STAT 1450:</strong></th>
<th><strong>Personal Commitment to STAT 1450:</strong></th>
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The University’s Vision for your completion of STAT 1450

**College of Arts and Sciences General Education (GE) Goals & Expected Learning Outcomes:**

**Goals:** Students develop skills in drawing conclusions and critically evaluating results based on data.

**Expected Learning Outcomes:** Students understand basic concepts of statistics and probability, comprehend methods needed to analyze and critically evaluate statistical arguments, and recognize the importance of statistical ideas.

**Course Objectives:**
- To introduce you to correct data collection methods through random sampling, experimental design & surveys
- To enable you to use statistical tools for presentation and descriptions of data
- To enable you to understand basic probability rules and sampling distributions as the foundation of inference
- To enable you to analyze data through linear regression, confidence intervals, and hypothesis tests
- To enable you to evaluate statistical procedures in the context of assumptions, biases, and extrapolation.

**Dr. Baker’s vision for your completion of STAT 1450**

Statistics is the science of collecting, organizing, analyzing, and interpreting data.
You will become proficient in these components.
You will become competent in the use of data analysis software.
You will interpret findings and improve in your ability to justify your results.
Your metacognition and desire to reflect upon what you have learned will be heightened.
You will respond to a problem by: considering any relevant assumptions, analyzing, and effectively communicating your results.
You will gain a greater appreciation for statistics (and the mathematics that underpins our work)
You will complete the Data Analysis GE requirement.
Grade Evaluation:

**Score Card**

25% of the total grade will be determined by the final exam. 5% will be determined by your TA based upon attendance at and performance in recitation and lecture. The other 65% is determined by the following assessments. To compute “your current grade,” sum the final column and divide by the total weight possible to that point. For example if one exam, and four homework assignments have been submitted, then you would divide by .31.

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Course grades will align with these intervals.

- A: [93, 100]
- A-: [90,93)
- B+: [87, 90)
- B: [83,87)
- B-: [80, 83)
- C+: [77, 79)
- C: [73, 76)
- C-: [70, 72)
- D: [60, 69)
- E: [0, 60)

**Homework**

Ten homework assignments will be due at various dates during the semester. Homework will be submitted via StatsPortal.

**Homework is due by 12noon on Saturday**

Your lowest homework score will be dropped. Not submitting a homework assignment on-time will result in a 0.

Homework assignments and due dates will be posted on Carmen.

No late assignments will be accepted.

**Quizzes**

Quizzes will also be administered via StatsPortal.

They will be due by 12noon on Sundays.

**Midterms**

Midterms will be administered in Independence Hall at 6:30p to all STAT 1450 students. Statistical formulas and tables will be provided as necessary.

Please inform both your TA and Dr. Baker immediately of any existing conflicts.
**Additional Information:**

**Make-Up Mid-term Examinations:**

The established exam dates and times are a priority for both students and university officials. Valid and documented absences during exam dates require final pre-approval from Dr. Baker. In requesting a make-up exam you must communicate with both your TA and Dr. Baker. Your performance on the final exam items most associated with the missed exam will count as the missed exam grade with up to an additional 10% point deduction. If you miss an exam because of an emergency, contact Dr. Baker immediately to request a makeup exam. You’ll need to provide evidence of need for rescheduling this exam.

**Grade Appeals:**

Your TAs are highly capable and follow established rubrics in evaluating your work. Only in the rarest of cases will an exam grade need to be appealed. In these situations:

a) (within 1 week of receipt of your assessment) Inform your TA of the issue in writing
b) Attach a statement of the issue at-hand to your work and submit to Dr. Baker

**Student Responsibility:**

You are responsible for your learning. Schedule a minimum of 6 hours to prepare for this course. This equates to 9 hours weekly when the 3 hours for lecture and recitation attendance are included. Responsible students perform a variety of positive academic behaviors like: reviewing the Carmen page, downloading notes, being proactive in contacting a TA or classmate when more information is needed, etc..

**Academic Misconduct:**

In short, if you are considering doing something that might be unethical, then “Don’t do it!!” This can be applied to both academic and non-academic settings.

Please help us to maintain an academic environment of mutual respect, personal growth, and fair treatment. Homework assignments, in particular, must be submitted in a student’s own words and handwriting. All instances of academic misconduct (including copied homework or dishonest practice connection with exams) will be reported to the Committee on Academic Misconduct. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct ([http://studentlife.osu.edu/pdfs/csc_12-31-07.pdf](http://studentlife.osu.edu/pdfs/csc_12-31-07.pdf)).

**Addressing Issues of Differing Abilities:**

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Students with documented disabilities must also contact the Office of Disability Services (ODS) in 150 Pomerene Hall (phone: 292-3307) to coordinate reasonable accommodations for the course. ODS forms must be given to Dr. Baker as early in the semester as possible to be filled out and returned to you.

**Course Admission and Section Changes:**

ADD and SECTION CHANGES handled by our department staff after the SIS registration system closes. Students should go to 405A Cockins Hall and speak with Jean Scott beginning Friday, January 10th.

**Drop Dates:**

The last day to drop the course without a ‘W’ appearing on your record is Friday, January 31. The last day to drop the course without petitioning is Friday, March 21.

**Receiving an ‘I’ for the Course:**

You cannot receive an incomplete for the course unless 70% of the work in the course has been completed. Extenuating circumstances will be handled on a case-by-case basis.