



“Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write.” --H.G. Wells

Instructors/Lecture Times and Locations	Office Hours and Locations	Email
Dr. Michelle Everson, Course Coordinator (TR 12:40-1:35 p.m., EA160)	TR 11 a.m. to 12 p.m. (in 415 Cockins Hall) and by appointment	everson.50@osu.edu
Michelle Duda (TR 4:10-5:05 p.m., PH1184)	To be announced	duda.35@osu.edu
Keith Rodgers (TR 8-8:55 a.m., EA170)	To be announced	rodgers.277@osu.edu
David Sebert (MW 5:20-6:15 p.m., EA160)	To be announced	sebert.8@osu.edu
Corey Smith (TR 8-8:55 a.m., SH0100)	To be announced	smith.9785@osu.edu
Masha Soboleva (MW 8-8:55 a.m., SH0100)	To be announced	soboleva.2@osu.edu

Please fill in the following information about your recitation instructor so that you know how to contact him or her outside of class time!

Name of Recitation Instructor: _____

Day/Time/Location of Recitation: _____

Email address of Recitation Instructor: _____

Tutor Room: The Math and Statistics Learning Center (MSLC) will be open beginning Week 2 of the semester (starting on August 29th), in 132 Cockins Hall. Hours are from 9:10 a.m. until 6:20 p.m. Monday through Thursday, and from 9:10 a.m. until 1:40 p.m. on Friday. STAT 1350 teaching assistants will be in this Tutor Room throughout the day if you need help, and we strongly encourage you to stop by with questions! For more details on the Tutor Room schedule, see the Tutor Room section on our Carmen course site. The schedule will be posted on Carmen before August 29th.

Course Goals: This course satisfies the learning goals of the *GE Data Analysis requirement*, which are to develop an understanding of the basic ideas of statistical reasoning, to comprehend methods needed to analyze and critically evaluate statistical arguments, and recognize the importance of statistical ideas. The course seeks to encourage students to actively think about statistical issues arising in real problems and to understand the basic statistical techniques used to generate, summarize, and draw conclusions from data.

Required Materials

Text: *Statistics Concepts and Controversies* 8th edition by David Moore and William Notz

Note: If you purchase the custom edition of this textbook, it will come with LaunchPad access. *This is **not** a required element for this course, but it can be useful.* LaunchPad is an online compilation of tools (e.g., practice problems, videos, self-tests, an electronic copy of the book, access to a student version of JMP, etc.) that we strongly encourage you to take advantage of during the semester, especially if you are in search of extra practice problems and opportunities to review material from the class and test yourself. Our STAT 1350 LaunchPad site (using the code you received from your custom book) can be accessed at: <http://www.macmillanhighered.com/launchpad/scc8e/3698022>. If you have any questions about using LaunchPad, please direct them to the Course Coordinator, Michelle Everson.

Course Web Site: Additional materials such as lab (or recitation activity) handouts, homework assignments, review materials and problems, and course announcements will be available on Carmen (also sometimes referred to as Canvas), and you can also keep up with your grade in the course through Carmen. Students are expected to check Carmen on a regular basis (<https://carmen.osu.edu/>). Please visit the following site if you encounter difficulties with Carmen: <https://resourcecenter.odee.osu.edu/canvas/>

Software: Students in this course will use the JMP software. JMP will not be required outside of class time, but students who wish to use it outside of recitation can find JMP on the computers in the Thompson and 18th Avenue libraries. All lab activities that involve the use of JMP will include detailed instructions about how you can use this software program.

Calculator: A simple calculator (with a square root key) will be necessary for STAT 1350. Please bring this calculator to class, recitation, and to each exam.

Top Hat: This semester, some of the lecturers may be using the *Top Hat* software during lecture, as a way of keeping track of your attendance and encouraging class participation. *Top Hat* is a system that allows you to answer questions and participate during lecture by using your computer or smart phone.

During Week 1, please go to <https://resourcecenter.odee.osu.edu/top-hat/using-top-hat-students> in order to learn more about *Top Hat* and to make sure you are registered to begin using *Top Hat*. You will also find out information about how you can download a *Top Hat* app to your phone to make it easier for you to use *Top Hat* during class. If you have any difficulties with the registration process, let your instructor know. Each lecturer who chooses to use Top Hat will set up his or her own Top Hat site, and we will make sure to share information with you (either via email or in lecture) about how you can join the site for your lecture section. .

Adding or Changing Sections

All add and section time changes are handled by our department staff. The instructor and TAs do not sign paperwork associated with course registration. Students should go to 408A Cockins Hall and speak with Jean Scott (scott.961@osu.edu) about this as early as possible in the semester. The Department will begin to give students permission to add classes or do sections changes (provided that there are openings) on a first-come first-serve basis beginning at 7:00 am on **Monday, August 29th and again on Tuesday, August 30th** in 408A Cockins Hall. Cockins Hall opens by 6am. You may attend the class the first week of the semester provided that you do not take a seat from someone already scheduled into the course. We

cannot add students to courses if you have a hold on your record or you do not meet the prerequisites. *It is extremely important that you attend the recitation you are officially scheduled for so that we can keep track of your work and progress in the course.*

Grading

Your final grade in this course will depend on the following.

Assignment	Points
Homework assignments (12 points each for 108 points ; lowest will be dropped)	96 points
Lab activities (10 points each for 140 points; lowest will be dropped)	130 points
Midterm Exam #1 (Monday, October 3rd, 2016, 5:20-6:15 p.m.)	75 points
Midterm Exam #2 (Monday, October 31st, 2016, 5:20-6:15 p.m.)	75 points
Final Exam (Friday, December 9th, 2016, 6-7:45 p.m.)	150 points
Total	526 points

More Details about Required Course Assignments

Homework: Homework assignments are posted on the Carmen course site, in the **Homework** section. Each homework assignment consists of 12 multiple-choice questions. Each question is worth 1 point, and you will complete these assignments through Carmen by the appropriate deadline. The homework assignments are meant to give you practice applying what you have been learning, and they are also meant to give you practice with the types of multiple-choice questions you will see on exams. Although the assignments are set up using the Quiz tool in Carmen, they are not technically quizzes. You can have as much time as you need to complete assignments before the deadline (i.e., you can start answering questions and then return later to finish or change your answers), but once you submit your work to be graded, you cannot change any of your answers, and you only get one attempt to submit each homework assignment. Please refer to the document “**Completing Homework Assignments and Reviewing Feedback**” in the **Homework** section of the Carmen course for details on how you can see feedback on your homework assignment. If you do not attempt to complete a homework assignment, you will not have any access to assignment feedback or to the correct answers for each homework question. For this reason, it’s strongly encouraged that you at least open and attempt every single homework assignment. Once the deadline has passed, the assignment will be automatically graded and you will receive instant feedback. Most homework assignments will be due on **Sundays by 11:55 p.m.** The homework assignments you complete before each midterm exam will be due on **Friday by 11:55 p.m.** so as to allow you time to contact your instructor or teaching assistant if you want to discuss your performance before the exam. **The lowest homework score will automatically be dropped from your grade.** *Note that if you add the course late and miss the first homework assignment as a result, this is the homework score that will be dropped from your grade WITHOUT EXCEPTION.*

Lab activities: During recitation sessions, you will participate in activities to supplement and extend the lecture material. These activities will be handed out in recitation, and the answer keys will be posted on Carmen (in the **Lab Activities and Materials** section) by the time your graded work is returned to you.

Lab activities will include opportunities for you to work with your peers and take an active role in the learning process. You will complete and submit most lab activities during recitation. The exception to this is the first two lab activities and the final activity, all of which will be submitted online (and worked on outside of recitation time). Information about the first two labs can be found below, and information about the final online lab (Lab Activity #14) will be shared with the entire class closer to the end of the semester. Note that for the lab activities you complete and submit during recitation, we will choose some questions at random from each lab to grade for correctness. Half of your recitation grade will be based on the questions we choose to grade for correctness, and half will be based on completeness. Thus, even if you attend recitation and complete the lab activity, you will not get full credit if you have not followed directions, or if some of your answers are incorrect. It is for this reason that you need to ask questions when you are in recitation so that you can earn as much credit as possible! **The lowest lab activity score will be dropped from your grade.** *Note that if you add the course late and miss the first graded lab activity as a result, this is the lab activity that will automatically be dropped from your grade WITHOUT EXCEPTION.*

IMPORTANT clarification about Lab Activities #1 and #2:

Lab Activity #1 consists of a pre-course assessment that you will need to complete no later than **Sunday, August 28th, at 11:55 p.m.** This is a short 10-item, multiple-choice quiz. We want you to take this quiz so that we can get a better sense of what you might already know about statistics coming into this course. We will not penalize you if you miss any questions on this quiz, but it's important that you try your best and attempt to answer all questions on the pre-assessment. You can find a link to this quiz on the course site by going to the **Lab Activities and Materials** section and looking within the Week 1 area for the **Pre-Assessment** link (alternatively, you can get to it by clicking on the **Quizzes** link on the left side of the course page). You will have only one attempt at completing the pre-assessment, and you should try to complete it within 30 minutes, if possible, without reference to any notes or other individuals.

Lab Activity #2 is also a short 10-item, multiple-choice quiz. This particular quiz is all about the syllabus. You can find the syllabus quiz by going to the Week 2 area within the **Lab Activities and Materials** section, or by clicking on the **Quizzes** link. You will again have just one attempt at taking the syllabus quiz, and you will get credit for each question you get right on this quiz. You can take as much time as you need to complete the syllabus quiz, provided that you submit your quiz no later than Friday, September 2nd, at 11:55 p.m. We strongly encourage you to carefully read through this syllabus (or have it handy) before taking the syllabus quiz to ensure that you get the highest grade possible. We also encourage you to complete the syllabus quiz as early as you can during the semester, especially since you will have another lab activity (Lab Activity #3) and a homework assignment that will also be due during Week 2.

Exams: This course has two midterm exams and a comprehensive final. The midterm exams will each take place on a Monday. More details about the exact locations of the exams will be sent out and shared on Carmen as we get closer to exam time. It is important that you make preparations to be available during the exam times listed above (in the **Grading** section on page 3 of this syllabus) and that you attempt to take these exams on campus with all other STAT 1350 students. You should bring a photo ID with you to each exam and be prepared to share that ID when submitting your exam. Students who have an unavoidable conflict should e-mail the course coordinator (Dr. Everson) at least one week prior to each exam to make appropriate arrangements for taking an alternate or make-up exam. We always have multiple alternate and make-up exam times that coincide with each exam date, and we'll share that information with the class as we get closer to each exam date. Please note, however, that space is limited in our alternate and make-up locations, so, ideally, we would like for most of you to be able to take the exams at the regularly scheduled times.

- If you will be unable to take the exam with other STAT 1350 students at the times we have designated on campus, we can attempt to make arrangements for you to take the exams at the campus testing center. The Ohio State University (OSU) Testing Center (<http://registrar.osu.edu/testing/>) is an acceptable proctoring site, and offers appointments Monday-Friday 8a.m. to 5 p.m. **If you need to take the exam in a different location away from the OSU campus, there may be proctoring fees. Please contact Dr. Everson immediately to begin making preparations for exams if this will be an issue.**
- All exams are closed book. For each of the midterm exams, students may use one 8.5 inch x 11 inch page of notes (front and back, typed or handwritten). For the final exam, students may use two 8.5 inch x 11 inch pages of notes (front and back). You should also bring a calculator and a photo ID to the exams. Each exam will consist predominantly of multiple-choice questions similar to the types of questions you will work through as part of homework assignments; there will also be a few short-answer questions similar to the types of examples and problems that appear in lectures or lab activities.
- Devices such as cell phones and/or watches with calculator *and* communication capabilities are not allowed. Devices such as iPods are also prohibited at the exam. **You should only have access to writing tools, a calculator, and your notes during each exam!**
- If you are late to an exam, had the wrong day on your schedule, or missed the exam for any unexcused reason, you might not be allowed to make it up and will receive a zero. Any missed exams with no communication to us within 24 hours (except for extreme emergencies) will receive a 0. If you have an emergency and are going to miss an exam please notify Dr. Everson as soon as possible so arrangements can be made. Please also have documentation (doctor's note, etc.) as to why you missed the exam. Your documentation must be approved prior to your being allowed to take a make-up exam.

Policy on Late and Missed Assignments

You should allow sufficient time to complete all required assignments so that you can get help if you need it. You should also plan to be in recitation every week so you can complete lab activities. Computer failures, lost files and other technical difficulties are not valid excuses for submitting an assignment late. It is for this reason that we allow you to drop one homework assignment and one lab activity from your grade. **No matter what the reason, the first lab activity and the first homework assignment you miss will be considered your dropped assignments, so please do not ask to make up these assignments.** If you have to miss subsequent work beyond the lab and homework assignments that are dropped from your grade, and you have documented reasons for missing this work, we will consider allowing you to make up that work. You will need to contact Dr. Everson as soon as possible to discuss making up missed work.

As noted above, a student who is unable to attend an exam for a legitimate unavoidable reason may take a make-up exam only if the student provides suitable documentation of the absence and takes the make-up in a timely manner. It is serious if you fail to show up to an exam without contacting us ahead of time, and, if this happens, you will need to contact us immediately. We will only allow you to make up the missed exam if we are provided with appropriate documentation.

Disputes about Grades

If you feel that any course assignment has been graded incorrectly or unfairly, you must speak with your recitation instructor or the course coordinator within one week of getting your grade on that assignment. We will not re-grade assignments at the end of the semester if you are not satisfied at that time with your final course grade.

Addressing Issues of Differing Abilities

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 098 Baker Hall; telephone 614-292-3307, TDD 614-292-0901; <http://www.ods.ohio-state.edu/>.

Grading Scale

Final grades in the course will be determined based on the following scale, and based on the percentage of total points that you earn during the semester.

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	E
Min %	93%	90%	87%	83%	80%	77%	73%	70%	67%	60%	≤59%

Course Outline

The following is a general outline of the course, and it is subject to change at the discretion of the course coordinator. Any changes will be announced in lecture and recitation, and on the Carmen site. Ideally, you should attempt to complete readings before the start of a new week so you can bring questions to class. Some topics will be supplemented with course handouts.

Date	Week	Topic	Readings	Assignments due*
8/23-8/28	1	Data/Samples	Chapters 1 & 2	Lab 1 (due on 8/28 by 11:55 p.m.)
8/29-9/4	2	More on Sampling/Surveys	Chapters 3 & 4	Lab 2 (due on 9/2 by 11:55 p.m.)/Lab 3 (completed during recitation) /Homework 1 (9/4)
9/6-9/11	3	Experiments/Measurement	Chapters 5, 6, & 8	Lab 4
9/12-9/18	4	Graphing Data	Chapters 10 & 11	Lab 5 /Homework 2 (9/18)
9/19-9/25	5	More Graphs and Summary Statistics	Chapters 11 & 12	Lab 6
9/26-10/2	6	Summary Statistics/Review	Chapter 12/Review	Homework 3 (9/30)
10/3-10/9	7	Midterm 1 (10/3) /Normal Distributions	Chapter 13	Lab 7
10/10-10/16	8	Correlation/Regression	Chapters 14 & 15	Lab 8 /Homework 4 (10/16)
10/17-10/23	9	Regression/Probability	Chapters 15 & 17	Lab 9 /Homework 5 (10/23)
10/24-10/30	10	More Probability and Review	Chapter 18/Review	Homework 6 (10/28)
10/31-11/6	11	Midterm 2 (10/31) /Confidence Intervals	Chapter 21	Lab 10
11/7-11/13	12	More Confidence Intervals/Hypothesis Testing	Chapters 21 & 22	Lab 11 /Homework 7 (11/13)
11/14-11/20	13	More Hypothesis Testing	Chapter 22	Lab 12/Homework 8 (11/20)
11/21-11/27	14	More Hypothesis Testing	Chapter 22	
11/28-12/4	15	More Hypothesis Testing/Review	Chapter 22	Lab 13 /Homework 9 (12/4)
12/5-12/9	16	Last day of instruction is Wednesday, December 7th/ Final Exam is Friday, December 9th at 6 p.m.		Lab 14 (due Monday 12/5 by 11:55 p.m.)

***Due dates:** Lab activities (with the exception of Labs 1, 2, and Lab 14) will be submitted during recitation; most homework assignments are due Sunday at 11:55 p.m. and will be completed through Carmen. Labs 1, 2, and 14 will be completed online through Carmen. Homework #3 and Homework #6 will be due on Friday at 11:55 p.m.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. 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/csc/>.

We take academic misconduct very seriously in this course. If you are suspected of behaving dishonestly during an exam (e.g., copying from another student’s exam, allowing another student to copy from your exam, using materials or devices that are prohibited) or when completing any other required course assignment, this is grounds for us to file a report with the Committee on Academic Misconduct (COAM), and this may result in a failing grade in this course or an even more severe penalty.

Creating a Respectful and Safe Class Environment

We want STAT 1350 to be an environment where you can feel safe to express your thoughts and ideas about what you are learning about. You can expect fair, consistent, and respectful treatment from the entire STAT 1350 teaching team. We expect all students to treat fellow students, recitation instructors, and lecturers, with respect in your behavior, attitude and communications, be they in-person discussions or email. Again, please see the OSU Code of Student Conduct at <http://studentlife.osu.edu/csc/>

Email Correspondence

In order to protect your privacy, all course e-mail correspondence *must* be done through a valid OSU name.number or Buckeyemail account. If you have not activated your OSU email account, you can activate your account at <https://acctmgt.service.ohio-state.edu>. **Note that it is your responsibility to make sure that any email messages you send (to a recitation instructor, lecturer, or course coordinator) are received. If you get no reply to an email message with 48 hours, please send that message again!!!**

Other Student Resources

Students can find information about academic services available at OSU on this website: <http://artsandsciences.osu.edu/academics/current-students/resources>, and about general student services on this website: <http://ssc.osu.edu>.

Tips for Success in the Course

- A good portion of your grade depends on being present during lecture and during recitation. Please do not skip lecture or recitation! Do not assume the recitation instructors will re-teach the material that is covered during lecture. The recitation instructors assume you have attended lecture, and if you have to miss a lecture, it is up to you to get notes from a classmate, or to talk with your instructor about what you missed. Recitation is not a time for lecture but a time for you

to apply what you have learned in lecture and to ask questions about material that is confusing or unclear.

- Please take advantage of opportunities to participate in class discussion, in both lecture and recitation, and to ask questions. We want to help you in whatever way we can. If you find that you do not feel comfortable asking questions in front of your peers, please try to contact us via email, or come to see us during our office hours or Tutor Room hours.
- This is NOT a math class, but some math will be used in the course, and we have a Mathematics Review Guide posted on our Carmen course site (see the **Course Information** section) if you are concerned about your math skills. This is a critical thinking class. Our goal is to help you make wise and educated decisions at work and in life. We definitely recognize that some of you might be nervous about the course, but we want you to know that we are here to help you. The TAs and some lecturers hold office hours in CH 132 in the Math/Stat Learning Center, starting the second week of classes and ending the day of the final exam. Specific hours (beginning Week 2) will be listed within the **Course Information** section on our Carmen course website. Please take advantage of opportunities to meet with the recitation instructors and lecturers if you need extra help. Other lecturers and instructors have office hours in other locations and will be sure to announce those to you in class during the first week of the semester.
- Your peers can be an excellent source of information. We encourage you to collaborate with your peers on certain course assignments (e.g., homework and lab activities) and to help each other, but keep in mind that you must submit your own individual work, and you must work independently on all exams. Collaboration on exams is NOT allowed!
- We strongly encourage you to avoid working on assignments until the very last minute. We want to help you if you run into problems, but it can be challenging for us to help if you do not ask questions in a timely manner. Note a **General Questions** discussion forum has been set up on Carmen (see a link in the **Course Information** section or by clicking on **Discussions** on the left-hand side of the page) for you to post questions outside of class time if you need extra help.
- Material will get more challenging as we go through the semester. Because of this, you may need to spend more time studying material that is covered later in the semester versus material covered earlier in the semester.