

# STATISTICS: 2450 INTRODUCTION TO STATISTICAL ANALYSIS I SPRING 2023

# **Course overview**

## Office Hours for Course Coordinator & Instructor

Jonathan Baker <u>baker.375@osu.edu</u> TR 12p – 12:30p (SMITH Lab 4186), M 3:30p – 4p (Zoom),
Additional WF hrs. to be added based upon student input.

Students may reach my online virtual hours via: https://go.osu.edu/jbus Password: F1N

Teaching Assistant (to be completed by student)		
Contact Information for other Students and/or Instructors		

# **Meeting Days/Times**

Lectures will occur in Evans Lab 1008 TR 12:45p - 1:40p. Student attendance will not be adversely impacted for extenuating health & safety related issues that might arise. The instructional team will try to work with you, and not against you, on these.

# **Course description**

Calculus-based introduction to statistical data analysis. Includes sampling, experimental design, probability, binomial and normal distributions, sampling distributions, inference, regression, ANOVA, two-way tables. The prerequisite for this 3 credit hour course is differential calculus.

# **Your Support System**

**Lecturer** Provide the overarching view of the clusters of concepts.

**Recitations** Reinforce and extend content covered in lecture. Students will attend

online recitations synchronously in alignment with their scheduled times

on Fridays. Recitation assignments must be submitted via Carmen

DropBox prior to the next lecture. Students should still expect to be active

participants in these sessions.

**Tutor Hours** The Math-Stat Learning Center will have an online component. The face-

to-face part of the operation opens Mon.-Thurs. at 10:20a. Closing at 7:30p each of those days. Look for exact times that 2450 TAs will be available to

help you. <a href="https://mslc.osu.edu/tutoring">https://mslc.osu.edu/tutoring</a>.

# **Primary Course Goal (Legacy & New GE):**

- (Legacy) Develop skills in drawing conclusions&critically evaluating results based on data.
- (New) Apply quantitative or logical reasoning and/or statistical methods to understand and solve problems and will be able to communicate results.

## **Course learning outcomes**

By the end of this course, students should successfully be able to:

- Understand basic concepts of statistics and probability.
- Comprehend methods needed to analyze and critically evaluate statistical arguments.
- Recognize the importance of statistical ideas.

## **Course Objectives:**

- To enable you to use statistical tools for presentation and descriptions of data
- To enable you to correctly apply probability rules and counting techniques.
- To enable you to understand the use of 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 use your knowledge of calculus to conceptually understand its role in computing probabilities.

# **GE Course Information (Legacy):**

- Quantitative & Logical Analysis Category {Data Analysis Sub-category}
- Develop students' quantitative literacy and logical reasoning.
- Identify valid arguments
- Use mathematical models
- Draw conclusions & critically evaluate results based upon data.

# **GE Course Information (New):**

- Use statistical concepts and methods to represent real-world situations.
- Use diverse statistical approaches, technologies and tools to communicate about data symbolically, visually, numerically and verbally.
- Draw appropriate inferences from data based on quantitative analysis.
- Make and evaluate important assumptions in estimation, modeling, and data analysis.
- Evaluate social and ethical implications in mathematical and quantitative reasoning.

# Dr. Baker's vision for your completion of STAT 2450

- · You will become proficient in collecting, organizing, analyzing, and interpreting data
- You will become competent in the use of data analysis software.
- You will conceptually understand situations involving random phenomena.
- You will interpret findings and improve your ability to justify your results.
- Your metacognition & 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 underpinning mathematics).
- You will complete the Data Analysis GE requirement.

## **Personal Vision Statement & Commitment**

Personal <u>Vision Statement</u> for STAT 2450:	Personal Commitment to STAT 2450:
By successfully completing STAT 2450 I will:	To successfully complete STAT 2450, I must:
•	•
•	•
•	•

## **Top Hat**

We will use the *Top Hat* software to elicit student responses during lectures. Students will use their devices to text responses to questions posed. Please use the following information to complete the registration process. Your username must be name.# (e.g. biden.46).

Top Hat course name: STAT 2450 SP 2023 6-digit course code: 398569

# **Course Materials**

# **Required Materials**

• Introductory Statistics: A Problem-Solving Approach (3<sup>rd</sup> ed.) Kokoska. ISBN 9781319272685

This course requires electronic access to the accompanying web-based materials via *Sapling*. The ebook, quizzes, and homework assignments are all located within this resource.

## The cost is \$67.49 through CarmenBooks.

The textbook and/or courseware for this course is being provided via CarmenBooks. Through CarmenBooks, students obtain publisher materials electronically through CarmenCanvas, saving them up to 80%per title. The fee for this material is included as part of tuition and is listed as CarmenBooks fee on your Statement of Account. In addition to cost-savings, materials provided through CarmenBooks are available immediately on or before the first day of class. There is no need to wait for financial aid or scholarship money to purchase your textbook.

Unless you choose to opt-out of the program, you do NOT need to purchase any materials for this course at the bookstore. For more information on the program or information on how to opt out, <u>please visit the CarmenBooks website</u>.

• [Kokoska] [SaplingPlus for The Basic Practice of Statistics] • [3rd edition] • [Macmillan]

Access the courseware for this title through the Macmillan Higher Education Learning tab on the left-side of the course navigation.

#### STUDENT REGISTRATION INSTRUCTIONS

- Log into STAT 2450 through Carmen.
- Click the MacMillan App in the left navigation panel.
- Click the Achieve Leaning link (note: if you encounter an error message or blank screen, you will need to adjust your browser settings and/or disable pop-up blockers).
- Agree to Macmillan Learning terms of use and end user agreement.
- Select your access option (credit card payment, use an activation code, or, request trial access). Click on any Sapling assignment link to launch the assignment.
- Follow the associated steps and continue to your assignment page.
- You are now enrolled in the course and can access future assignments through the links on your instructor's course page.
- To access your ebook click on the image of the cover on the right sidebar of your course site. Create an account or login with an existing Macmillan Learning ebook account.

# **Optional Materials**

- Texas Instruments 83 Plus (or higher) Graphing Calculator.
- University provided iPad.

# **Course technology**

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <a href="https://ocio.osu.edu/help/hours">https://ocio.osu.edu/help/hours</a>, & support for urgent issues is available 24x7.

Self-Service and Chat support: <a href="http://ocio.osu.edu/selfservice">http://ocio.osu.edu/selfservice</a>

• **Phone:** 614-688-HELP (4357)

Email: 8help@osu.edu
 TDD: 614-688-8743

#### Baseline technical skills necessary for online courses

- Basic computer and web-browsing skills
- Navigating Carmen

## Technology skills necessary for this specific course

- CarmenConnect text, audio, and video chat
- Collaborating in CarmenWiki
- Recording a slide presentation with audio narration
- Recording, editing, and uploading video Necessary equipment
- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed
- Microphone: built-in laptop or tablet mic or external microphone

## Necessary software

- <u>Microsoft Office 365 ProPlus</u> All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Each student can install Office on five PCs or Macs, five tablets (Windows, iPad® and Android™) and five phones.
  - Students are able to access Word, Excel, PowerPoint, Outlook and other programs, depending on platform. Users will also receive 1 TB of OneDrive for Business storage.

Office 365 is installed within your BuckeyeMail account. Full instructions for downloading and installation can be found <a href="https://ocio.osu.edu/kb04733">https://ocio.osu.edu/kb04733</a>.

# **Grading**

# **Grades**

Assignment or category	Percentage	Your Grade
(January Quiz) (Tuesday, January 31 <sup>st</sup> )	10%	
(February Quiz) (Tuesday, February 28 <sup>th</sup> )	10%	
(March Quiz) (Tuesday, April 4 <sup>th</sup> )	10%	
(Comprehensive Quiz) (Thursday, April 27 <sup>th</sup> )	20%	
Small Project "S.P." ("Ess-P.")	20%	
Homework Assignments (6 total, none are dropped)	10%	
Semi-monthly Quizzes (6 total, 1 is dropped)	10%	
Attendance & Participation (Combined For Lecture & Recitation)	10%	
Total	100	

The exact due dates will appear in the daily calendar at the end of this document.

Homeworks & quizzes are completed in our learning management system, Achieve. Unless the date is stated above, they'll be generally due on Mondays 11:59 p.m. The S.P. will not be due until the end of the course – with intermediate progress points.

# **Grading scale**

93-100: A

90-92.9: A-

87-89.9: B+

83-86.9: B

80-82.9: B

77-79.9: C+

73-76.9: C

70 -72.9: C-

67 -69.9: D+

60 -66.9: D

Below 60: E

# **Additional Policies, Resources, & Information**

# Instructor feedback and response time

## **Grading and feedback**

Feedback will be made available by the next corresponding meeting.

#### E-mail

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.

#### **Discussion board**

Expect infrequent usage. However, students will be notified of new threads requiring their attention. Instructors will review posts within 24 hours.

# Student participation and responsibility

We expect you to be actively engaged in the learning process. 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. Successful students perform a variety of positive academic behaviors like: reviewing the Carmen page, downloading notes, being proactive in contacting a TA or classmate as necessary, etc.. Please seek assistance in managing any non-academic responsibilities prior to any potential for underperformance.

Successful students perform a variety of positive academic behaviors like: reviewing the Carmen twice a week, reviewing the weekly learning units the first half of each week, and completing all homework assignments and quizzes during the second half of each week.

# Student participation requirements

We expect you to be actively engaged in the learning process. You are responsible for your learning. Schedule a minimum of 6 hours to prepare for this course (this equates to 9 hours weekly, when you include the 2 lecture hrs. and the recitation hour). Successful students perform a variety of positive academic behaviors including: reviewing the Carmen site regularly, downloading class notes beforehand, contacting the TA or classmates as issues begin to arise, etc.. Please consider contacting our Student Affairs offices for assistance in managing any non-academic responsibilities. Contact information for some offices are included later in the syllabus

# **Discussion and communication guidelines**

The following are my expectations for how we should communicate as a class.

Above all, please remember to be respectful and remember that this is a university course, and not a casual dialogue occurring via a cellular phone.

- Writing style: While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using proper grammar, spelling, and punctuation. Be selective in the usage of emoticons.
- **Tone and civility**: Maintaining a supportive learning community is critical. Everyone must feel safe and comfortable expressing their opinions. Attempt to obtain clarification with an individual (including myself) privately and respectfully.
- **Citing your sources**: Please include the exact page number (of the textbook or notes) and/or exercise when requesting assistance. For online sources, use links and reference the last time the link was accessed.
- **Saving your work**: Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

## **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.

## Student academic services

Student academic services offered on the OSU main campus:

http://advising.osu.edu/welcome.shtml.

Tech Tutors who can help you navigate your devices:

https://digitalflagship.osu.edu/tech-tutoring-student-mentors

Key Ideas to help you succeed during the pandemic:

https://keepteaching.osu.edu/student-success

Name Coach if you'd like to set this up to assist with pronunciation:

https://odee.osu.edu/news/2020/02/27/pronoun-selection-and-name-pronunciation-carmencanvas

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# **Academic integrity policy**

A guiding principle is that, if you are considering doing something that might be unethical, then "Don't do it!!"

This mantra applies to both academic and non-academic settings.

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 <a href="http://studentlife.osu.edu/csc/">http://studentlife.osu.edu/csc/</a>.

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not

limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* is never considered an "excuse" for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct. <a href="http://studentlife.osu.edu/csc/">http://studentlife.osu.edu/csc/</a>.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. In short, if you are considering doing something that might be unethical, then resist and refrain from pursuing it. This will help you in college and well-beyond.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me. Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages (COAM Home)
- Ten Suggestions for Preserving Academic Integrity (<u>Ten Suggestions</u>)
- Eight Cardinal Rules of Academic Integrity (www.northwestern.edu/uacc/8cards.htm

## Policies for this synchronous online course

- **Homework, and quizzes**: Homework & quizzes will be completed in our Learning Management system, Achieve. *The other component submitted by the appropriate date as part of an overall course project.*
- Recitations: Students will attend online recitations synchronously in alignment with their scheduled times on Thursdays. Recitation assignments must be submitted via CarmenDropBox (by 12noon on Fridays).
- Written assignments: Your written assignments, including discussion posts, should be
  your own original work. In formal assignments, you should follow [MLA/APA/?] style to
  cite the ideas and words of your research sources. You are encouraged to ask a trusted
  person to proofread your assignments before you turn them in--but no one else should
  revise or rewrite your work.
- Reusing past work: In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on

past research or revisit a topic you've explored in previous courses, please discuss the situation with me.

- Falsifying research or results: All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.
- Collaboration and informal peer-review: The course includes many opportunities for
  formal collaboration with your classmates. While study groups and peer-review of major
  written projects is encouraged, remember that comparing answers on a quiz or
  assignment is not permitted. If you're unsure about a particular situation, please feel
  free just to ask ahead of time.
- **Group projects**: This course includes group projects, which can be stressful for students when it comes to dividing work, taking credit, and receiving grades and feedback. I will make the guidelines for group work as clear as possible for each activity and assignment, but please let me know if you have any questions.

# **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.

# **Copyright disclaimer**

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

# **Course Registration and Completion**

Students will be able to work with department staff on any ADD and SECTION changes. Students can begin communicating with Jean Scott (<a href="mailto:jscott@stat.osu.edu">jscott@stat.osu.edu</a>), Tuesday, January 18<sup>th</sup>.

Date Event

Friday, January 13<sup>th</sup> The last day to add the course without instructor permission. Friday, January 20<sup>th</sup> The last day to register and avoid additional fees.

\*Please note that students who are dropped for non-payment are not guaranteed re-enrollment.\*

Friday, February 3<sup>rd</sup> The last day to drop without a 'W' appearing on your record.

Friday, February 3<sup>rd</sup> The last day to register for pass/non-pass options for a course.

Friday, March 17<sup>th</sup> The last day to drop the course without petitioning.

FYI, Incompletes will only be awarded when 70% of the coursework has been completed.

# **Accommodations for accessibility**

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's <u>request process</u>, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: <u>slds@osu.edu</u>; 614-292-3307; <u>slds.osu.edu</u>; 098 Baker Hall,113 W. 12<sup>th</sup> Ave.

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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

# **Make-Up Quizzes & Extensions**

The established dates and times are a priority for both students and university officials. Valid and documented absences during prescribed dates require final pre-approval from Dr. Baker. In requesting a make-up you must communicate with both your TA and Dr. Baker. Your performance on the Comprehensive Quiz 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 assessment 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.

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

Student support services offered on the OSU main campus <a href="http://ssc.osu.edu">http://ssc.osu.edu</a>.

Remember to be Safe & Healthy: <a href="https://safeandhealthy.osu.edu/current-students">https://safeandhealthy.osu.edu/current-students</a>

# **Other Student Support Resources**

(Including: Mental Health, Equity, Respect, Diversity, & Private Transportation)

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily

activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting <a href="mailto:ccs.osu.edu">ccs.osu.edu</a> or calling <a href="mailto:614-292-5766">614-292-5766</a>. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at <a href="mailto:614-292-5766">614-292-5766</a> and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at <a href="mailto:suicidepreventionlifeline.org">suicidepreventionlifeline.org</a>.

Wellness app: <a href="https://it.osu.edu/ohio-state-app-suite#ohio-state-wellness-app">https://it.osu.edu/ohio-state-app-suite#ohio-state-wellness-app</a>

**Title IX** makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <a href="http://titleix.osu.edu">http://titleix.osu.edu</a> or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at <a href="mailto:titleix@osu.edu">titleix@osu.edu</a>

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

## Student Advocacy Center <a href="http://advocacy.osu.edu/">http://advocacy.osu.edu/</a>

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

- 1. Online reporting form at <a href="equity.osu.edu">equity.osu.edu</a>,
- **2.** Call 614-247-5838 or TTY 614-688-8605.
- 3. Or Email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.

The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member."

The Ohio State University affirms the importance and value of **diversity** in the student body. *Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them.* We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Lyft Ride Smart at Ohio State offers eligible students discounted rides, inside the university-designated service area from 7 p.m. to 7 a.m. Prices may be impacted by distance, traffic, time of day, special events and prime time surcharges. To protect the health and safety of passengers, "shared" rides have been temporarily suspended to eliminate the possibility of users riding with another passenger they do not know. Users must now select "Lyft" as their shared ride option in personal mode to qualify for the university discount. Everyone should wear a face mask when using public transportation. Lyft has initiated additional health and safety measures through a Personal Health Certification program. Those with Lyft accounts can link their Ohio State student email to their account profile to qualify for discounted rides.

# Spring 2022 STAT 2450 Calendar

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Tuesdays	Thursdays	
January 10	January 13	
Chp.1 An Intro. to Statistics & Statistical Inference	2.1–2.3 Types of Data, Bar Charts, Pie Charts,	
	Stem-and-Leaf Plots	
January 17	January 20	
2.4 Frequency Distributions and Histograms	3.1,3.2 Measures of Central Tendency& Variability	
January 24 <u>HW 1 &amp; Qz. 1 Due M 1/23</u>	January 27 Short Review	
3.3 Empirical Rule, Measures of Position, Box Plots	4.1 Experiments, Sample Spaces, Events	
January 31 January Quiz (Chps.1, 2, 3)	February 3	
	4.2 An Introduction to Probability	
	4.3 Counting Techniques	
February 7 <u>HW 2 &amp; Qz. 2 Due M 2/6</u>	February 10	
4.4 Conditional Probability	5.4 The Binomial Distribution (with ref. to 5.1)	
4.5 Independence	6.2 The Normal Distribution (with ref. to 6.1)	
February 14	February 17	
6.3 Checking the Normality Assumption	6.4 The Exponential Distribution	
February 21 <u>HW 3 &amp; Qz. 3 Due M 2/20</u>	February 24 Short Review	
7.1 Statistics, Parameters&Sampling Distributions	7.2 Sampling Distribution of the Sample Mean	
	7.3 Distribution of the Sample Proportion	
February 28	March 3	
February Quiz (Chps. 4, 5, 6)	8.1 Point Estimation	
	8.2 Conf. Int. for a Pop. Mean when $\sigma$ is known (z)	
March 7 <u>HW 4 &amp; Qz. 4 Due M 3/6</u>	March 10	
8.3 Conf.Int.for a Pop.Mean when $\sigma$ is Unknown (t)	8.4 Confidence Interval for a Pop. Proportion	
March 14 - Spring Break	March 17 - Spring Break	
March 21	March 24	
9.1, 9.2 Parts of a Hypothesis Tests & Errors	9.3 Hypothesis Tests for a Pop. Mean when $\sigma$ is	
	Known (z)	
	9.4 P-Values	
March 28 Short Review HW 5 & Qz 5 Due M 3/27	March 31 Short Review	
9.5 Hypothesis for a Pop. Mean when σ is	9.6 Hypothesis Tests for a Pop. Proportion	
Unknown(t)		
April 4	April 7	
March Quiz (Chps. 7, 8, 9)	S.P. Check-In Day	
April 11	April 14	
11.1 One-Way ANOVA	12.1 Simple Linear Regression	
April 18 <u>HW 6 &amp; Qz. 6 Due M 4/17</u>	April 21	
12.2 Hypothesis Tests and Correlation	Short Review	
(Comp. Qz. Thursday, April 28 <sup>th</sup> 2:00p-3:45p)	(Comp. Qz. Thursday, April 28 <sup>th</sup> 2:00p–3:45p)	