STA 2023 Introduction to Statistics 1 (Online)
Spring 2021 Syllabus

Instructor: Bryant Davis

Email: davibf11@ufl.edu

Teaching Assistants:

Please contact through Canvas email.

Mirajul Islam and Lingxiao Zhou.

Course Website: https://elearning.ufl.edu

Online Office Hours / Tutoring

Canvas, Zoom Conferences. Typically on Tuesday and Thursday. Please check the office hours schedule here.

- Where: elearning conferences aka Zoom Conference
- We will work out three to five problems on the material related to the module and then take questions from those in attendance.
- You can also send me (davibf11@ufl.edu) questions prior to the session to be included. The sessions will be recorded for later viewing.
- After we finish going over the problems, if there is no one in attendance we will close the session.

Who to Contact for Help

Problem	**Contact**
Questions about grades or questions about actual exam questions.	Bryant Davis at davibf11@ufl.edu or through Canvas email.
Course Material – any questions from lessons, practice materials, projects etc. (any course material questions that you have about material in which you are not proctored).	Please post your question in the Canvas discussion board. Your question can be answered by other students, teaching assistants or the instructor.
Technical problem with videos or with quiz functions or other Canvas functionality.	UF help desk at http://helpdesk.ufl.edu/ or 352-392-4357

Course Objective

The primary goal of the course is to understand how the process of posing a question, collecting data relevant to that question, analyzing the data, and interpreting the data can help find answers to real world problems.

Course Description

STA2023 is an introductory course that assumes no prior knowledge of statistics but does assume some knowledge of high school algebra. Basic statistical concepts and methods are presented in a manner that emphasizes understanding the principles of data collection and analysis rather than theory. Much of the course will be devoted to discussions of how statistics is commonly used in the real world. There are two major parts to this course:

I Data – which includes graphical and numerical summaries to describe the distribution of a variable, or the relationship between two variables (chapters 1, 2 and 3, approximately 1 week), and data production to learn how to design good surveys and experiments, collect data from samples that are representative of the whole population, and avoid common sources of biases (chapter 4, 1 day.)

II Probability and Inference – using the language of probability and the properties of numerical summaries computed from a random sample (chapters 5, 6 and 7, approximately 2 weeks), we learn to draw conclusions about the population of interest, based on our random sample, and attach a measure of reliability to them (chapters 8, 9, 10 approximately 3 weeks).

Course Material by Week

Week 1	Getting to Know the Course
Week 2	What is Statistics?
Week 3	Exploring Data with Graphs; Measures of Center, Variability and Position
Week 4	Exploring Relationships between Two Variables; Simple Linear Regression
Week 5	Experimental and Survey Design; Probability Rules
Week 6	Normal Distributions; Binomial Distribution
Week 7	**Exam 1**; Sampling Distribution of the Sample Proportion
Week 8	Sampling Distribution of the Sample Mean; More Sampling Distributions
Week 9	Confidence Interval for the Population Proportion and Population Mean
Week 10	Sample Size Determination and More about Confidence Intervals; Significance Test for the Population Proportion
Week 11	Significance Test for the Population Mean
Week 12	**Exam 2**; Additional Concepts about Significance Tests
Week 13	Comparing Two Independent Proportions and Two Independent Means
Week 14	Comparing Means of Dependent Samples
Week 15	McNemar's Test and Permutation Tests
Week 16	**Exam 3**

Required Materials

- **Lecture Notes** – these are needed to follow along with the lectures.
  - Either print them from the course home page in Canvas under the "Lecture notes" link.
  - Or buy the Student Laboratory Workbook for Statistics: The Art and Science of Learning from Data, 4th Edition by Mocko and Ripol. You will also need to print out a small supplement from Canvas to go with the Workbook.
- **Scientific Calculator** – you will need a calculator with some basic statistical functions including mean and standard deviation. Many inexpensive calculators (around $16) have these functions; check the manual or look for the following symbols: $\overline{x}$ and either s or σ_{n-1}. Graphing calculators, TI-nspires or other smart devices are NOT ALLOWED on exams. Here is a list of some "non-graphing" scientific calculators for reference.
- **Reliable Computer** – that meets the requirements for online proctored exams by ProctorU. This includes having access to a high speed stable Internet connection and webcam.
- **Statistical Software Packages** – for the Mini Projects you will need to use a statistical software package. You can chose between three packages: artofstat.com (free online, accompanies the textbook), Minitab (free in UF Apps, see https://info.apps.ufl.edu/) or StatCrunch.com ($13.00 for 6 months). Some of the quizzes will also ask you to access artofstat.com.

Optional Materials

- **Textbook** – Statistics: The Art and Science of Learning from Data by Agresti, Franklin, Klingenberg, 4th Edition, Pearson, 2017. To access the textbook you can:
  - Purchase or rent the textbook hardbound new or used ISBN13: 9780321997838
  - Purchase as an etext ($50) from UF All Access using the MyLab and Mastering link on the left side menu of the Canvas home page. See instructions on this flyer. If you opt in, you will also have access to StatCrunch (statistical software package).

Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Instructor Course/Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via

https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Class attendance

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Grading Structure

Current UF grading policies for assigning grade points can be found at:

https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

For this course the methods by which you will be evaluated and your grade determined are given below.

Course Assessment

Assessment	Percent of Grade
Exam 1	22%
Exam 2	22%
Exam 3	22%
Mini Projects	17%
Quizzes	17%

Grading Scale

Letter Grade	Grade Points	Percentage of Points Needed
A	4.00	92 to 100%
A-	3.67	88.5 to 91.99%
B+	3.33	84.5 to 88.49%
B	3.00	80 to 84.49%
B-	2.67	78.5 to 79.99%
C+	2.33	74.5 to 78.49%
C	2.00	67.5 to 74.49%
D	1.00	60 to 67.49%
E	0.00	Below 60%

Please see the following webpage for UF grading policies for assigning grade points:

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

You must have a grade of a C or higher to get general education credit for this course.

Layout of the Course

The course is setup on a modular system.

- A module will be due most Wednesdays and Fridays, for a total of 24 modules in the course. Please check corresponding due dates here.
- Each MODULE will have the following components.
    - OVERVIEW page. This explains what material is covered in that module including pages to read out of the textbook and suggested homework problems.
    - LESSON. The lesson includes several 5 - 10 minutes videos with questions that reinforce the material. For these questions, you can re-do the questions until you get them correct. These do not count towards your grade.
    - QUIZ. For each quiz, you will have three attempts, the highest attempt counts. This is worth 10 points.
    - EXTRA EXAMPLES OR EXTRA RESOURCES. This is a list of additional support videos and handouts or instructions.

Lessons

You will be completing about 2-3 lessons each week. The lesson will include text and video about the day's assigned material. As you work through the material, you will be filling in the Lecture Notes. You should expect this lesson and the related quiz assignment to take you about 2 to 3 hours per lesson; however, this time may vary from student to student.

Quizzes

It is important to practice statistics in order to learn it. Each module has an online quiz that should be completed. The quizzes are worth 10 points each and are due by 11:59pm in the Eastern Time Zone. Some of these quizzes will have questions around a theme whereas others will have more independent questions. There are a total of 26 quizzes (24 module quizzes and 2 course surveys) available. The three lowest quiz scores will be dropped.

Suggested Homework

Suggested homework problems from the textbook can be found listed under each module page.

Mini Projects

In this course, there will be three individual mini projects. The Island mini project brings together all aspects of the course: data collection, experimental design and data analysis. More information and rubrics are provided in Canvas. The Island Project is worth 17% of your grade. There will be a 25% late penalty per day and not accepted after the 4th day. It is your responsibility to make sure that the assignment is uploaded into Canvas. The project is due at 11:59pm in the Eastern Time Zone. Academic dishonesty on any mini project will result in a grade of zero on that mini project.

Exams

There will be **three** online proctored exams. The exam will be multiple choice, drop down box and matching. Exams will cover a larger amount of material than the quizzes and will also place more emphasis in the understanding of concepts and ideas behind the formulas. For the exam, you will be allowed to have **one** blank sheet of paper and a **scientific calculator**. Graphing calculators, TI-nspires or other smart devices are **NOT** allowed. Formula Sheets, and appropriate tables (z and t tables) will also be available as a link in the instructions of the exam. You can find a link to the formula sheets under Module 1: Important Resource Formula Sheets for Exam (Fall/ Spring). Exams are not dropped. There are no retakes on exams.

Using a cell phone or other smart device during the exam is considered an honor code violation and will be reported to the honor court. There are no breaks during the exam. Leaving the proctored area during an exam is also considered an honor violation. Academic dishonesty on any exam will result in a grade of zero on that exam.

Online Exam Dates

Exam	Date	Time	Chapters in Book	Lecture Notes
Exam 1	Wednesday, February 17th (7am to 9pm EST start time) Must finish by midnight	Exam Length: 2 hrs.	Ch. 1 – Ch. 6 Sec. 3	You Print Notes p1-53
Exam 2	Wednesday, March 31st (7am to 9pm EST start time) Must finish by midnight	Exam Length: 2 hrs.	Ch. 7 – Ch. 9 Sec. 3	You Print Notes p54-92
Exam 3	Saturday, April 24th (7am to 9pm EST start time) Must finish by midnight	Exam Length: 2 hrs.	Ch. 9 Sec. 4- Ch. 10	You Print Notes p93-127

Makeup Exam Policy

Every effort should be made to take the exam during the open exam period. Only extreme situations will warrant a makeup exam. Contact the instructor prior to the exam - as soon as you realize you will be unable to take the test at the scheduled time. Each case will be reviewed individually. Valid and detailed documentation is a prerequisite for scheduling a makeup exam under such extenuating circumstances. There are no retakes on the exam, even if you were feeling badly during the exam. If you are feeling badly, you need to contact the instructor before the exam and provide a doctor's note.

If you have an emergency on the day of the exam, the instructor must be contacted by midnight of the day of the exam via email.

To make arrangements for a makeup exam: Contact the instructor at davibf11@ufl.edu. Makeup exams will cover the same material as the regularly scheduled exam but will not necessarily be in multiple choice formats.

ProctorU Information

You will be taking your exam through an online proctoring company. ProctorU is service that allows you to complete your assessment at any location while still ensuring the academic integrity of the exam for the institution. Using almost any web cam and computer, you can take exams at home, at work, or anywhere you have internet access. You will be connected to a live person during your exam that will be there to guide you through the process and assist with any technical problems.

I have provided some information below.

- ProctorU Live: Getting Started
- 6 Things to do before your exam with ProctorU

ProctorU Appointments

Appointments are required to use ProctorU and all appointments need to be made at least 72 hours in advance. Reservations made within 72 hours of your exam are subject to a $5 late reservation fee. There is also a "Take it Now" option that does not require prior reservation. However, it will cost you more money and there is a risk that an appointment space may not be available. You will need to make an account first if you have not already – go to https://www.proctoru.com/live-plus-resource-center and select "Create Account". After you have created your account, go to https://go.proctoru.com/session/new, log in, click on "new exam" and select the exam, date, and time that you want. You will receive a confirmation email of your reservation at the email address that you provided to ProctorU.

ProctorU Pre-Exam Checklist

- Test out your equipment, click "Requirements" on the ProctorU Resource Center (link above).
- Be in a well-lit room – must be daylight quality.
- Have your photo ID ready.
- Have a reflective surface such as a mirror, CD or DVD available.

ProctorU Procedure

- Plan ahead for your session.
- Make sure you have a quiet, private location in which to take the test.
- The area and room around your computer will be scanned using a web cam prior to your exam, so all non-authorized materials should be put away and the area should be clutter-free.
- You will be required to show picture identification to your proctor at the time of your exam. Approved forms of identification include, but are not limited to, a driver's license, military identification card, passport, or school-issued identification card.
- No breaks are allowed during your testing session and cell phones and other devices will not be permitted in the testing area.
- No other people are allowed in the area in which the test is being taken.
- Any unauthorized notes or other attempts to cheat will abort the test session and will be reported to your instructor.
- At the date and time of your appointment, return to http://go.proctoru.com, log in, and a message will appear saying, "You have an exam. Click here to begin." Click on this button and it will automatically take you to the proctor page. Fill out your personal information and hit submit. You will then be directed to a screen which will connect you to your proctor. Just follow the steps on the screen and a proctor will be connected with you shortly. Once connected, your designated proctor will walk you through the set-up process and you will log into your testing portal. Your proctor will also supply the password for your examination. Your exam time will begin when the proctor enters the examination password on your screen. If you have any problems connecting, please call ProctorU at 1-855-772-8678. Should you not be able to reach ProctorU via telephone you can use their live chat or email help@proctoru.com. If you have scheduled an exam and you are late, your proctor will attempt to call you at the phone number you provided when you scheduled your exam. Should there be any UF login issues at the time of your scheduled exam your proctor will contact the course instructor or course coordinator and you will be able to reschedule your exam if necessary.
- You may not take the exam at a café, on a plane, train or other public place.
- Make sure that your laptop is plugged in before starting the exam.

Question and Answer Discussion Board

We will be using the Canvas discussion board for questions. Please try to post questions with an appropriate heading, such as" lesson 1 page 9 question1" or "Mini Project Question 2" or "Interpreting R-squared". You can ask questions about lessons, videos, lesson quizzes, and homework questions. Please make sure that you do not select that respondents have to respond before seeing content.

DO NOT POST QUESTIONS ABOUT THE ACTUAL EXAM QUESTIONS online in or outside of the course in Canvas. An easy way to think about it is this, if you are not being proctored by ProctorU, you are free to post your question in the discussion board at any time. If you are asking a question about material while you are being proctored, please email me privately through email when you have finished the exam.

Students who post Exam questions or answers online will be penalized. It will be considered an honor violation.

Please send an email to the Instructor to discuss private matters such as grades, medical excuses, and DRC letters.

The discussion board is a positive learning environment to ask questions. Please be respectful of other students at all times. Do not use profanity or use this as a place to complain. Please be positive so that we can create a positive environment for everyone to learn.

Course Policies

Academic Dishonesty: UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (sccr.dso.ufl.edu/process/student-conduct-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Extensions: Because it is possible to complete the lessons and quizzes early and that there are three drops, no extensions will be given on assignments unless there is prolonged hospitalization. All quizzes are open from the beginning of the semester so students can work ahead if they need to, since all the material is also available as online interactive lessons posted from the start. Please complete the quizzes early if you have travel plans, religious observances, sports or club events, or any other conflict whether approved by the university or not.

Extenuating Circumstances: Sometimes students may be unable to complete their quizzes due to extended hospitalization or illness, or some catastrophic event. In these cases the student must meet with the Course Coordinator in person with all the appropriate documentation to discuss the situation. Each case will be reviewed individually.

Privacy Policies: Student records are confidential. Only information designated "UF directory information" may be released without your written consent. UF views each student as the primary contact for all communication. If your parents contact me about your grade, attendance or other information that is not "UF directory information", I will ask them to contact you.

Email: Email relating to information about the class should be sent to the instructor at davibf11@ufl.edu or through the course management system. If your questions are about your grade or of a personnel nature, please email me directly. Your message will be answered within one to two working days, in most cases. However, I ask you to please refer to this Syllabus and the course website to try to find the answers for yourself. Questions regarding the material covered should be asked on the Canvas discussion board. This way everyone can benefit from your questions.

Grading: Grades will be changed only when an error has been made; negotiation is not appropriate.

Incomplete: Incomplete grades are only assigned when extraordinary circumstances (such as an accident, or extended hospitalization), after more than 2/3rds of the course has been completed and prevent the student from completing the course requirements. Having a failing grade in the course is not a valid reason for requesting an Incomplete.

Where to Get Help for this Course

- During Online Office Hours
- Discussion board in Canvas
- Via emails to the instructor at davibf11@ufl.edu

How to Do Well in the Course

- Keep up with the lessons. Set a schedule for yourself and stick with it.
- Visit the course website regularly to read announcements on the course homepage.
- Do well on the lessons and quizzes.
- Attend/watch the online office hours to get help from your instructor and the TA. Our job is to answer any questions that you may have, and to help you understand the material and learn to do the problems.
- Get to know other students in the class and get together regularly to work on homework problems, and to study for quizzes and exams. Please remember to be professional in your conversations. Please respect each other and refrain from profanity.
- Prepare carefully for exams by going over the lessons, doing your suggested homework problems, studying your quizzes and reading the book. Pay special attention to the understanding of concepts and ideas behind the formulas.

How to Get the Most Out of the Online Course

- Set aside time each day to complete the lessons.
- You should watch and read the lessons on a regular schedule.
- Complete the lessons and then do the quiz.
- Actively involve yourself in the lesson. Be inquisitive. Work out the problems presented in the videos. Learning is not a spectator sport. Jump in and work on the problems.
- Watch the lecture videos and complete the lessons in a low disruption environment. In addition, to watching the lecture, you should not be also texting, instant messaging, emailing, reading a website, watching TV, etc. Your attention should be focused on the lesson.
- I have carefully considered what needs to be discussed in the lessons. Make sure that you are paying attention to all of it.

Problems

Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See http://distance.ufl.edu/student-complaints for more details.

- First, please contact the instructor first via email at davibf11@ufl.edu
- If necessary, after that, please contact the chair of the Statistics department at 352-392-1941.
- If necessary after that, should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

General Course Information

This course satisfies general education credits in the mathematical sciences. Students learn how to summarize data and how to make appropriate decisions based on data. (This course is the general education category of M.)

General Education Objective (Mathematics)

Courses in mathematics provide instruction in computational strategies in fundamental mathematics including at least one of the following: solving equations and inequalities, logic, statistics, algebra, trigonometry, inductive and deductive reasoning. These courses include reasoning in abstract mathematical systems, formulating mathematical models and arguments, using mathematical models to solve problems and applying mathematical concepts effectively to real-world situations.

In this course, this objective will be met by . . .

During the semester the students will be given an introduction to the three main aspects of statistics: design (of experiments/surveys), description (of data collected) and inference (the extension of conclusions from the data gathered in the sample to the larger population). These concepts will be presented through lectures two times a week and three mini projects. They will also learn about the normal and binomial distributions as well as the methodology of confidence intervals and significance tests. From the methods that they learn in class they will be able to critique real world surveys and experiments, interpret graphs in newspapers and magazines as well as conduct basic statistical inference for one or two groups.

General Education Student Learning Outcomes (SLOs)

Content: Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.

Communication: Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.

Critical Thinking: Students analyze information carefully and logically from multiple perspectives, using discipline specific methods and develop reasoned solutions to the problems.

In this course, these SLOs will be met by . . .

Content: Students will learn critical terminology, concepts, methods, and theories during lecture. These concepts will include terminology to describe one and two samples, discuss surveys/experiments, basic probability theory, sampling distributions, and one and two group inference. The students will be assessed on these terms and concepts during the **lessons, quizzes and the three exams**. Students will also demonstrate their competence in identifying the appropriate formulas to use for each situation and using those formulas correctly.

Communication: The students will use verbal and written communication to discuss central statistical concepts in the **mini projects**. These concepts include description of data sets, sampling methods and interpretations of inference methodology.

Critical Thinking: The students will be asked to critically think about trustworthiness of surveys and experiments presented in the media. Additionally, students will learn how to conduct significance tests, a statistical method to logically determine if there is enough evidence for a hypothesis. Students will learn how to state the null and alternative hypotheses (different perspectives) and then to use the data collected to determine if there is enough evidence to support the alternative hypothesis using methods central to the field of statistics. **The students will be tested on these concepts in their lessons, quizzes and on the exams.**

Campus Resources

Health and Wellness

U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

*Counseling and Wellness Ce*nter: https://counseling.ufl.edu/, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS): Student Health Care Center, 392-1161.

University Police Department: 392-1111 (or 9-1-1 for emergencies). http://www.police.ufl.edu/

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. *https://career.ufl.edu/*

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/

Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

Textbook Chapters Covered

Chapter 1	Statistics: The Art and Science of Learning From Data 1.1 Using Data to Answer Statistical Questions 1.2 Sample versus Population
Chapter 2	Exploring Data with Graphs and Numerical Summaries 2.1 Different Types of Data 2.2 Graphical Summaries of Data 2.3 Measuring Center of Quantitative Data 2.4 Measuring the Variability of Quantitative Data 2.5 Using Measures of Position to Describe Variability
Chapter 3	Association: Contingency, Correlation, and Regression 3.1 The Association Between Two Categorical Variables 3.2 The Association Between Two Quantitative Variables 3.3 Predicting the Outcome of a Variable 3.4 Cautions in Analyzing Associations
Chapter 4	Gathering Data 4.1 Experimental and Observational Studies 4.2 Good and Poor Ways to Sample 4.3 Good and Poor Ways to Experiment 4.4 Other Ways to Conduct Experimental and Nonexperimental Studies
Chapter 5	Probability in Our Daily Lives 5.1 How Probability Quantifies Randomness 5.2 Finding Probabilities 5.3 Conditional Probability: The Probability of A Given B 5.4 Applying the Probability Rules
Chapter 6	Probability Distributions 6.1 Summarizing Possible Outcomes and Their Probabilities 6.2 Probabilities for Bell-Shaped Distributions 6.3 Probabilities When Each Observation has Two Possible Outcomes
Chapter 7	Sampling Distributions 7.1 How Sample Proportions Vary Around the Population Proportion 7.2 How Sample Means Vary Around the Population Mean
Chapter 8	Statistical Inference: Confidence Intervals 8.1 Point Estimates of Population Parameters 8.2 Constructing a Confidence Interval to Estimate a Population Proportion

	8.3 Constructing a Confidence Interval to Estimate a Population Mean 8.3 Choosing the Sample Size for a Study 8.5 How Do Computers Make New Estimation Methods Possible?
Chapter 9	Statistical Inference: Significance Tests about Hypotheses 9.1 Steps for Performing a Significance Test 9.2 Significance Tests about Proportions 9.3 Significance Tests about Means 9.4 Decisions and Types of Errors in Significance Tests 9.5 Limitations of Significance Tests
Chapter 10	Comparing Two Groups 10.1 Categorical Response: Comparing Two Proportions 10.2 Quantitative Response: Comparing Two Means 10.3 Other Ways of Comparing Means and Comparing Proportions 10.4 Analyzing Dependent Samples