# First-Day Handout for Students <br> MATH 1342 Elementary Statistics 

Spring 2015

| Synonym and Section: |
| :--- |
| $1342.010 \quad$ synonym 25995 |
| $1342.024 \quad$ synonym 26009 |
| Online Distance Learning |
| Instructor: Dr. Mary Parker |
| Office Number: HLC 1431 |
| Phone: 512-522-1281 |
| (for messages) |
| Email: mparker@austincc.edu |
| Web: www.austincc.edu/mparker |

## Office Hours:

MTWTh: 9:30-9:45 am HLC ACCelerator lab
MTWTh: 11:30-11:45 am HLC ACCelerator lab
MTWTh 11:45 am - 12:15 pm HLC 1431
MW 12:45-1:00 pm HLC Accelerator lab
MW 2:45-3:00 pm HLC ACCelerator lab
Thursday 12:15-1:15 pm HLC 1431
I will be available to answer email and return calls for at least two hours each of these times: Tuesday, Thursday, Saturday, and Sunday afternoon.

By appointment: Email to request an appointment at least a day in advance. Please suggest some choice of times.
http://courses.bfwpub.com/bps6e.php (StatsPortal)
http://acconline.austincc.edu/ (Blackboard Discussion Board and main Gradebook.)
http://www.austincc.edu/mparker/software/data/ (data files for our text and brief guides to Minitab and CrunchIt)

Course Description: A first course in statistics for students in business; nursing; allied health; or the social, physical, or behavioral sciences; or for any student requiring knowledge of the fundamental procedures for data organization and analysis. Topics include frequency distributions, graphing, measures of location and variation, the binomial and normal distributions, z-scores, t-test, chi-square test, F-test, hypothesis testing, analysis of variance, regression, and correlation. Skills: S Prerequisites: A satisfactory score on the ACC Mathematics Assessment Test. A second option is completion of any TSI-mandated mathematics remediation.

Note: Texas State University recently changed their Transfer Guide to show that MATH 1342 is no longer considered equivalent to their QMST 2333 (Quantitative Methods). ACC's BUSG 2371 is the correct equivalent to that course, which is needed for most majors in business.

Statement of Prerequisite Requirements: Students in MATH 1342 will be expected to:

1. understand material from the text after reading it.
2. do homework using fairly complicated formulas after seeing one example
3. do some, but not much, algebraic manipulation of formulas

Required Materials: (See further details about each of these on the class website
http://www.austincc.edu/mparker/1342/ and follow the links to this class.)

- Access to the StatsPortal, a web-based portal for this text. It includes an online version of the textbook:

The Basic Practice of Statistics, $6^{\mathrm{h}}$ ed., by David S. Moore. DO NOT purchase the e-book or rent a book. Those do not include StatsPortal.

- Minitab statistical software. Rent it for $\$ 30$ for six months from http://www.minitab.com/enUS/academicl (Minitab 17 for those with PC computers and Minitab Express for those with Macs.)
- Scientific calculator (You will not be allowed to use a graphing calculator on tests.)

Instructional Methodology: This course is taught as an Internet-based distance learning class.
Course Rationale: Students will learn to

1. Determine the aspects of a question, if any, for which statistics can provide relevant information.
2. Analyze statistical studies, particularly regarding appropriate sampling and experimental design.
3. Select and use appropriate statistical analyses to get useful information from data.
4. Communicate knowledge using standard statistical language and also interpret it in non-technical language.
This course meets the Core Curriculum requirement in mathematics. It meets the requirement for an introductory statistics course for students in many majors such as business, health sciences, and social sciences.

## Course Student Learning Outcomes (SLOs):

Upon successful completion of this course, students will:

1. Explain the use of data collection and statistics as tools to reach reasonable conclusions.
2. Recognize, examine, and interpret the basic principles of describing and presenting data.
3. Compute and interpret empirical and theoretical probabilities.
4. Explain the role of probability in statistics.
5. Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables.
6. Describe and compute confidence intervals.
7. Solve linear regression and correlation problems.
8. Perform hypothesis testing using statistical methods.

## The General Education Competency of

1) Critical Thinking - gathering, analyzing, synthesizing, evaluating and applying information - is covered in every SLO.
2) Quantitative and Empirical Reasoning - applying mathematical, logical, and scientific principles and methods - is covered in every SLO.
3) Technology Skills- using appropriate technology to retrieve, manage, analyze, and present information is covered in SLOs \# 2, 3, 5, 6, 7 and 8.
4) Written, Oral and Visual Communication - communicating effectively, adapting to purpose, structure, audience, and medium is covered in every SLO.

## Learning Objectives:

1. Interpret ideas of population versus sample, random variables, and techniques of descriptive statistics including frequency distributions, histograms, stem and leaf plots, boxplots, and scatterplots.
2. Calculate and interpret measures of central tendency and dispersion, including mean, median, standard deviation, and quartiles.
3. Apply the 68-95-99.7 rule to normal distributions and use the normal tables to answer questions about the proportion of scores in a certain range or find various percentiles.
4. Analyze relationships between two quantitative variables using correlation and linear regression. Analyze residual plots and determine how to handle outliers and influential points.
5. Analyze data presented in two-way and three-way tables to provide information about relationships between categorical variables, including understanding and interpreting situations to which Simpson's Paradox applies.
6. Apply ideas of appropriate sampling techniques and experimental design to data production.
7. Use the basic ideas of probability and apply them to statistics.
8. Use the sampling distributions of sample proportions and sample means to answer appropriate questions.
9. Estimate single means, difference of two means, single proportions and difference of two proportions using confidence intervals. Interpret the results.
10. Demonstrate skills in hypothesis testing for means and proportions, for single populations and comparison of two populations.
11. Demonstrate skills in hypothesis testing using the chi-squared test to compare several proportions and to test independence.
12. Demonstrate skills in inference for regression or ANOVA techniques.

Throughout the course, students will learn to do almost all the calculations by hand with a scientific calculator on small data sets and also students will learn to use a substantial statistical computer software package to do the statistical calculations quickly and on larger data sets. Some of the regression inference analyses will not be done by hand.

## How to learn the material:

It is crucial that you do three things.

1. Receive some instruction. (Work through the lesson.)
2. Work some problems for which you can immediately compare your work with the solutions. (Homework)
3. Work some problems for which solutions are not immediately available. (Quizzes)

Students who struggle with this course are almost always trying to get by with little to no work on one of these three - usually the second one and then they get very stuck in the third one.

Often students develop a pattern of work during the first three weeks which may include skipping some parts of the materials. Sometimes the students persist in using that pattern even after it is clear that they need more help. Such students usually fail if they don't modify their pattern of work enough. If you are struggling, please talk with me very soon so that I can help you be as efficient and effective in your learning as possible.

## Required Activities:

Students taking a three-credit college math class in a 16 -week semester are expected to work in and out of class about 9-12 hours per week. To be most effective, this should be spread over at least three different days each week.

1. Time requirement per week in this Distance Learning Course:
a. 1-2 hours. Carefully compare your quiz work for the previous week to the solution keys to find any areas that you did not fully master. Work more on those and ask questions about it on the Discussion Board in the current week.
b. 3 hours: Work through the instructor prepared lessons.
c. 3-4 hours: Work on homework problems and ask and answer questions on the Discussion Board. (It is probably a good idea to combine this with working through the instructor-provided lessons, spending 6-7 hours on the combination of these.)
d. 3 hours: Work on the two parts of the quiz.
2. Approximately every four weeks, take a paper-and-pencil test in the Testing Center. They are not timed, and most students spend about 1.5-2 hours on a test. You may have to wait in line at your Testing Center, particularly toward the end of the semester and in the late afternoons and evenings. DO NOT enter the Testing Center to take a test unless you have at least 2 hours available to take it.

## Testing:

Test 1: Chapters 8, 9, Data Ethics, 1, 2
Test 2: New material is chapters $4,5,6,3,10$ (Also includes some previously-covered material)
Test 3: New material is chapters $11,14,15,16,18$.
(Also includes previously-covered material from 1, 2, 3, 8, 9, 10)
Test 4 / Final Exam: New material is chapters 19, 20, 21, 23, 24 (Also includes all previously-covered material, especially from Chapters 16 and 18.)

A substantial majority of credit on each test will come from questions similar to those in the sections called "Chapter _ Exercises." A few multiple-choice questions will be included - usually less than 30\% of the credit. Many of the questions will emphasize interpretations.

Tests are given in the Testing Centers during the times indicated on the Detailed Course Calendar. I will only send your test to the campus you indicate to me on your orientation assignment, so please give me notice well in advance if you ever need to change campuses. I will post more specific test information a week prior to each test, but in general you will be allowed to bring about half a page of handwritten notes in that can include definitions and formulas (but not specific examples). You must turn in those notes with your test and I will review them.

The final exam will have a "take-home" part for you to do using Minitab, worth between $20 \%$ and $30 \%$ of the credit for that exam. It will be provided ten days before it is due. Submit that in Blackboard in the same manner that you submit the Quiz, Part 2 assignments.

If you wish to take a test early, please tell me at least one week prior to the date you wish to take the exam. You will have a full week available in which to take each test, but you are expected to go on to learn new material during that week.

Bring your ACC ID to the Testing Center but do not bring a cell phone into the Testing Center, even if it is hidden and turned off. That is a serious infraction of the Testing Center rules, with severe mandatory penalties. You will need a scientific calculator on your exams. The Testing Center can provide you with one if you forget yours or do not have one. You will not be allowed a graphing calculator on exams.

Please read the other Testing Center Guidelines before taking a test. The ACC Testing Center policies, as well as locations and hours, can be found from http://www.austincc.edu/testctr/

No make-up tests or retesting. Avoid planning to take the test on the deadline date, and only use that last day if you tried to take it before and had car trouble or a long line at the Testing Center. If it is in the last month of the semester and you do go in the late afternoon or evening, allow a GENEROUS allowance for time to sit in line at the Testing Center.

Despite this, NEVER start a test unless you have at least 2 hours available before the Testing Center closes and never take a test when you feel ill or too distracted to be taking a test. Email me if you run into these difficulties when you planned to take the test on the last day, and, within 24 hours, I will respond. (If it is less than 24 hours until the test deadline, don't just take the test because I didn't respond immediately! Assume that I will respond and give you a chance to take it the following day.) Obviously you must resolve all these problems quickly in order to be able to take the test the following day. We can discuss that. You are also expected to have a good reason for waiting until the last day and also to be committed to not need such help again in the semester.

I will replace the lowest test grade on the first three tests with the fourth test grade, if that fourth test grade is higher.

For security reasons, tests will not be returned and solutions will not be posted. You are welcome to view your tests and ask questions about them during any of my office hours. Please give me advance notice so that I can be sure to have your test with me. We can also make a telephone appointment after the test grades are posted to discuss test questions.

## Quizzes:

Quizzes will be taken/submitted electronically. Each quiz has two parts and each is graded on a scale of $0-100$. Each part may be submitted more than once. I expect you to submit it the first time by Thursday night of that week and the final time by Sunday night at the end of the week. I will drop the lowest two quiz grades of each part when I average grades. You may not discuss the quiz questions on the Discussion Boards until after the absolute deadline to submit the quiz, so that means the quiz discussion is in the NEXT week's Discussion Board Forum.

Each of the quizzes is graded in a substantially more lenient way than tests are graded. Students' desire to be perfect on every quiz problem they submit is one of the main reasons students fall behind and eventually withdraw or fail. The point of the lenient grading is to encourage you to submit all required work every week on time.

Quiz, Part 1: Take this online in StatsPortal. You are allowed two tries and your grade is the average of those two tries.

It will consist of multiple choice and short answer questions. You can start it and then save it to finish later. Please do note that some of the questions "re-generate" when you look at it another time, so do look over all of your answers just before you submit it. The answers are available each time you submit it.

Quiz, Part 2: Submit this in Blackboard Assignments. It may be submitted repeatedly before the deadline and only the last submission will be graded. (Be sure to check before the deadline that you can see the submission, that you submitted the correct file and didn't leave out any problem.)

The questions on these will be in the style of the exercises at the end of each chapter. You will be required to use MINITAB on some of these problems. (Using Minitab is an important part of the course.) Part 2 of the quiz should be prepared as a single word-processing document (saved in one of these formats: doc, docx, or pdf) and uploaded to the appropriate box. You can prepare these in any of a variety of word-processing programs, but do save them to one of these formats before you submit them. Put your name at the top of the first page of your file and also, in the name of the file itself, include your last name and quiz number.

Do NOT type your solutions directly into the textbox on when you submit your quiz. Relevant MINITAB output should be copied into your document and also interpreted. I grade what you show that you understand from the output - not only whether you can produce the output.

Each week the solution key for the Quiz, Part 2 will be posted a couple of hours after the absolute deadline of Monday at 11:00 pm.. It will include a list of how much I would have taken off for each part if this were a test question. When I actually grade the quizzes, I will grade some parts of some of the problems "on completion." That means that if you attempt that part of the question, you will earn credit, even if it wasn't correct. This is to encourage you to try each problem instead of spending too much time on one or two of them. It is also to make it clear that it is much better to submit something than nothing,
even if you have not fully mastered the material. When you try each problem, even if some of the solutions are not correct, you are in much better shape to learn from the solution key and Discussion Board about these problems.

## Homework and Homework Discussion Board:

Homework which is not submitted for a grade: Each week I will give you a homework list of odd numbered problems to work on paper in a notebook to use as practice. Solutions to these are provided in the text. Working through these, comparing your work with the solutions, and discussing them on the Discussion Board is probably the most crucial part of your work in the course. Keep your work on these problems and on the online homework problems well-organized in a notebook, with enough space between problems to take notes and write comments later. Then, as you read the Discussion Board (described below) take notes on your homework paper in the appropriate places. Your homework notebook should be helpful to you in working on the quiz and in studying for the tests.

Part of the work you must be doing is to learn which problems are solved in similar ways. I know that you will have questions about the quiz problems. Your first step with each of those questions is to find a homework problem or example that is similar and read that solution. Then ask your question in terms of that homework problem or example.

Homework Discussion Board Forum is submitted for a grade: Each week, a Forum is posted in the Discussion Board. This is a whole-class discussion of the examples in the textbook, the paper homework for the week, and the questions about any of the other resources provided in the course. It is also acceptable to discuss the odd-numbered exercises in the book that are not homework questions, but not any of the even-numbered problems in the book.

This should be the first place you go to get help on the material in the course. First see if there is already a thread about the example or concept or homework problem you want to discuss. If so, join that thread and make your comments in it. If not, start a new thread, and make the subject line clear what example, homework problem, or concept you are discussing.

To earn credit for the week, post at least three times:

- at least one question or comment about the previous week's quiz solutions. (In Week 1, this should be about material in the Orientation, Parts 1, 2, and 3.)
- at least one substantive question or one substantive comment on the current week's material further explaining some concept or something that you learned about MINITAB or something that you learned from one of the extra resources. "Substantive" means that it must describe exactly what you were doing as you tried to solve the problem and your comment about why you think it is not correct.
- at least one substantive response to someone else's question on the current week's material.

These types of comments and questions don't count: "I agree with your answer" or "I don't understand this concept." This also doesn't count for credit: a question like "How do you work problem __?" without any description of how you tried to work it and what you found confusing when you compared your work with the solution.

Also questions about the organization of the course or where to find things don't count for credit. It's OK for you to post comments like these - just don't expect them to earn credit. Do not mention anything about a test at all or anything about a quiz problem or any even-numbered problem in the text (unless it was on the homework) before the final quiz deadline for that week.

I will read the Discussion Board at least twice a week, but will not necessarily make comments. (When I make comments, it cuts off opportunities for other students to answer, so I try to do that fairly sparingly. On the other hand, I will intervene if I see that a large percentage of the class is confused.) If there is anything that you
specifically want me to comment on, please email me and describe specifically where to find it. (Be very sure to include your section number in your email so I know which course to look in.) I will read it and reply - either on the Discussion Board or to you privately.

When you start a thread, make the subject line clear about which exercise or example it is about. If it is about a concept instead of an exercise or example, make the subject line clear about which concept. If someone has already posted about that exercise, example, or concept, please reply in that thread, so that the discussion board is well-organized for everyone.

Discussion Board Forums will generally be open on Wednesday before the week begins. Questions you want answered must be in by Saturday at 11:00 p.m. and then everything you want to submit "for credit" must be in by Sunday at 11:00 p.m. The forum is available until the absolute quiz deadline time on Monday so that you can still read from it and revise your quiz answers.

There are 15 Discussion Board Forums and a special forum on Data Ethics. Appropriate participation is required in 13 of them for full credit in this part of the course. Missing more than two of them may result in your being withdrawn from the course.

## *You are not allowed to post about quiz problems on the Homework Discussion Board Forums before the quiz deadline. Post general questions about practice problems or resources in the course or about concepts.*

If you have a question, before the deadline, about a quiz question and cannot find a similar enough oddnumbered problem to discuss on the Discussion Board, please email me individually. And expect that the answer you receive will be about finding an example or homework question or other material from the text to help you approach the quiz question. Do not expect that I will tell you, before the deadline, whether you are thinking about the quiz problem correctly.

## Grading:

I will do my best to grade assignments within a week of the due date. Tests will take a bit longer because they must be mailed to me from the Testing Centers.

| Percentage |  |
| ---: | :--- |
| $12 \%$ | Quizzes |
| $6 \%$ | Homework Discussion Board |
| $60 \%$ | Tests 1-3 (20\% each) |
| $22 \%$ | Final Exam |

Scale: A: $90.0-100 ; \quad$ B: 80.0-89.9; $\quad$ C: $70.0-79.9 ; \quad$ D: $60.0-69.9 ; \quad$ F: below 60.0

## Extra credit:

Frequently, toward the end of the semester, students ask whether there is something they can do for extra credit. At that point, it is too late - students barely have time to do the required work without anything extra. Moreover, in terms of fairness, any extra credit assignments should be made available to the entire class, with time for them to prepare. My "extra credit" is that you can get a grade boost for excellent performance in the following way: Borderline grades are those that are no more than 2.0 points below the cut-off. For students with such grades, I will review their performance on the expected things that are not directly addressed in grading: the timing and quality of their first quiz submissions each week and the timing and quality of their Discussion Board contributions. I will use those to determine whether to give any extra credit toward the higher letter grade. If you have any question in any week about how well you are meeting those expectations that aren't addressed in grading each week, please ask me.

## Class Rules:

1. Questions about the content of the course should be directed to the Homework Discussion Board Forums rather than to the instructor individually, since both the question and answer are likely to be of interest to other students. Questions about quizzes before the deadline or tests or questions specifically for the instructor should be emailed to the instructor and not posted on the Discussion Board.
2. Class discussion must be courteous and appropriate.

- Discussion on the class boards and email list must focus on the course material and the subject of statistics.
- Sending jokes and other non-course related material to others whose email address you have obtained from this class is not allowed, unless you have specifically asked the person if it is OK to do this and they have agreed.
- No flaming is allowed, either on the class bulletin board or in email messages. Remember that we are all here to learn and everyone's opinion will be respected. Conduct yourself in a manner that would be appropriate in a professional job. Your tone can be conversational, but not as casual as talking or texting with friends.
- Avoid using all capital letters, because that is SHOUTING and encourages readers focus on emotions rather than the thoughts expressed.
- Be mindful that humor and sarcasm can easily be misinterpreted in print.

3. All Quiz and Discussion Board deadlines are enforced very strictly.

- We have a full week's worth of important material EVERY WEEK, so if you get behind, you are likely to have to withdraw. Some weeks you may not do as good a job as in other weeks, and that is understandable. Turn in your preliminary work on each quiz by Thursday and your final work on each quiz by Sunday even if it is not perfect. The Monday absolute deadline is only for people who have computer problems or have some emergency come up on Sunday. If you need flexibility in your schedule, then get ahead - the lessons are available a week in advance, and can be made available two weeks early if you ask at least two days before you want to see them.
- I have set each of the deadlines to be a day or so later than I originally intended, so the flexibility you might want is already built into the deadlines. Provisions are already made for your missing some discussions, quizzes, and even a test.
- If you are unexpectedly unavailable for an entire week and unable to turn in anything at all on either part of the quiz, you will be happy that I do drop some quiz grades. But then it is ESSENTIAL that you go on to the next week's material immediately so that you don't miss it as well and wind up having to withdraw.
- If you miss the Part 1 quiz, then you won't be able to see it at all. I recommend that you at least open it and try it - even if you think you won't do well. If you do that, then you will at least have seen the types of problems covered on it and have the opportunity to look at it for later study.
- If you enroll in the class late, you are subject to the same rules as students who enrolled in the class before the class began. The standard grading scheme, including the extra day on each week's quiz deadline, allows enough flexibility for all students to make up a reasonable amount of missed work.
- If you wish to withdraw from or be reinstated in the class, you must adhere to the deadlines as given in the college catalog and in this handout, under "Withdrawals".

4. Collaboration: I encourage you to work with other students, tutors, and all the material available to you on homework and all activities except quizzes and tests. The work you turn in on quizzes and tests must
be your own. Anything else is cheating and cheating will not be tolerated.
5. Communication with the instructor: If you need to email me you must use your ACC email and the subject line must start with DL+ 1342.+ section number + last name. For example, if the author of our book were in section 003 of our class, the subject line of his emails should start with "DL1342.003moore". This is to help me find your emails amidst the hundreds of others I receive.

## Course-specific support services:

ACC main campuses have Learning Labs which offer free first-come first-serve tutoring in mathematics courses. Not all mathematics tutors can tutor statistics. Check the lab schedule to see when statistics tutors are available. Students should bring their course handouts and notes when they come to the Learning Lab. The locations, contact information, and hours of availability of the Learning Labs are available from http://www.austincc.edu/tutor/

MATH 1342 Lab class (optional): Starting the week of Feb. 16, 2015 we have a weekly tutoring lab for students in any section of MATH 1342, meeting in HLC on Fridays noon - 2:25 p.m. Register for MATH 0159 , section 001, synonym 22590 , no later than Feb. 9.

## Attendance and withdrawals:

Attendance is this Distance Learning course is measured by completing the required work each week. The final withdrawal date for Spring 2015 is Monday, April 27, 2015. Students who miss any of the following may be withdrawn by the instructor: (1) missing one test and failing to communicate with the instructor about that within three calendar days after the deadline;
(2) not submitting on time three of the Part 2 Quizzes, (3) not submitting on time three Part 1 Quizzes, OR (4) missing any two weeks of Homework Discussion Board work.

## Reinstatement Policy:

Reinstatements are only done if the instructor made a mistake in noticing what work was actually missed. The last date for reinstatements for Spring 2015 is Monday, April 27, 2015.

## Course Policies

## Attendance/Class Participation

Regular and punctual class and laboratory attendance is expected of all students. If attendance or compliance with other course policies is unsatisfactory, the instructor may withdraw students from the class.

## Withdrawal Policy

It is the responsibility of each student to ensure that his or her name is removed from the roll should he or she decide to withdraw from the class. The instructor does, however, reserve the right to drop a student should he or she feel it is necessary. If a student decides to withdraw, he or she should also verify that the withdrawal is submitted before the Final Withdrawal Date. The student is also strongly encouraged to retain their copy of the withdrawal form for their records.

Students who enroll for the third or subsequent time in a course taken since Fall, 2002, may be charged a higher tuition rate, for that course.

State law permits students to withdraw from no more than six courses during their entire undergraduate career at Texas public colleges or universities. With certain exceptions, all course withdrawals automatically count towards this limit. Details regarding this policy can be found in the ACC college catalog.

## Incompletes

An instructor may award a grade of "I" (Incomplete) if a student was unable to complete all of the objectives for the passing grade in a course. An incomplete grade cannot be carried beyond the established date in the following semester. The completion date is determined by the instructor but may not be later than the final deadline for withdrawal in the subsequent semester.

## Statement on Scholastic Dishonesty

A student attending ACC assumes responsibility for conduct compatible with the mission of the college as an educational institution. Students have the responsibility to submit coursework that is the result of their own thought, research, or self-expression. Students must follow all instructions given by faculty or designated college representatives when taking examinations, placement assessments, tests, quizzes, and evaluations. Actions constituting scholastic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, collusion, and falsifying documents. Penalties for scholastic dishonesty will depend upon the nature of the violation and may range from lowering a grade on one assignment to an " F " in the course and/or expulsion from the college. See the Student Standards of Conduct and Disciplinary Process and other policies at http://www.austincc.edu/current/needtoknow

## Student Rights and Responsibilities

Students at the college have the rights accorded by the U.S. Constitution to freedom of speech, peaceful assembly, petition, and association. These rights carry with them the responsibility to accord the same rights to others in the college community and not to interfere with or disrupt the educational process. Opportunity for students to examine and question pertinent data and assumptions of a given discipline, guided by the evidence of scholarly research, is appropriate in a learning environment. This concept is accompanied by an equally demanding concept of responsibility on the part of the student. As willing partners in learning, students must comply with college rules and procedures.

## Statement on Students with Disabilities

Each ACC campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic or other accommodations must request them through Student Accessibility Services (SAS, formerly OSD). Students are encouraged to request accommodations when they register for courses or at least three weeks before the start of the semester, otherwise the provision of accommodations may be delayed.

Students who have received approval for accommodations from SAS for this course must provide the instructor with the 'Notice of Approved Accommodations' from SAS before accommodations will be provided. Arrangements for academic accommodations can only be made after the instructor receives the 'Notice of Approved Accommodations' from the student.

Students with approved accommodations are encouraged to submit the 'Notice of Approved Accommodations' to the instructor at the beginning of the semester because a reasonable amount of time may be needed to prepare and arrange for the accommodations.

Additional information about Student Accessibility Services is available at http://www.austincc.edu/sas/

## Safety Statement

Austin Community College is committed to providing a safe and healthy environment for study and work. You are expected to learn and comply with ACC environmental, health and safety procedures and agree to follow ACC safety policies. Additional information on these can be found at http://www.austincc.edu/ehs. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the Emergency Procedures poster and Campus Safety Plan map in each classroom. Additional information about emergency procedures and how to sign up for ACC Emergency Alerts to be notified in the event of a serious emergency can be found at http://www.austincc.edu/emergency/.

Please note, you are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

You are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be immediately dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

## Use of ACC email

All College e-mail communication to students will be sent solely to the student's ACCmail account, with the expectation that such communications will be read in a timely fashion. ACC will send important information and will notify you of any college related emergencies using this account. Students should only expect to receive email communication from their instructor using this account. Likewise, students should use their ACCmail account when communicating with instructors and staff. Instructions for activating an ACCmail account can be found at http://www.austincc.edu/accmail/index.php.

## Testing Center Policy

Under certain circumstances, an instructor may have students take an examination in a testing center. Students using the Academic Testing Center must govern themselves according to the Student Guide for Use of ACC Testing Centers and should read the entire guide before going to take the exam. To request an exam, one must have:

- ACC Photo ID
- Course Abbreviation (e.g., ENGL)
- Course Number (e.g.,1301)
- Course Synonym (e.g., 10123)
- Course Section (e.g., 005)
- Instructor's Name

Do NOT bring cell phones to the Testing Center. Having your cell phone in the testing room, regardless of whether it is on or off, will revoke your testing privileges for the remainder of the semester. ACC Testing Center policies can be found at http://www.austincc.edu/testctr/

## Student And Instructional Services

ACC strives to provide exemplary support to its students and offers a broad variety of opportunities and services. Information on these services and support systems is available at: http://www.austincc.edu/s4/

Links to many student services and other information can be found at: http://www.austincc.edu/current/
ACC Learning Labs provide free tutoring services to all ACC students currently enrolled in the course to be tutored. The tutor schedule for each Learning Lab may be found at:
http://www.autincc.edu/tutor/students/tutoring.php
For help setting up your ACCeID, ACC Gmail, or ACC Blackboard, see a Learning Lab Technician at any ACC Learning Lab.

## Math Department Contact Information

Department Chair: Constance Elko
Department email: math@austincc.edu

Tentative Schedule. Any changed dates will be announced in Blackboard.
Deadlines for tests and assignments are given in the Detailed Course Calendar.

| Week | dates |  |  |
| :--- | :--- | :--- | :--- |
| 1 | Jan 20-23 | 8, Data Ethics, 9 |  |
| 2 | Jan 26-30 | 9,1 |  |
| 3 | Feb. 2-6 | 2,4 |  |
|  |  |  | Test 1 |
| 4 | Feb. $9-13$ | 5 |  |
| 5 | Feb 16-20 | 6,3 |  |
| 6 | Feb. 23-27 | $3,10,11$ |  |
|  |  |  |  |
| 7 | Mar. 2-6 | 11,14 |  |
| 8 | Mar. $9-13$ | 15,16 |  |
|  | Mar. $16-20$ | Spring Break | School is closed March 16-22. |
| 9 | Mar. 23-27 | 18 |  |
|  |  |  | Test 3 |
| 10 | Mar. 30- Apr 3 | 19 |  |
| 11 | Apr. 6-10 | 20 |  |
| 12 | Apr. 13-17 | 21 |  |
| 13 | Apr. 20 - 24 | 23,25 |  |
| 14 | Apr 27 - May 1 | 24 |  |
| 15 | May 4-9 |  | Test 4 |
| 16 | May 11-12 | No new material |  |

## If you want to get ahead in the course:

## Follow the calendar above to learn the material and start the homework:

- For a chapter, either read all the material in the text, or go through the StatTutor videos.
- Work through a few of the homework problems for that chapter and compare your work with the solutions. Use Minitab as appropriate to solve problems. (In each lesson, additional hints and discussion are provided.)

Ch. 8: 8.27, 8.29, 8.31, 8.32, 8.33, 8.35, 8.37, 8.39, 8.45 (Be able to pick a random sample with Minitab.)
Ch. 9: 9.1, $9.5,9.29,9.31,9.35,9.37,9.43,9.47,9.49$ (Be able to randomly assign subjects to treatments with Minitab.)
Data Ethics Commentary: 1, 3, 7
Ch. 1: $1.23,1.27,1.29,1.31,1.33,1.37,1.41,1.45$ (Be able to make these with Minitab: histogram, stemplot, dotplot) Ch. 2: 2.25, 2.31, 2.32, 2.33, 2.35, 2.37, 2.39, 2.47, 2.51 (Be able to compute these with Minitab: mean, standard deviation, five number summary. Also compute these by hand, EXCEPT do not compute the standard deviation in any way except with Minitab.)
Ch. 4: 4.25, 4.27, 4.35, 4.37, 4.39, 4.41, 4.43 (Be able to do these with Minitab: Make a scatterplot, find the correlation coefficient.)

Homework for additional chapters will be provided ahead of time for students who are working ahead.

