

Dear Student,

Welcome to the Mathematics Department!

We look forward to working with you and providing you with the very best education in mathematics.

We are a seven-member full-time team with 9 other part-time instructors that boasts a combined experience of over two-hundred-fifty years in professional education. We are extremely proud of our services and our accomplishments, and we always strive to maintain the best of quality instruction and as well as adherence to high academic standards and goals. Because of this dedication, we enjoy an excellent academic reputation with the surrounding upper-division colleges and universities in the region. It is a high priority to maintain this reputation, and consequently the value of your degree.

In order to be successful in your Math class and to ensure that other students have the learning environment they deserve, we require that you adhere to the Code of Student Conduct located in your Student Handbook, and on your syllabus. A positive learning environment makes it much easier for any student to achieve their goals.

If it is necessary for you to discuss any personal issue with your instructor, it is imperative that you do so during their office hours or during an out of class appointment. We are happy to meet with you to talk about any issue that is relevant to your participation in class, or your grade in the course. We have appropriate and time-proven suggestions that should help you.

As a student at AB-Tech, it is expected that you to keep up with the class, turn in assignments on time, and take responsibility for your education. The instructor will assist you in every way possible that does not compromise the integrity of the course itself. Our reputation depends on it.

Again, Welcome to AB-Tech and have a great semester!

R. Trent Codd, Jr.; Chairman; AA, BS, BSCS, MA, EASGC; 38 years of experience

Jerry L. Ashe; Instructor; AA, BS, MS; 22 years of experience

Jackie Caldwell; Instructor; BS, MA; 20 years of experience

Karma Crouch; Instructor; BS, MA Ed; 23 years of experience

Valerie Martin; Instructor; AA, BA, MS; 8 years of experience

Tammy Pagan; Instructor; AA, BS, MS; 20 years of experience

Robby Webb; Instructor; BA, MA; 23 years of experience

Asheville-Buncombe Technical Community College

Spring 2009

Course and Title: MAT 151 WD04, Statistics I
Credits: 3 Credits
Prerequisites: See catalog
Corequisites: MAT 151A
Time: 6:00 – 8:50 PM Wednesdays
Place: Elm Hall, Room 336
Instructor: Chris Phillips
Office: Adjunct Office – Elm Hall, Room 340
Available: TBA
E-Mail: phillips.chris@abtech.edu

Textbook: Elementary Statistics, 3rd Edition, Triola, Pierson

Calculator – A graphing calculator is required for this course. The instructor will be using the TI-83 for instructional purposes.

Course Description: This is a college-level study of basic probability, descriptive and inferential statistics, and decision making. Topics will include: measures of central tendency and dispersion, correlation and regression, discrete and continuous probability distributions, quality control, popular parameter estimation, and hypothesis testing.

Course Objectives: Upon completion of this course, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data.

Instructional Methods: The material is presented by a combination of lecture, example by problem solving, class discussion, homework, and occasional assigned reading. Each class will include a review of homework problems, introduction and application of new material. Tests will be scheduled periodically to evaluate each student's progress.

Grades: The four tests scheduled for this course will constitute 60% of each student's final average. Homework will count towards 15% of each student's grade, and the remaining 25% will be determined by cumulative final exam. Your final course grade will be assigned according to the A-B Tech grading system: 90-100: A, 80-89: B, 70-79: C, 60-69: D, 0-59: F.

Homework: Homework assignments will be assigned, collected, and graded. They are an important part of the course, as they are practice for tests and are a good measure of how well you understand the material.

Attendance: Regardless of ability, students who miss many classes, especially one that meets once a week, rarely pass college math courses. For this reason, the importance of attending class regularly cannot be stressed enough. If your schedule prevents you from attending this class during the time it is given, it is recommended that you drop this course or switch to a section that better fits your schedule. Students must attend 80% of the contact hours. Students who miss 20% of the contact hours may be

dropped from the class with a grade of “U” at the discretion of the instructor. You will be held accountable for all the material presented in class whether you attend or not.

Ethics: You may not deceive any official of the college by cheating on any assignment, exam, or paper. By signing your name on any test or homework assignment, you are indicating that the work turned in is yours. As an adult student you are expected to understand the difference between debating the process of arriving at an answer, which is completely acceptable, and merely copying the answers of another student, which is unacceptable. Any questions on the areas in between should be directed to the instructor.

Other Course Policies: Students will not be penalized for religious observances or practices due to national origin. Also, any reasonable accommodations for students with disabilities are acceptable, but should be brought to the attention of the instructor. Every instructor has his or her own pet peeves, and mine is students who come to class and either try to maintain a conversation during class or text message during class. The class is held for the sole purpose of educating students in math. Any activity that distracts others cannot be tolerated. If you have important business outside of your education that needs your immediate attention, please attend to it outside of the classroom.

How to Succeed in this Course: As in any college class, a student who is serious about getting a good grade will attend classes regularly, complete homework assignments to ensure his/her understanding of the material, and study for the tests. If you do not understand the material as it is presented, ASK QUESTIONS! Maybe, some of your classmates will have the same question and you'll be helping more than yourself. If you can't do a homework problem, make sure that it be shown at the beginning of the next class. If you miss a class, get the notes and the assignment from someone else in the class or from me. If you find yourself falling behind, try getting help from a classmate or at the Academic Learning Center located in the Laurel Building, Room 118. The hours are from 9 AM to 6:30 PM Monday through Thursday and 9 AM to 1 PM on Friday. Computer labs on campus that currently have MyMathLab access are: Laurel 116 (open computer/Writing), Elm 200 (Transfer Advising Center), Sycamore 216 (Early College Lab), and the LRC

Activity Day Schedule This schedule will be used for most approved and announced student activities.

Normal Class Time	Activity Day Schedule
8 a.m.	8-8:40 a.m.
8:30 a.m.	8:20-9 a.m.
9 a.m.	8:45-9:25 a.m.
9:30 a.m.	9:05-9:45 a.m.
10 a.m.	9:30-10:10 a.m.
10:30 a.m.	9:50-10:30 a.m.
11 a.m.	10:15-10:55 a.m.
11:30 a.m.	10:35-11 a.m.
11 a.m.-1 p.m. free for activities	
Noon	1:00-1:40 p.m.
12:30 p.m.	1:20-2 p.m.
1 p.m.	1:45-2:25 p.m.
1:30 p.m.	2:05-2:45 p.m.
2 p.m.	2:30-3:10 p.m.
2:30 p.m.	2:50-3:30 p.m.

3 p.m.	3:15-3:55 p.m.
3:30 p.m.	3:35-4:15 p.m.
4 p.m.	4 p.m.

Inclement Weather Schedule The College will close when weather conditions are such that driving is hazardous. The following procedure will be observed for inclement weather conditions:

1. A decision concerning school operation will be made by 5:30 a.m. and posted on the College website at www.abtech.edu. Students may also tune into local radio and television stations for announcements about day classes. A voice message will also be recorded on the College switchboard. One of the following three options will be used: (1) College closed for staff and students; (2) College closed for students, staff report at 10 a.m.; (3) College open at 10 a.m. for staff and students. If option 3 is used, curriculum students should follow the schedule below. Continuing Education classes scheduled to begin prior to 10 a.m. will commence at 10 a.m. Continuing Education classes beginning after 10 a.m. will follow their regular schedule.

Normal Class Time	Delayed Opening
8 a.m.	10-10:40 a.m.
8:30 a.m.	10:20-11 a.m.
9 a.m.	10:45-11:25 a.m.
9:30 a.m.	11:05-11:45 a.m.
10 a.m.	11:30 a.m.-12:10 p.m.
10:30 a.m.	11:50 a.m.-12:30 p.m.
11 a.m.	12:15-12:55 p.m.
11:30 a.m.	12:35-1:15 p.m.
Noon	1:00-1:40 p.m.
12:30 p.m.	1:20-2 p.m.
1 p.m.	1:45-2:25 p.m.
1:30 p.m.	2:05-2:45 p.m.
2 p.m.	2:30-3:10 p.m.
2:30 p.m.	2:50-3:30 p.m.
3 p.m.	3:15-3:55 p.m.
3:30 p.m.	3:35-4:15 p.m.
4 p.m.	4 p.m.

2. If weather conditions become worse after the 5:30 a.m. announcement, an additional announcement closing school for the day will be made no later than 8:30 a.m.

3. Closing or delaying the day programs does not automatically close evening classes. Announcements will be made on radio stations no later than 3 p.m. concerning the evening classes.

4. When weather conditions dictate early dismissal of the day or evening classes, the announcement will be made by telephone to each building on campus.

5. Commuters should exercise personal judgment concerning highway conditions regardless of College announcements, particularly those commuting from outlying areas.

6. Adjustments in the school calendar for time missed because of inclement weather may be made at the end of the semester.

7. Oak Student Center will open at 8 a.m. for early arrivals.

Code of Classroom Conduct Asheville-Buncombe Technical Community College is an institution for adult learning. It is a partnership between instructors with the desire to teach and students with the desire to learn. In order to create an appropriate environment for teaching and learning to flourish, there must be respect for the instructor and fellow students. Listed below are guidelines for classroom behavior, which the College has established to ensure that the learning environment is not compromised.

1. **Attendance** - You are expected to be in class the entire class time. Do not enter late or leave early. Rare exceptions may be excused, particularly under emergency circumstances, but you should be prepared to explain your tardiness to the instructor after class. Likewise, the need to leave early should be explained to the instructor before class.

2. **Absences** - Inform the instructor in advance, if you know you are going to miss class. Also, take responsibility for getting missed assignments from other students. Do not expect that you will be allowed to make up work, such as unannounced quizzes or tests, after an absence. Instructors are not responsible for reteaching the material you missed because of absence.

3. **Conversation** - Do not carry on side conversations in class.

4. **Other Activities** - You may not work on other activities while in class. _is includes homework for other courses or other personal activities.

5. **Internet** - In classes where Internet access is provided, you may use the Internet for valid, academic purposes only. You may not use it for open access to other nonacademic sites, which are unrelated to the course.

6. **Sleep** - Do not sleep in class.

7. **Attitude** - You are expected to maintain a civil attitude in class. You may not use inappropriate or offensive commentary or body language to show your attitude regarding the course, the instructor, assignments, or fellow students.

8. **Profanity and Offensive Language** - You may not use profanity or offensive language in class.

9. **Cell phones and pagers** - You may not receive or send telephone calls or pages during class. You are responsible for turning off cell phones and beepers upon entering class.

10. **Guests** - You may not bring unregistered friends or children to class.

11. **Food or Drink** - You may not have food or drink in class.

12. **Personal Business** - You may need to transact personal business with the instructor, asking him or her to sign forms. Plan to do this before instruction begins or after class.

Typically, violations of the Code of Classroom Conduct will be dealt with as minor infractions. However, repetition of minor infractions or other more serious violations of the Code of Student Conduct may lead to removal from the classroom while the matter is resolved and referral to the Vice President for Student Services for disciplinary action.

Tobacco Free Campus – Asheville-Buncombe Technical Community College is committed to providing students and employees with a safe and healthy environment. It is the policy of Asheville-Buncombe Technical Community College that tobacco use is not permitted on any of the campuses. AB Tech is tobacco-free.

Statement of Right to Make Changes – I, Chris Phillips, reserve the right to make changes in the syllabus. Any changes that occur will be announced in class.

Important Dates

Classes Begin	January 12 th
Last Day to Drop for Partial Refund	January 22 nd
Martin Luther King Jr. Holiday	January 19 th
Professional Development (afternoon)	February 17 th
Spring Break	April 13 th - 18 th
Last Day to Withdraw from Class without penalty	April 7 th
Student Break or Inclement Weather Make-Up	March 13 th
Last Day of Classes/Exams	May 12 ^{th*}

*Up to 3 days may be made up at the end of the semester for inclement weather. All dates are subject to change.

MAT 151 WD2 / MAT 151A O2
Statistics I
Course Outline

SPRING 2009

I. Chapter One: Introduction to Statistics

- a. Section 1.1: Overview
- b. Section 1.2: Types of Data
- c. Section 1.3: Critical Thinking
- d. Section 1.4: Design of Experiments

II. Chapter Two: Summarizing and Graphing Data

- a. Section 2.1: Overview
- b. Section 2.2: Frequency Distribution
- c. Section 2.3: Histograms
- d. Section 2.4: Statistical Graphics

III. Chapter Three: Statistics for Describing, Exploring, & Comparing Data

- a. Section 3.1: Overview
- b. Section 3.2: Measures of Center
- c. Section 3.3: Measures of Variation
- d. Section 3.4: Measures of Relative Standing
- e. Section 3.5: Exploratory Data Analysis (EDA)
- f. **Examination 1**

IV. Chapter Four: Probability

- a. Section 4.1: Overview
- b. Section 4.2: Fundamentals
- c. Section 4.3: Addition Rule
- d. Section 4.4: Multiplication Rule: Basics
- e. Section 4.5: Multiplication Rule: Complements/Conditional
- f. Section 4.6: Probabilities Through Simulation
- g. Section 4.7: Counting

V. Chapter Five: Discrete Probability Distributions

- a. Section 5.1: Overview
- b. Section 5.2: Random Variables
- c. Section 5.3: Binomial Probability Distribution
- d. Section 5.4: Mean, Variance, & Standard Deviation
- e. **Examination 2**

VI. Chapter Six: Normal Probability Distribution

- a. Section 6.1: Overview
- b. Section 6.2: The Standard Normal Distribution
- c. Section 6.3: Applications of Normal Distribution
- d. Section 6.4: Sampling Distributions and Estimators
- e. Section 6.5: The Central Limit Theorem
- f. Section 6.6: Normal as Approximation to Binomial
- g. Section 6.7: Assessing Normality

VII. Chapter Seven: Estimates and Sample Sizes

- a. Section 7.1: Overview
- b. Section 7.2: Estimating a Population Proportion
- c. Section 7.3: Estimating a Population Mean: known SD
- d. Section 7.4: Estimating a Population Mean: unknown SD
- e. Section 7.5: Estimating a Population Variance
- f. **Examination 3**

VIII. Chapter Eight: Hypothesis Testing

- a. Section 8.1: Overview
- b. Section 8.2: Basics of Hypothesis Testing
- c. Section 8.3: Testing a Claim About a Proportion
- d. Section 8.4: Testing a Claim About a Mean: known SD
- e. Section 8.5: Testing a Claim About a Mean: unknown SD
- f. Section 8.6: Testing a Claim About Variance or SD
- g. **Examination 4**
- h. **Final Examination**

NETIQUETTE

General

1. Understand that typed messages lack cues normally associated with face-to-face conversation. Without these supporting cues for context, satire or sarcasm can come across in unintended ways.
2. Use parenthetical explanation to explain meanings that might be misunderstood.
3. Do not criticize spelling or grammar but do check your own spelling, punctuation, and grammar.
4. Don't use all capital letters. In the online world, this is the equivalent of shouting and it is difficult to read.
5. All lowercase letters indicate mumbling.
6. Be brief and to the point.

Subject Lines

1. Keep subject lines short.
2. Make subject lines informative by indicating the content of the message.
3. Make subject lines clear and unambiguous.

Replying

1. If you excessively reply to ongoing discussions and include the original message, your messages will be very long and hard to follow.
2. For simple messages, quoting the original message when replying will clarify your response.
3. Using carets to indicate lines of text that are quoted.

Email

1. Unless you are explicitly given permission, don't publicly post email sent to you in private.
2. Recognize that instant delivery of email does not guarantee an instant response.
3. If you are sending information from another source, pay attention to whether the material is copyrighted and cite sources.
4. For important messages, compose a draft in a word processor so you can spell check it.
5. Be careful when addressing emails. One character out of place, or a ".com" suffix when the person's email really ends with ".edu", and your message won't be delivered.
6. If it is going to take considerable time to reply fully, try to acknowledge receipt of a message promptly and let the sender know that you will answer.

Attachments

1. Do not send huge attachments.
2. When you're replying to a message that has an attachment, do not include the attachment again.
3. Avoid sending attached files that lack filename extensions (that's because some computers won't be able to open them).

Flaming

1. Do not flame! Flaming refers to derogatory, abusive, threatening, sarcastic, rude, or otherwise mean-spirited messages directed at people.
2. If a message provokes a negative emotional response, put it away for a while, then reread it and see if you're misinterpreting it. If you don't understand a particular item, ask the sender for clarification before replying to an incorrect conclusion.
3. Messages are not secure. Remember, it's very easy for someone else to forward messages you thought were confidential.
4. Apologize. If there's been a misunderstanding or miscommunication, you can often nip a flame war in the bud by a brief apology.
5. Don't write anything that you won't want other people to be able to see for a long time (posts can be archived for years).

Discussions

1. Lurk before you leap. Lurking is visiting without participating. While it's rude to make a habit of lurking, a little lurking can acquaint you with rules and procedures, help you get the "lay of the land," and prevent embarrassment.
2. Avoid posting non-informative messages on bulletin boards. Chat is more like a telephone, so saying "Me, too!" or "I don't know" is accepted. But on bulletin boards, people don't like to read postings that aren't substantive.

Chat

1. Remember that chat rooms are "logged" (i.e., a record is kept of conversations).
2. Do not disrupt chat rooms by pasting large blocks of text into the input box (thus causing the screen to scroll faster than other users are able to type) or otherwise act in a manner that negatively affects other users' ability to engage in

real time exchanges.

3. If you are having a conversation that is off the main topic, please move to another chat room.
4. If you are a fast typist, please pause occasionally to let slower typists contribute to the discussion.

California State University at Fullerton

Excerpted from Bramucci, Robert. Cal State Fullerton.

Course Syllabus
MAT 151 WD04
Statistics I

Your Acknowledgement:

I have been provided access to the course syllabus. I understand what is expected of me and agree with the provision set forth in the syllabus.

Your Name

Your Student ID Number

Your Signature

Date