

# INTRODUCTION TO BIOMEDICAL STATISTICS

## MTH 1370.09 – Fall 2017

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**Office Hours:** TR 10-11am, TR 2-3pm and Fridays 11a- 12:30p or by appointment. I am also available for Skype call appointments.

**Class meeting time and place:** TR 12:30-1:50pm in AB4 203

**Text and Materials:** Statistics: Learning from Data, 1<sup>st</sup> Ed, by Roxy Peck  
(ISBN-13: 978-0495553267 or ISBN-10: 0495553263)

**Course Objective:** To develop an understanding of and facility for the concepts and applications of introductory descriptive and inferential statistics.

**Course Description:** This course covers the fundamentals of statistical concepts and will guide the student through basic statistical procedures to permit critical insight into the science of collecting, classifying, presenting, and interpreting information from data. The topics covered include descriptive statistics (graphic presentation of data, histograms, plots, charts, etc.), measures of central tendency, dispersion, and position, etc. Inferential statistics is emphasized throughout the course, and this coverage includes confidence intervals and hypothesis testing. **HEAVY EMPHASIS WILL BE PLACED ON USING STATISTICAL SOFTWARE INVOLVING REAL-WORLD APPLICATIONS.**

**Prerequisite:** Passing score on the Math TSI Assessment or equivalent

### Course Requirements:

#### a. Quizzes:

- There will be a short quiz at the beginning of class at least once a week.
- I will pass out the quiz at the start of class.
- If you come in late, you will not be given additional time. Please be on time.
- I will drop at least two of these quizzes.
- If you are tardy and miss the quiz you will not make it up.
- Quizzes will not be made up after the fact if missed for any reason.
- I drop quizzes to balance this out.

#### b. Online Homework:

- The online homework is called WebAssign, and can be found at [www.webassign.net](http://www.webassign.net). The cost should be \$90 but that includes the electronic copy of the textbook. There is a 14 day trial so do not wait to get enrolled. You will need a class key for enrollment. The class key for this section is **shsu 1353 8883**.
- WebAssign extensions are rarely given on an individual basis. ***Please stay on top of this and feel free to work ahead.***
- If you are struggling with a problem and think that it is a computer issue, the best way to show me is to take a screen shot and email me. If you do not know how to do this, see me after class and I will be glad to show you.
- WebAssign averages are not automatically updated in the Blackboard gradebook. I will try to update it manually weekly. I do have to enter them *manually* so if you see an obvious transcription error feel free to bring it to my attention.

c. Exams:

- On the day of the exams I will ask you to put your bags and all belongs at the front of the classroom. I will also ask that you put your cell phone on silent or off, not vibrate. Your cell phone need to be in your bags at the front of the classroom as well as your calculator lids.
- There will be at least **three major tests** during the semester and a **mandatory comprehensive final exam**.
- **Your final exam is scheduled for Tuesday, December 5th 1-3pm.**
- *If you miss an exam, its grade will be replaced by the final exam grade.*

**Tentative Course Calendar:**

Exam 1	The week of Sept 25 <sup>th</sup>	Ch 1 -3
Exam 2	The week of October 23 <sup>rd</sup>	Ch 4-6
Exam 3	The week of November 27 <sup>th</sup>	Ch 12-13
Final exam	Tuesday December 5 <sup>th</sup> 1-3pm	Cumulative

**Grades:**

Online Homework average.....	10%
Quiz average.....	10%
Research Articles.....	5%
Exam average.....	50%
Comprehensive/Cumulative final exam .....	25%

**Attendance Policy:**

- Catching up due to an unexcused absence is not my responsibility; it is yours.
- In the chance that you miss it is a good idea to have exchanged emails and/or phone numbers with your classmates on the first day of class.
- ***IMPORTANT: If you leave early without letting me know before class that there is a valid reason that you need to leave, then whatever was turned in that day will not be counted for credit.***
- In cases where you do need to leave early and have let me know, please sit close to the door so as not to disrupt anyone on your way out.
- Attendance will be taken daily.

**Technology:**

- This course will rely **heavily** on the campus network **SPSS** statistical software system. We are interested in developing proficiency with **SPSS** as we learn statistical concepts and methodologies.
- SPSS can be found on all computers on campus within the computer labs.
- A student copy of SPSS can be rented from e-academy at [www.onthehub.com/spss/](http://www.onthehub.com/spss/).
- A calculator with statistical function is required; a graphing calculator (such as a TI-83, or equivalent) is recommended.
- Calculators are allowed in this course, yet I will be resetting all calculator memories on the day of the exam. Hiding information such as formulas within your calculator will be considered cheating on an exam.
- You may not have your calculator lid out during the exam.
- You may not share calculators on Exams or quizzes.
- Please come to class prepared especially if there is a quiz or Exam. Do not assume I have an extra calculator.

- You may not use an ipod touch or any device in that similar category as a calculator.
- You may not use your cell phone as a calculator.

**If you must miss class:**

- *If you miss an exam, its grade will be replaced by the final exam grade.*
- Student athletes who anticipate missing a class, exam, or assignment due to a University sponsored athletic event must provide appropriate documentation and notification **PRIOR** to the absence.
- You are responsible for obtaining all handouts and/or announcement information.
- Some materials are available ahead of time on our class website.

**Miscellaneous Information:**

- Cheating is a most serious offense - I will not hesitate to press for the most severe consequence allowed by the University. YOU WILL ALSO RECEIVE an "F" FOR THE CLASS.
- Issues that are not addressed politely and respectfully will not be addressed.
- No hats, headphones, or sunglasses are permitted during Exams or quizzes.
- No work, no credit, therefore, show all work. My rule of thumb is, if I cannot do it in my head, it is likely neither could or did you.
- Your cell phone needs to be turned off or on silent, not vibrate. Most importantly, it must be out of sight during class. A cell phone out during an exam will be considered cheating. You may not use your cell phone as a calculator.
- Please check your campus email regularly or forward your campus email to an email that you check regularly.
- Be respectful of the student around you at all times.
- Make sure you have read the syllabus carefully because you are responsible for what lies within it.

**Recording Devices:** Recording devices, such as cameras, audio recorders, or video recorders may not be used without prior approval of the instructor.

- **Electronic Devices:** The use by students of any device that is performing the functions of a telephone, text messages, or pager during class-time is prohibited. Arrangements for handling potential emergency situation uses of devices must be approved by the instructor in advance. Any use of a telephone, text messages, pager, PDA, or any device that performs these functions during a test period is prohibited. These devices should not be present during a test, or if present should be stored securely in such a way that they cannot be seen, heard, or used by a student. The visible presence of such a device during the test period will result in a zero for the test. Use of these devices during a test is considered de facto evidence of cheating.
- **Academic Dishonesty:** All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.
- **Classroom Rules of Conduct:** Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited

from using tobacco products in class, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

- **Visitors in the Classroom:** Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

• **Student Absences on Religious Holy Days Policy** Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

- **STUDENTS WITH DISABILITIES POLICY:**

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail [disability@shsu.edu](mailto:disability@shsu.edu)). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

<http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html>