Angelo State University
Archer College of Health & Human Services
Department of Health Science Professions
HSP 4338 Biostatistics
Fall 2019

Schedule: Mondays, Wednesdays, & Fridays: 1:00 – 1:50 PM
Location: HHS 208
Instructor: Jay Brown, DrPH, MPH
Email: jay.brown@angelo.edu
Office Location: HHS 222A
Office Hours: By appointments, Mondays, Wednesdays, & Fridays: 10 – 11:00 AM
Office Phone Number: (325) 942-2126
Triola, Triola & Roy. Pearson.

Course Description: Biostatistics is essential to ensuring that findings and practices in public health and biomedicine are supported by reliable evidence. This course covers the basic tools for the collection, analysis, and presentation of data in all areas of public health. Central to these skills is assessing the impact of chance and variability on the interpretation of research findings and subsequent recommendations for public health practice and policy. Topics covered include: general principles of study design; hypothesis testing; review of methods for comparison of discrete and continuous data including ANOVA, t-test, correlation, and regression.

Prerequisite: Health Science Professions 4337 or Mathematics 3321

Course Format: This course will meet on campus. Most content will be delivered via class Lecture/Video, Discussion and Course Assignments. The course will also use the Blackboard Learning Management System for online components. The course site can be accessed at http://blackboard.angelo.edu

Students & Disabilities: If you have, or believe you may have, a disability which may impair your ability to successfully complete this course, please read the following closely:
1. “Angelo State University is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), and subsequent legislation.”
2. The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting the Office of Student Affairs, University Center, Room 112 at (325) 942-2047 or (325) 942-2211 (TDD/FAX) or by e-mail
Students’ Responsibilities: You will be responsible for utilizing information included in the Sixth Edition of the textbook. If you choose to use a previous edition, you are responsible for any discrepancies. All students are expected to adhere to the ASU Student Code of Conduct, as specified in the ASU Student Handbook. Angelo State University expects observance of regulations and/or standards by which its members abide and procedures by which its organization functions. The standards should provide order and an atmosphere conducive to intellectual and personal development. This Student Handbook and the Code of Student Conduct contained within are intended to serve these purposes in the interest of all segments of Angelo State University.

The University has a responsibility to maintain order within the University community and to discipline those who violate its standards, rules, and/or policies. Enrollment requires students to share this responsibility. Students are responsible for knowing the information, policies and procedures outlined in this document. Students agree to abide by the standards, rules and/or policies set forth in this Student Handbook, the Undergraduate Catalog and other official University publications, as well as the Texas Education Code. Student organizations also agree to follow these standards, rules, and/or policies.

Communication: Use ASU email accounts ONLY. Email from other providers will be deleted due to virus concerns. Include course name, section in subject line, and sign your emails with your full name. Your instructor is not responsible for non-delivery of forwarded mail.

Blackboard: We will use Blackboard intensively in this class. All class materials, syllabus, study guides, handouts, grades, and all sort of communications will be posted there. Please make yourself familiar with this tool. You can log into Blackboard using your ASU user ID and password at https://blackboard.angelo.edu. Please bookmark this site and check it daily!!!
Topic Outline:

- General Principles of Study Design
- Hypothesis Testing
- Statistical Significance
- T-Tests
- Analysis of Variance
- Correlation Coefficient
- Linear Regression
- Non-parametric Statistics

Course Objectives: Upon completion of this course, students will be able to:

1. Understand statistical concepts utilized in research within the social sciences
2. Apply the mathematical/statistical techniques presented for social science research
3. Demonstrate an ability to analyze and interpret data within the social sciences
4. Analyze practical examples as to when statistical techniques presented are appropriate for analysis.

*Be aware: THIS SYLLABUS IS SUBJECT TO CHANGE, WITH NOTIFICATION.
Course Policies

Tips for Success: Students are expected to take responsibility for their own learning. What you get out of this class, including your grade, is based on your effort and commitment. In order to succeed, just follow some simple rules:
   a) Be to class on time
   b) Read and study
   c) Plan and schedule your assignments’ submissions and exam preparations in advance. Calendar all course assignments at the beginning of the semester to ensure they are completed before or by due dates
   d) Please make sure you are clear on assignment deadlines
   e) Block time in your schedules several days before assignments are due to ensure assignments are completed well before due dates.

Student Contribution: Students are expected to actively contribute to class and group discussions, but not to dominate them.

Respect & Tolerance: Students are expected to listen to other people’s views, even if you don’t agree with them. Please be respectful and professional at all times. Students are expected to stay focused in class. Please do not side talk or do your other work while in class.

Questions: Students are strongly encouraged to use the instructor as a resource person in solving any problems or questions concerning the course. If you are unclear concerning any concepts or assignments, please feel free to contact the instructor.

Attendance Policy: Students are expected to attend classes. Class attendance and participation will be evaluated. According to the undergraduate handbook, a week’s worth of cumulative absences (regardless of the nature of the absence) in any one course will result in faculty evaluation of the student’s ability to meet course objectives and may result in failure of the course. Emergencies and illness do happen, but these are the exceptions not the rules. Make every effort to be in every class. Also, students are expected to be on time to class and remain in class until the end of the session.
Late Submissions: Due to the nature of assignments, NO late/make up assignments will be accepted nor will be allowed without prior approval from the instructor. The instructor will determine if a student will be allowed to make-up the assignment in the rare cases of excused absences (documented medical emergencies, documented death in the family).

Cell Phones: Cell phones are to be turned off during class. If there is an expected need to receive a cell phone call then please talk to me before class. In these cases, your phone should be set to vibrate and can be left on your desktop. There will be no text messaging in the class.

Computers: Computers can be used to write or access class notes, but internet surfing for unrelated material should not be occurring. Please do not surf the web, shop online, log into Facebook, send personal emails, or do anything else that is unrelated to class. This is distracting and inconsiderate to other students and may affect your participation grade.

Incompletes: It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. (OP 10.11 Grading Procedures)

Expectations: What can you expect from me?
- I will make every effort to be on time and prepared for class.
- If I am sick or have to cancel class, I will notify you on Blackboard ASAP.
- I will try to answer every question you have, and if I can’t answer it, I will find out an answer for you.
- I will try to make this course as fun as possible and do all that I can to enhance your learning in this class.
- I will listen to your feedback and try to manage the class accordingly.
Course Requirements:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>POINTS</th>
<th>% OF GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation &amp; Attendance</td>
<td>100</td>
<td>10% of grade</td>
</tr>
<tr>
<td>Homework (4 x 50 points each)</td>
<td>200</td>
<td>20% of grade</td>
</tr>
<tr>
<td>Quizzes (15 x 20 points each)</td>
<td>300</td>
<td>30% of grade</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>200</td>
<td>20% of grade</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
<td>20% of grade</td>
</tr>
</tbody>
</table>

**TOTAL** 1,000 100% of grade

Grade Equivalences:

<table>
<thead>
<tr>
<th>GRADE</th>
<th>POINT</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100%</td>
<td>900-1000 points</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
<td>800-899 points</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
<td>700-799 points</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
<td>600-699 points</td>
</tr>
<tr>
<td>F</td>
<td>59% or &lt;</td>
<td>0-599 points</td>
</tr>
</tbody>
</table>

Exams:

There will be two (2) major exams (Midterm & Final exams). Please bring a #2 pencil on exam days and I will provide the Scantrons. Cheating on an exam will very likely result in failure of the course. Leaving the classroom during an exam should not occur and no electronics are to be used during exams. The final exam will have to be taken at the scheduled time.

Material for exams will come from lectures, discussions in class, textbook readings, materials brought to class by the instructor, companion website and slide handouts. Makeup exams are contingent to the presentation of a valid excuse according to the student’s manual and University regulations. Late fees for makeup exams will be as required by the testing center. Always make sure you have allowed enough time to take the test before the center closes.
Assignments:  
**Readings:** You are responsible for the material covered in the book prior to attending class. Please note that the week’s readings are specified in the class schedule on the following pages. In addition to these readings, the instructor may assign supplemental readings throughout the semester. These supplemental readings do not appear on the schedule, as these readings will be assigned at the instructor’s discretion.

**Quizzes:** Weekly in-class quizzes will be given every Friday throughout the semester and will require that you read and respond to material in the textbook as well as work out mathematical/statistical procedures discussed in class. These quizzes will be completed via Blackboard.

**Homework:** Students will be responsible for the completion of four (4) homework assignments. The purpose of these assignments is to assist students in applying their understanding of the statistical procedures discussed in class.

Extra-Credit:  
There may be opportunities for extra credit points given at the discretion of the instructor.

Student Evaluations:  
ASU faculty are committed to improving their methods of instruction. Student input is not only welcome, but vital to this process. The administration of the student evaluation of faculty/courses through the IDEA Student Ratings of Instruction survey serves to satisfy requirements by state and federal agencies and the SACSCOC that students evaluate faculty/courses. Please complete your course evaluations timely.

Title IX at ASU:  
Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.
You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manner:

**Online:** [www.angelo.edu/incident-form](http://www.angelo.edu/incident-form)

**Face to Face:** Mayer Administration Building, Room 210

**Phone:** 325-942-2022

**E-Mail:** michelle.boone@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-9422171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State’s policy please visit: [www.angelo.edu/title-ix](http://www.angelo.edu/title-ix).