ANGELO STATE UNIVERSITY

Bachelor of Science Health Science Professionals

HSP 4337
Statistical Techniques for Health Science Professionals
Fall 2017
Dr. Allyn Byars, Ph.D., CSCS, *D
COURSE NUMBER
HSP 4337

COURSE TITLE
Statistical Techniques for Health Science Professionals

CREDITS
Three Semester Credit Hours (3-0-0)
Online Class: Meets completely online using Blackboard

PREREQUISITE COURSES
None

CO-REQUISITES
None

PRE-REQUISITE SKILLS
Accessing internet web sites, use of ASU Library resources, and proficiency with Microsoft Word and/or PowerPoint are expectations of the Bachelor of Science Health Science Professionals. Computer access requirements are further delineated in the Undergraduate Handbook. Tutorials for ASU Library and for Blackboard are available through RamPort. The ASU Undergraduate/Graduate Student Handbook should be reviewed before taking this course. URL of Undergraduate or Graduate Student Handbook.

COURSE DELIVERY (ONLINE)
This is an online course offering. The course will be delivered via the Blackboard Learning Management System. The course site can be accessed at http://blackboard.angelo.edu

BROWSER COMPATIBILITY CHECK
It is the student’s responsibility to ensure that the browser used to access course material on his/her computer is compatible with ASU’s Blackboard Learning System. The faculty reserves the right to deny additional access to course assignments lost due to compatibility issues. Students are responsible for reviewing the guidelines posted in this course regarding accessing Blackboard assignments. Problems in this area need to be discussed with faculty at the time of occurrence, either via a phone call (preferred) during posted office hours, or via email notification during times outside office hours.

Be sure to perform a browser test. Select the “Support” tab from the Blackboard homepage (http://www.blackboard.angelo.edu) Select “Test your Browser” option.
FACULTY
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Phone: (325) 486-6166
Fax: (325) 942-2129
Email: allyn.byars@angelo.edu

OFFICE HOURS
by appointment

COURSE DESCRIPTION
A practical application of statistical techniques required to analyze data with specific applications for health professionals. Emphasis placed upon providing students with the knowledge and skills needed to read, interpret, and evaluate quantitative findings in medical and allied health literature. Techniques include measures of central tendency and variability, correlation, regression, t-tests, analysis of variance, chi-square and various advanced statistics.

PROGRAM OUTCOMES
Upon completion of the program of study for the Bachelor of Science Health Science Professionals, the graduate will be prepared to:

STUDENT LEARNING OUTCOMES

<table>
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<tr>
<th>Student Learning Outcome</th>
<th>Assignment(s) or activity(ies) validating outcome achievement:</th>
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<tbody>
<tr>
<td>Demonstrate independent problem solving and critical thinking skills by asking appropriate research questions.</td>
<td>Exams, quizzes, and SPSS data analysis software textbook activities</td>
</tr>
<tr>
<td>Demonstrate the ability to organize, analyze, synthesize, and interpret statistical data related to health care.</td>
<td>Exams, quizzes, and SPSS data analysis software textbook activities</td>
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<tr>
<td>Summarize the results of data analysis in a professional format.</td>
<td>SPSS data analysis software textbook activities</td>
</tr>
<tr>
<td>Demonstrate a basic awareness of research questions and how to apply appropriate statistical techniques to answer these questions.</td>
<td>Exams, quizzes, and SPSS data analysis software textbook activities</td>
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<td>Demonstrate proficiency using statistical data analysis software to analyze data from various health professions</td>
<td>SPSS data analysis software textbook activities</td>
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REQUIRED TEXTS AND MATERIALS

TESTING VIA RESPONDUS™ MONITOR

Access to quizzes and exams will be through Respondus™ Lockdown Browser and will be video recorded via Respondus™ Monitor [See Other Required Materials for a list of needed equipment]. Use of another electronic device is prohibited.

There are two practice quizzes: a) one is a Webcam test and b) a short 10 question practice quiz over ASU trivia that is not graded. These tools will be available to the student to assure accessibility. Students are highly encouraged to go through these practice quizzes in advance of taking a graded quiz. This process will allow you to become familiar with the technology associated with testing and improve the testing environment. These quizzes, instructional videos, and more information regarding Respondus Monitor can be found under the Respondus Monitor Help tab in your Blackboard course.

OTHER REQUIRED MATERIALS
- Computer with MAC or Windows Operating System
- High Speed Internet Access
- Refer to Angelo State University’s Distance Education website for further technology requirements: [http://www.angelo.edu/distance_education/](http://www.angelo.edu/distance_education/)

GRADING SYSTEM
Final grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:
- A = 450-500 points
- B = 400-449 points
- C = 350-399 points
- D = 300-349 points
- F = < 300 points

EVALUATION AND GRADES
The overall course grade is based on the following point values for quizzes, exams, and assignments:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>SPSS Activities</td>
<td>100</td>
</tr>
<tr>
<td>Quizzes</td>
<td>100</td>
</tr>
<tr>
<td>Exams</td>
<td>300</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>500 points</strong></td>
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TEACHING STRATEGIES

• The course will include instructional videos, PowerPoint presentations, and practical experience through various textbook activities (e.g., SPSS activities).

• Students are expected to be “active learners.” It is a basic assumption of the instructor that students will be involved (beyond the materials and lectures presented in the course) discovering, processing, and applying the course information using peer-review journal articles, researching additional information and examples on the Internet, and discussing course material with their peers.

ASSIGNMENT/ACTIVITY DESCRIPTIONS

Three scheduled exams (300 points) and fourteen quizzes (100 points) will be announced throughout the semester and consist of multiple choice questions and scored as either correct or incorrect. Questions will be taken from the daily lectures and the textbook. Only ten quizzes will be used to determine the overall quiz grade. The four lowest quiz scores will be dropped which includes any missed quizzes.

Ten scheduled SPSS Activities (100 points) will be assigned from textbook chapters and announced throughout the semester. Activities will consist of data analysis and interpretation utilizing Statistical Package for the Social Sciences (SPSS) data analysis software. Each activity requires the student to answer open-ended questions specific to data analysis and interpretation in which there is only one correct response and therefore scored as either correct or incorrect (100 points).

GENERAL POLICIES RELATED TO THIS COURSE

All students are required to follow the policies and procedures presented in the following documents:

• Angelo State University Student Handbook located on the ASU website
  http://www.angelo.edu/student-handbook/

• ASU Undergraduate Catalog located on the ASU website
  https://www.angelo.edu/content/files/16795-201213-undergraduate-catalog

STUDENT RESPONSIBILITY & ATTENDANCE

ON-LINE: This class is asynchronous, meaning you do not have to be on-line at a certain time.

There are readings which you will have to complete to be able to adequately participate in individual assignments. In order to complete this course successfully, you do have to participate in all course activities. Students are expected to complete all course requirements and submit their work by scheduled due dates and times.

Scholarly contribution is an expectation. For planning purposes, this class will probably require a minimum of 6-9 study hours per week on average.
COMMUNICATION
Faculty will generally respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Students will be notified of exceptions (e.g., professional conferences). Weekend messages will not be returned until Monday.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes.

Virtual communication: Office hours and/or advising may be conducted via telephone correspondence.

Note: It is inappropriate to contact the professor by calling his/her personal phone number unless permission is granted.

Use Good "Netiquette":
• Check the discussion frequently and respond appropriately and on subject.
• Focus on one subject per message and use pertinent subject titles.
• Capitalize words only to highlight a point or for titles. Otherwise, capitalizing is generally viewed as SHOUTING!
• Be professional and careful with your online interaction. Proper address for faculty is by formal title such as Dr. or Ms./Mr. Jones unless invited by faculty to use a less formal approach.
• Cite all quotes, references, and sources.
• When posting a long message, it is generally considered courteous to warn readers at the beginning of the message that it is a lengthy post.
• It is extremely rude to forward someone else's messages without their permission.
• It is fine to use humor, but use it carefully. The absence of face-to-face cues can cause humor to be misinterpreted as criticism or flaming (angry, antagonistic criticism). Feel free to use emoticons such as J or :) to let others know you are being humorous.

(The "netiquette" guidelines were adapted from Arlene H. Rinald's article, The Net User Guidelines and Netiquette, Florida Atlantic University, 1994, available from Netcom.)

ASSIGNMENT SUBMISSION
In this class, all assignments need to be submitted through the Assignments link in the Blackboard course site. This is for grading purposes. Issues with technology use arise from time to time. If a technology issue does occur regarding an assignment submission, email me at allyn.byars@angelo.edu and attach a copy of what you are trying to submit. This lets your faculty know you completed the assignment on time and are just having problems with the online submission feature in Blackboard. Once the problem is resolved, submit your assignment through the appropriate link. This process will document the problem and establish a timeline. Be sure to keep a backup of all work.
LATE WORK OR MISSED ASSIGNMENTS POLICY
The course is set up on weekly modules. The week begins on Monday and ends on Sunday. Due dates and times for exams, quizzes, and assignments are shown on the calendar/schedule or posted within Blackboard. Failure of a student to submit an exam, quiz, or assignment within the stated timeframe allotted will result in a score of zero. Exceptions to this policy are on a case by case basis (e.g., prior approval of faculty).

ACADEMIC HONESTY
Academic honesty is expected on all work. Students are expected to maintain complete honesty and integrity in their online experiences. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The Physical Therapy Department adheres to the academic honesty statement as set forth in the Angelo State University Student Handbook (2011-2012) http://www.angelo.edu/student-handbook/code-of-student-conduct/misconduct.php. The University "faculty expects all students to engage in all academic pursuits in a manner that is above reproach and to maintain complete honesty and integrity in the academic experience both in and out of the classroom setting and 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, plagiarism, collusion, and the abuse of resource materials."

PLAGIARISM
Plagiarism at ASU is a serious topic. The Angelo State University’s Honor Code gives specific details on plagiarism and what it encompasses. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

STUDENTS WITH DISABILITIES
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 at studentservices@angelo.edu to begin the process. The Office of Student Affairs will establish the particular documentation requirements necessary for the various types of disabilities.

Reasonable accommodations will be made for students determined to be disabled or who have documented disabilities.
INCOMPLETE GRADE POLICY (OP 10.11 Grading Procedures)
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.

STUDENT ABSENCE FOR OBSERVANCE OF RELIGIOUS HOLY DAYS
“A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence.” Please see ASU Operating Policy 10.19.

COPYRIGHT POLICY
Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

SYLLABUS CHANGES
The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student’s responsibility to look for such communications about the course on a daily basis.

COURSE EVALUATION
Students are provided the opportunity, and are strongly encouraged to participate in a course evaluation at the end of the semester. Areas on the IDEA evaluation include:
1. Gaining factual knowledge (terminology, classifications, methods, trends)
2. Learning fundamental principles, generalizations, or theories
3. Learning to apply course material (to improve thinking, problem solving, and decisions)
4. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course