Instructor: Dr. Gina A. Glanc
Office: BH 313
Office Hours: See Below
Email: gina.glanc@tamucc.edu

*or by appointment
**Please note: I prefer email correspondence. Please use phone only for emergencies*

MEASUREMENT & STATISTICS

OFFICE HOURS
M 1:00 – 2:00 p.m.
T 11:00 – 4:00 p.m. (break at noon for lunch)
Other: email for appointment

COURSE DESCRIPTION

The purpose and design of this course is to cover the research methodology and statistics used in the performance of psychological experiments and the interpretation of standard assessment instruments. The course is designed to take students from the generation of a research topic through design, data collection, statistical analysis, data interpretation, and the final write-up of a research report.

Note: This is a “flipped” course, meaning there is no traditional lecture during classtime. Instead, you are required to learn the material in the readings on your own, prior to class. This allows for classtime to be used for practice and practical application exercises. Please note that it is vital that you come to class prepared in order for this format to be successful.

LEARNING OBJECTIVES

- Describe the research methods and statistical tests commonly used in psychology.
- Identify and critique potential flaws and limitations in psychological studies.
- Demonstrate statistical and measurement knowledge by correctly describing the use of means, medians, standard deviations, percentiles and the like.
- Employ statistical software (SPSS) to find solutions to statistical and methodological questions.
- Correctly use the writing style used in psychological research (APA style).
- Propose research designs for particular psychological questions.

REQUIRED COURSE MATERIALS

You will need a laptop with the SPSS program installed to bring to each class period.
**Required textbook:**
ISBN: 978-1-4833-7530-4

**Required Workbook:**
ISBN: 978-1-926523-16-0

**Required Reference Book:**

**MAJOR COURSE REQUIREMENTS**

**QUIZZES:** Weekly reading quizzes will be assigned. These quizzes will be posted and taken online, on the course Blackboard site. Each quiz must be completed prior to class on the date indicated. Each quiz will be worth 10 points.

**EXAMS:** There will be three (3) exams given for the course. Exams will contain a variety of multiple choice, short answer, mathematical calculation, and essay questions. Exams will include material covered both in class and the assigned readings. Each exam will be worth 100 points.

**Make-up Exams:** Attendance at exams is mandatory. In order to make up a missed exam, I need to be notified within 24 hours of the test date to make arrangements for a makeup exam. Only excused absences will be allowed a makeup exam. The instructor has the final decision whether or not to allow a makeup exam. If granted, a makeup exam must be completed within one week of original exam date.**

**ASSIGNMENTS:** All graded assignments must completed by the assigned due date. Late assignments will not be accepted.

Readings will be assigned weekly throughout the semester. You are required to learn the material in the readings on your own, prior to class. Questions for the weekly quizzes will be drawn from these readings.

**LAB REPORTS:** You will be required to write three (3) lab reports during the course. You will be required to participate in a psychological experiment, collect data from yourself and classmates, analyze the data, and write-up the lab report. Essentially, each lab report is a mini research paper, and will include an introduction, methods, results, and discussion sections. You will be required to use the APA Publication
Manual for proper style and construction of these reports. More instructions will be given in class.

DETERMINATION OF GRADES

Grading for the course will be based on performance on exams, graded assignments, and class participation. Each graded item will be posted on Blackboard, and students have one week after the date a grade is posted to contest that grade. Once one week has passed, the grade cannot be changed.

*Remember: I do not give grades, you earn them.* Course grades will be based primarily on the total number of points earned during the course. There will be approximately 700 points total for the course. The breakdown is as follows:

- Lab Reports (3) = 30 points each (90 points total)
- Reading Quizzes (11) = 10 points each (110 points total)
- Exams (3) = 100 points each (500 points total)

Letter grades will be assigned at the end of the semester as follows: (Please note: a grading curve may be applied to exam grades and/or final grades if warranted, according to the discretion of the instructor.)

- 90 – 100%  A
- 80 – 89%   B
- 70 – 79%   C
- 60 – 69%   D
- Below 60%  F

CLASSROOM POLICIES

*Attendance:* Class attendance is required, and missing class may directly impact your grade. In-class activities, pop quizzes, and other classroom assignments will be given throughout the semester AND CANNOT BE MADE UP, except in the case of University Excused Absences. If you miss a class, you will still be held responsible for all that transpired during that class, including any homework assignments given/collected, schedule changes made, and material covered.

*Classroom Correspondence:* All correspondence from the instructor will occur through Blackboard. It is your responsibility to make sure that your preferred email address is connected to the Blackboard site*, and also to check Blackboard frequently for announcements, new assignments, and other correspondence. *You can contact the TAMUCC help desk at ext. 2825 to make sure your emails from Blackboard are forwarded to your active email account*

*Email*
- Please consider e-mail as official correspondence.
• Efforts will be made to address your e-mail within 48 hours. If you do not receive an email within 48 hours, please send a follow-up email.
• No email correspondence on weekends.
• No email correspondence on the day before an examination or deadline.
• E-mail communications should be about class business. E-mail is not the place for summaries of lectures, discussions, readings, etc.
• Please use the subject line in a way that indicates the content of the message.
• Please also use professional language and **include your full name, which class you are in, and a complete inquiry** in the body of the message. Unprofessional emails will result in non-response.
• Please keep copies of e-mails that are sent and received for records purposes.

**Classroom/professional behavior:** Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor's ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc. Students who engage in disrespectful behavior (including excessive sleeping in class and unauthorized use of electronic devices) may be asked to leave.

**Academic Integrity/Plagiarism:** University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one's own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a zero on the item and/or a report made to the academic conduct committee for further penalization.

**Dropping a Class:** I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center...
and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. November 7, 2014, is the last day to drop a class with an automatic grade of “W” this term.

**Grade Appeals:** Students who feel that they have not been held to appropriate academic standards as outlined in this class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details on the process of submitting a formal grade appeal, please visit the College of Liberal Arts website, cla.tamucc.edu/students/studentinfo.html. For assistance and/or guidance in the grade appeal process, students may contact the Associate Dean.

**ACADEMIC ADVISING**

The College of Liberal Arts requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College’s Academic Advising Center is located in Driftwood 203E, and can be reached at 825-3466.

**Disabilities Accommodations:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

**STATEMENT OF ACADEMIC CONTINUITY**

In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.
Tentative Schedule of Classes:

*Notes:

1. This Syllabus is subject to change or adjustment at the instructor's discretion according to class needs.

2. This Syllabus is designed to help students understand as clearly as possible what is expected of them. *Students should direct all questions regarding the course and/or syllabus to the instructor.*

3. Lectures and classroom activities are designed with the assumption that the reading has been completed *before* the class indicated.

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<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading*</th>
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<tr>
<td><strong>PART I: THE BASICS; Single-Group Statistics</strong></td>
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<td><strong>Week One</strong></td>
<td><strong>Background Information</strong></td>
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<td>8/27</td>
<td>Welcome to Class&lt;br&gt;Why Statistics? A Review&lt;br&gt;Levels of Measurement&lt;br&gt;SPSS: Entering a Data Set</td>
<td>T: Ch 1&lt;br&gt;SPSS: Ch 1-2</td>
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<td><strong>Week Two</strong></td>
<td><strong>Descriptive Statistics</strong></td>
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<td>9/3</td>
<td>Data Distributions&lt;br&gt;Central Tendency &amp; Variability&lt;br&gt;SPSS: Creating Graphs &amp; Charts</td>
<td>T: Ch 2-3&lt;br&gt;SPSS: Ch 3-5</td>
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<td><strong>Week Three</strong></td>
<td><strong>Descriptive Statistics (Cont.)</strong></td>
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<td>9/10</td>
<td>Central Tendency &amp; Variability&lt;br&gt;Understanding the Normal Distribution&lt;br&gt;SPSS: Finding Mean, Median, Mode, and Standard Deviation</td>
<td>T: Ch 3-4&lt;br&gt;SPSS: Ch 6-7</td>
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<td><strong>Week Four</strong></td>
<td><strong>Standard Scores</strong></td>
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<td>9/17</td>
<td>Standard Scores (z and f)&lt;br&gt;SPSS: converting data to z-scores and t-scores</td>
<td>T: Ch 4-5&lt;br&gt;SPSS: Ch 8</td>
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<td><strong>Week Five</strong></td>
<td><strong>Inferential Statistics</strong></td>
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<td>9/24</td>
<td>Hypothesis Testing &amp; Statistical Significance&lt;br&gt;Using the z-test and the single-group t-test&lt;br&gt;SPSS: Single Sample t-test</td>
<td>T: Ch 5&lt;br&gt;SPSS: Ch 12</td>
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<td><strong>Week Six</strong></td>
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<td>10/1</td>
<td>Exam 1</td>
<td>Ch 1-5</td>
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| Seven   | Finding Relationships                     | 10/8 | Correlation and Regression
          |                                          |      | Pearson vs. Spearman
          |                                          |      | SPSS: correlation and linear regression |
| Eight   | Correlations & Test Construction          | 10/15| Reliability & Validity
          |                                          |      | SPSS: Testing for Reliability & Validity   |
| Nine    | Comparing Two Groups                      | 10/22| Types of T-tests
          |                                          |      | Statistical Power & Effect Size
          |                                          |      | SPSS: T-tests
          |                                          |      | **Assignment Due: Lab Report Implicit Learning** |
| Ten     | Comparing Two Groups (Cont.)              | 10/29| T-tests (Cont.)                             |
| Eleven  | EXAM 2                                    | 11/5 | Ch 6-8                                     |
| Twelve  | Comparing Three or More Groups            | 11/12| Comparing more than two groups: ANOVA
          |                                          |      | Randomized & Repeated Measures
          |                                          |      | SPSS: Multi-group Comparisons
          |                                          |      | **Assignment Due: Lab Report Prototypes** |
| Thirteen| Comparing Three or More Groups (Cont.)    | 11/19| ANOVA (Cont.)                              |
| Fourteen| When distributions aren’t normal          | 11/26| Non-Parametric Tests
          |                                          |      | SPSS: Chi-Square
          |                                          |      | **Assignment Due: Lab Report Brown-Peterson** |
|         |                                          | 11/26|                                           |

Final Exam: Wednesday, December 10th – 4:30 p.m.  Ch 9-11, 15-16