I. **PURPOSE:**
The purpose of this course is to provide the student with the basic concepts, principles, and applications related to research methods and data analysis techniques commonly used in scientific investigation. The goal is to develop the student’s skills necessary for the consumption of scientific writings by equipping the student with the ability to analyze, interpret, critique, and produce scientific research. It specifically focuses on developing the skills needed for critiquing research in terms of: methodology, sample design, survey scheme, questionnaire design, data collection, and basic statistical analysis.

II. **COURSE OBJECTIVES:**
Upon satisfactory completion of this course, the student will be able to demonstrate:
1. an understanding of the basic concepts, principles, and applications related to research methods;
2. how to write good questionnaire items;
3. ability to design an appropriate sampling scheme;
4. ability to use statistical procedures appropriately;
5. ability to produce scientific research;
6. an understanding of the APA format for writing a manuscript;
7. ability to compose written, oral, and poster presentations.

III. **REQUIRED READINGS:**

**RECOMMENDED READINGS:**


IV. **CLASS POLICIES:**
The course will be governed by all policies described in the *Faculty Handbook*, the *Student Guidebook*, and the *Graduate Catalog* of the University of North Texas.

**Attendance** for this course is expected, no absences are permitted. **To receive maximum benefit from this course you are expected to attend all classes, come prepared, and participate in the discussion.**

**Behavior** during class period should reflect professional courtesy. Please refrain from any unnecessary talking, deactivate any electronics, conducting business not related to the course, and snoozing.

**Assignments** turned in after the due date will be subjected to a full letter grade reduction for each 24 hour period beyond the due date. **Assignments must be typed and follow a consistent style (a word processor software program is recommended).** Professional "quality" for each of the assignments is the standard. A deduction in grading will occur for sloppiness, grammatical, spelling, or typographical errors, or lack of proper APA format.

**Make-up exam** will not be given. Students with scheduling difficulties must make arrangements with the instructor prior to the exam.

**Cheating** will not be tolerated in the class. You are not to receive information from another student or give information to another student during a test or quiz. You are to use only your memory during examinations. Students caught cheating during an examination will be charged under the University's Code of Student Conduct. Among other punishments, students found guilty run the risk of having their score changed to a zero, receiving a grade of “F” for the course, and/or dismissal from the University.

V. **GRADING:**
A = 100-90 **Excellent** - Indicates exceptional achievement.
B = 89-80 **Good** - Indicates extensive achievement.
C = 79-70 **Satisfactory** - Indicates acceptable achievement.
D = 69-60 **Fair** - Indicates minimal achievement.
F = 59-00 **Unsatisfactory** - Indicates inadequate achievement.

VI. **PERFORMANCE EVALUATION:**
35% Quizzes
25% Final
10% Group Research Paper
10% Group Oral Presentation
5% Group Poster Presentation
15% Participation/Assignments

VII. **ASSIGNMENTS:**
1. Obtain NIH – Certification online
   Class will divide into groups of two with common research interests and:
   1 - Select an instrument to use for your groups research project:
      a) Instrument must have multiple dimensions (sub-scales)
      b) Instrument must use a Likert-type response scale
      c) Examples:
         Quality of Life Instrument
Leisure Satisfaction Scale  
Personal Lifestyles Scale  
Self-Esteem Scale  

d) Instrument response scale cannot include a zero value  
e) Instrument has to be relevant to all of the general public (i.e. cannot pertain only to a specific sub-segment)  
f) Must be able to fit all of the Instrument’s items and response scale on one page.

2 - Each group member will review one empirically based research article that includes the instrument in a research study  
3 - The group will identify/create a grouping variable to use for comparative analysis:  
   Level of Physical Activity  
   Body Mass Index  

4 - Each member in the group will be responsible for acquiring ten (10) questionnaires completely filled out and entering the data onto an SPSS file  
5 - Each group will analyze all the data related to their selected instrument plus the demographic data, and complete a research report that includes the following sections: Introduction, Literature Review (brief – 4 articles), Methods, Results, Conclusions, References, and at least one Table and one Figure.  
6 - Each group will present their research findings in class and as a poster presentation.

VIII. AMERICANS WITH DISABILITIES COMPLIANCE:
"The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at http://www.unt.edu/oda. You may also contact them by phone at 940.565.4323."

The student has the responsibility of informing the course instructor of any disabling conditions that will require modifications and avoid discrimination.

IX. FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT:
Students have the right to expect their grades will be kept confidential. During this class it may be necessary for you to pass your assignments forward to the instructor or it may be necessary for the instructor to call your name and then return graded material to you by passing it across the room. The instructor, under the reasonable assumption guidelines, assumes students are collecting only their own materials. Every attempt will
be made to keep your information confidential. Your signature indicates that you understand and agree to pass materials to and from the instructor via other students. Should you choose not to sign, you will have to personally meet with the instructor to submit and receive assigned material. Neither your course grades nor grades for any assignment will be posted in a way that could result in your being identified by other students or faculty members. Consequently, I will not discuss a student’s grades over the telephone, the Internet via email, nor post final grades outside my office.

X. Course Calendar:
The assigned readings will prepare you for the material to be covered in class. It is expected that you will have Read This Material Before Coming To Class.

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENT</th>
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<tbody>
<tr>
<td>Tue, 1-16</td>
<td>Welcome, Syllabus Overview</td>
<td>Topics - 1-13</td>
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<td>Send me an email through Blackboard by tomorrow at 5:00 PM that you are able to navigate Blackboard functions</td>
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<tr>
<td>Tue, 1-23</td>
<td>New RESM Graduate Student Orientation (6:30-7:50)</td>
<td>Topics – 14-18</td>
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<td></td>
<td>Introduction to Research Methods, Variables, Psychometric Instruments/Scales, Creating Project Questionnaire - NIH Assignment</td>
<td>Topics – 19-23</td>
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<td>Tue, 1-30</td>
<td>Reviewing Literature, Citations, and References</td>
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<td>Questionnaire Planning and Design – Demographics</td>
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<tr>
<td>Tue, 2-6</td>
<td>SPSS data entry</td>
<td>20 - questionnaires</td>
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<td><strong>Remember to bring your 20 completed questionnaires</strong></td>
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<td>Tue, 2-13</td>
<td>SPSS statistical analysis</td>
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<td>Tue, 2-20</td>
<td>SPSS statistical analysis</td>
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<tr>
<td>Tue, 2-27</td>
<td>SPSS statistical analysis training</td>
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<td>Tue, 3-6</td>
<td><strong>NIRSA Conference</strong></td>
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<td>Tue, 3-13</td>
<td>No Class – SPRING BREAK</td>
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<tr>
<td>Tue, 3-20</td>
<td>SPSS statistical analysis training</td>
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<td>Tue, 3-27</td>
<td>Sampling Measurement</td>
<td>Topics – 24-30</td>
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<td><strong>Measurement</strong></td>
<td>Topics – 31-40</td>
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<tr>
<td>Tue, 4-3</td>
<td>Experimental Design</td>
<td>Topics - 41-46</td>
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<td>Tue, 4-10</td>
<td>Understanding Statistics</td>
<td>Topics – 47-61</td>
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<td>Tue, 4-17</td>
<td>Effect Size and Meta-Analysis</td>
<td>Topics – 62-67</td>
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<td>Qualitative Research</td>
<td>Topics – 68-74</td>
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<td>Tue, 4-24</td>
<td>Reporting the Information</td>
<td>Topics – 75-82</td>
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<td>Presenting Survey Results</td>
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<td>Tue, 5-1</td>
<td>Group Research Paper/Oral and Poster Presentations</td>
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<td>Tue, 5-8</td>
<td>Final Examination</td>
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