CNEP 6372. Seminar in Applications of Advanced Statistical Techniques and Evaluation Methodology

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Office Hours: TBA
By Appointment

Classroom:

I. COURSE DESCRIPTION

This research methodology course is designed to provide doctoral students with application experience in quantitative, qualitative and mixed-method data analytic procedures. Students will address promises and pitfalls using advanced univariate, multivariate, and non-parametric techniques introduced in CNEP 6360 and CNEP 6370. Students will act as consultants and evaluators on projects developed by student research teams in the department. This course is designed to help students address data analytic applications relevant to professional consulting, clinical and counseling practice as well as contexts involving program evaluation in a wide range of professional settings.

Prerequisites: CNEP 6320; CNEP 6360; CNEP 6370.

II. RATIONALE

This course concludes a series of methodology courses required for students in the doctoral program in Counselor Education. The methods courses are designed to facilitate in-depth knowledge of research methodology and statistical tools for PhD. students who will be applying for faculty positions in Counselor Education programs. This final course encourages students to work on individually defined statistical problems that emerge from their own research as well as from practical problems presented in a program evaluation. In addition, the course provides opportunities for students to work as peer statistical consultants/evaluators and seminar leaders, - important skills for developing professionals.

III. STATE ADOPTED PROFICIENCIES FOR TEACHERS/Counselors

The State adopted proficiencies covered in this course include the following:

1. Learner-Centered Knowledge.
2. Learner-Centered Professional Development
3. Learner Centered Planning
4. Learner Centered Responsive services
IV. TExCES COMPETENCIES

The competencies covered in this course are applicable to TExCES programs requiring the understanding and application of the research process components. In addition special emphasis is placed on

Competency 008 Assessment. The professional school counselor uses formal and informal assessment to provide information about and to learners, to monitor student progress and to recommend modification to the educational environment to help all learners achieve success in school.

Competency 012 Ethical, Legal and professional Standards. The Professional school Counselor complies with the legal, ethical and professional standards of Texas public school educators; engages in self-reflection and professional growth activities and works with colleagues to advance the counseling profession.

V. COURSE OBJECTIVES AND OUTCOMES

1. The doctoral student will demonstrate advanced theoretical knowledge of statistical concepts that underlie appropriate interpretation and application of the research process. The student will be able to develop an applied practice module on a selected statistical technique.

2. The doctoral student will demonstrate practical knowledge of statistical applications of SPSS. The student will be able to use the software to manage and manipulate raw data, test hypotheses, display data and interpret the results.

3. The doctoral student will demonstrate advanced knowledge through integration of course content into an independent research endeavor. The student will be able to complete a substantial draft of chapters 3-5 on their dissertation.

4. The doctoral student will have learning experiences beyond the entry-level in the following content areas: (Doctoral CACREP Standard II.C.5.) design and implementation of quantitative research and methodology including univariate, multivariate, and single-subject design. The student will be able to demonstrate mastery of univariate, multivariate, and single subject and evaluation designs.

5. The doctoral student will be able to have learning experiences beyond the entry-level in the following content area: (Doctoral CACREP Standard II.C.7.) models and methods of assessment and use of data. The student will be able to fit appropriate assessment methods and evaluation models to selected data sets.

6. The doctoral student will demonstrate practical skill in evaluating the validity and utility of research ideas. The student will be able to provide critical in-depth peer feedback to other students regarding research design and data analytic strategy.
7. The doctoral student will gain experience in conducting program evaluation. The student will be able to demonstrate ability to utilize a logical modeling approach to evaluating and providing consultation services to fellow student researchers.

VI. COURSE TOPICS (See attachment)

The major topics to be considered are the following: (see schedule)

VII. INSTRUCTIONAL METHODS AND ACTIVITIES

- Critical review of proposed statistical methodology
- Peer consultation on case presentation
- Cooperative groups
- Guided data analytic practice sessions
- Student presentations as case studies

VIII. EVALUATION AND GRADE ASSIGNMENT AND DELIVERABLES

What you will be expected to do to demonstrate your competence and proficiency with material covered in this course. Five activities each weighed equally (20%).

1. Present dissertation study as a case.
2. Provide in-depth written consultation feedback on two (2) case studies
3. Design and lead a teaching module which will include applied practice in data analysis
4. Complete a significant draft of chapters 3-5 of dissertation (depending upon expected graduation date)
5. Co-construct and implement a data based focused evaluation based on systematic monitoring of their goals and processes identified this semester.
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<th>Date</th>
<th>Topic</th>
<th>Reading/Exercise</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to Scope and Goals of the Course</td>
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<td>Brief Rounds &amp; Review of Personal Goals</td>
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<td>Design FA contract Process</td>
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<td>Formation of Peer Evaluation Teams</td>
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<td><strong>HWK</strong></td>
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<td>Week 2</td>
<td>Assuming a Professional Role I: Critical Thinking about Scientific Inquiry:</td>
<td><strong>HWK</strong>: Ch. 11</td>
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<td>Descriptions, Questions, Data, Hypotheses &amp; Conclusions</td>
<td>Design Teaching Module</td>
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<td>Week 3 &amp; 4</td>
<td>Assuming a Professional Role II: Topics in Qualitative Research: What everyone should know about Quantitative Research</td>
<td><strong>HWK</strong>: CH: 10</td>
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<td>Design Teaching Module</td>
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<td>Week 5 &amp; 6</td>
<td>Assuming a Professional Role III: Topics in Quantitative Research: What Everyone should Know about Qualitative Research</td>
<td><strong>HWK</strong>: CH: 18; 21</td>
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<td>Design Teaching Module</td>
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<td>Week 7 &amp; 8</td>
<td>Assuming a Professional Role IV Evaluation and Research in Applied Settings</td>
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<td>Week 9</td>
<td>Case Studies, Consultation, &amp; Applied Practice</td>
<td><strong>HWK</strong></td>
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<td>Week 10</td>
<td>Case Studies, Consultation, &amp; Applied Practice</td>
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<td>Week 11</td>
<td>Case Studies, Consultation, &amp; Applied Practice</td>
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<td>Week 12</td>
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<td>Week 15</td>
<td>Case Studies, Consultation, &amp; Applied Practice</td>
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X. **TEXTBOOK**  
**Required Texts:**  


SPSS v.13: Student Version: Prentice Hall

XI. **SELECTED BIBLIOGRAPHY includes, but is not limited to, the following:**


Faculty/Student
Expectations, Goals and Outcomes

A major focus of this course is to move you toward completion of your degree—specifically toward completion of your dissertation. It will be important to have the input of your advisor as you set goals for work this semester. Please use this form to structure a focused discussion with your dissertation chairperson. I will ask you to return with this form and be prepared to discuss how you might use this course time to meet the goals you and your advisor have discussed for your progress this semester.

Faculty Advisor/Dissertation Chair:

Status of Dissertation Project (comments):

Proposed or Expected Proposal Date:
  Status of chapters 1-5
  Dates for Referral

Goals based on discussion with Advisor:
  Dates for Referral

Work Plan for Reaching Goals and Objectives
  How will you go about reaching goals?
    Specific Activities?
  Dates for Referral

How will you know when they have been obtained or need to be revised?
  Specific Benchmarks?

Anticipated Barriers to Successful Completion of this plan?