COUN 7120: Research Methodology: Quantitative

Credits: 3
Prerequisite: Open only to PhD/CES students
Day/Date/Time: Mondays, 3-6pm, date range
Quarter: Winter, year
Location: AUS Main Campus
2400 Third Avenue, Suite 200
Seattle, WA 98121
Instructor: name
Contact Info: university email address
Office Hours: by appointment
Teaching Liaison: name
Contact Information: university email address

COURSE DESCRIPTION:
Focuses on the range of quantitative research methodologies used within the counseling profession, including both bivariate and multivariate statistics.

PROGRAM COMPETENCIES AND OUTCOMES

The goal of the program is to expand student abilities in adult learning andragogy specific to counselor and creative arts counselor training, while developing critical thinking skills toward a focused research agenda. To meet CACREP 2016 Doctoral Standards, students must demonstrate proficiency in five core areas:
Teaching, Supervision, Research, Counseling, and Leadership & Advocacy. As such, the AUS CES program is designed with curricula that specifically addresses these five areas across multiple required courses as outlined in the student handbook and Ph.D./CES plans of study. Additionally, the AUS CES program specifically addresses expectations for student learning and competency via the following program objectives:

Objective1: Diversity and Change. Doctoral students are expected to demonstrate attitudes and understandings that support engaging with, and appropriately responding to the needs of, a constantly changing population of clients and students whose cultures, experiences, and personal characteristics may be marginalized in the mainstream society.
Objective 2: Counselor Education. Students are expected, by the end of their doctoral internships, to demonstrate levels of knowledge, understandings of the processes of teaching and learning, and teaching skills appropriate for high-quality Masters-level instruction as well as student assessment and program evaluation.

Objective 3: Supervision. Students are expected to demonstrate, by the end of their doctoral internships, the ability to conceptualize supervisory relationships and deliver high-quality supervision.

Objective 4: Advanced Practice. Students are expected to identify an area for advanced professional growth demonstrated within their internship experience in the domains of clinical counseling, counselor education and/or counseling supervision.

Objective 5: Research. Students are expected to demonstrate, by the completion of their programs, high levels of competence in conceptualizing, planning, conducting, and interpreting research appropriate to their counseling interests and the needs of the counseling profession.

Objective 6: Engagement and Advocacy. Students are expected to demonstrate an active role in their professional communities and the larger society they serve, advocating for improvement in standards of service delivery and access to resources.

Objective 7: Creative Arts Cognate. Students in this cognate are expected to integrate the knowledge and skills of counselor education and supervision to the specific training competencies of creative arts therapists

COURSE AND STUDENT LEARNING OBJECTIVES:

The Council for Accreditation of Counseling and Related Educational Programs (CACREP) requires that, for doctoral students, learning experiences in Research in Counseling and Counselor Education must not only meet the Core Research Curriculum Requirements (CACREP 2.F.8) but must also meet the following Doctoral Professional Identity Standards (CACREP 6.B.4):

a. research designs appropriate to quantitative and qualitative research questions
b. univariate and multivariate research designs and data analysis methods
c. qualitative designs and approaches to qualitative data analysis
d. emergent research practices and processes
e. models and methods of instrument design
f. models and methods of program evaluation
g. research questions appropriate for professional research and publication
h. professional writing for journal and newsletter publication
i. professional conference proposal preparation
j. design and evaluation of research proposals for a human subjects/institutional review board
k. grant proposals and other sources of funding
l. ethical and culturally relevant strategies for conducting research

As such, the AUS Ph.D./CES Program is designed with four courses to cover the necessary research and scholarship material. In this second course, Research Methods: Quantitative, all areas will be introduced but with particular emphasis on parts a, b, d, e, g, h, i, and l.
<table>
<thead>
<tr>
<th>CACREP Standard (Doctoral Professional Identity)</th>
<th>Abbreviations</th>
<th>Key Performance Indicators</th>
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<tr>
<td>Demonstrate an ability to construct research questions appropriate for quantitative research</td>
<td>B4 a, g</td>
<td>Course readings, active participation, homework, case studies, skill performance and observation, narrative assessments and rubric Assignments: ROA, AWU, QAP</td>
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<td>Demonstrate a knowledge of differences between means-comparison, correlational, and mixed-methods analyses</td>
<td>B4 a,d,e</td>
<td>Course readings, active participation, homework, case studies, skill performance and observation, narrative assessments and rubric Assignments: ROA, AC, QAP, AWU</td>
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<td>Synthesize information from constructed research questions and analysis to infer information from quantitative data</td>
<td>B4 a, l</td>
<td>Course readings, active participation, homework, case studies, skill performance and observation, narrative assessments and rubric Assignments: AC, AWU</td>
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<td>Identify strengths and weaknesses of empirical studies utilizing quantitative analysis from a methodological standpoint</td>
<td>B4 a,b,d,h</td>
<td>Course readings, active participation, homework, case studies, skill performance and observation, narrative assessments and rubric Assignments: AC</td>
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<td>Demonstrate an ability to appropriately document results from quantitative analyses for dissemination (e.g., journals, conference presentations, newsletters)</td>
<td>B4 g,h,i</td>
<td>Course readings, active participation, homework, case studies, skill performance and observation, narrative assessments and rubric Assignments: AWU</td>
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<td>Execute appropriate quantitative analyses from pre-existing datasets</td>
<td>B4 a,b,d,g</td>
<td>Course readings, active participation, homework, case studies, skill performance and observation, narrative assessments and rubric Assignments: QAP, AWU</td>
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<td>Develop an understanding of multicultural and social justice concerns in conducting quantitative research</td>
<td>B4 l</td>
<td>Course readings, active participation, homework, case studies, skill performance and observation, narrative assessments and rubric Assignments: AC, AWU</td>
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**ANDRAGOGICAL DESIGN:**
This course is a mix of didactic and experiential learning. Students will learn via lecture, reading, discussion and class activities. Emphasis will be on broadening the base of understanding of to conduct quantitative analysis through hands-on experience with statistical software and real data. Class sessions will include short lectures; group discussions; individual and group presentations; and experiential activities. Emphasis will be on developing a knowledge base about the quantitative research including its evolution from research question to analysis and dissemination in scholarly work. Students will complete required readings, research, and writing assignments.
REQUIRED TEXTS AND READING RESOURCES


Additional articles will be posted on Sakai

SUGGESTED/OPTIONAL TEXT


Helpful Links:
- American Counseling Association (ACA) link: [www.counseling.org](http://www.counseling.org)
- Association for Assessment and Research in Counseling: [www.aarc-counseling.org](http://www.aarc-counseling.org) Spiritual, Ethical, and Religious Values in Counseling (ASERVIC): [www.aservic.org](http://www.aservic.org)
- Association of Counselor Education and Supervision: [www.acesonline.net](http://www.acesonline.net)

ASSIGNMENTS

1. **Article Critiques (AC) – Due Week 5 via Sakai Dropbox**
   For this assignment, you will select two (2) quantitative or mixed methods studies from ACA journals (e.g., Journal of Counseling & Development, Counselor Education and Supervision, or Counseling Outcomes and Research Evaluation). Please critique the research questions and their appropriateness for quantitative analysis; the appropriateness of the analysis; information missing from the article; cultural considerations the authors did or did not include in collecting their data and the analysis (e.g., how representative is the sample?); and your overall interpretation of the articles and their use of quantitative analysis. Each analysis should be ~3 pages and appropriate cite the article being critiqued and other appropriate citations.

2. **Research Questions and Analysis (RQA) – Due Week 7 via Sakai Dropbox**
   For this assignment, you will detail two (2) research questions that are appropriate for quantitative research. In addition to the research question, you will also detail the type of data to be collected and the appropriate analysis. You will expound on your reasoning for your chosen analysis and the assignment should include one means-comparison and one correlational analysis. You may feel free to use materials from previous courses to further develop critiques for eventual research.

3. **Quantitative Analysis Presentation (QAP) – Presented in Week 9**
   You’ll be paired with a cohort-mate to work with a pre-existing dataset (resources available on Sakai) that is relevant to your developing research lines. The datasets can originate from any source, but your research questions should relate to counseling and/or counselor education. You may also use your own data, as long as it was collected IRB approval. You’ll work with your
partner throughout the quarter to develop the research questions, analysis, and write-up. During Week 9, you will both present your background, research question, rationale, and (if completed) preliminary analysis to the class for critiques and feedback. You can then use this feedback for the following written assignment. Presentations should last 20-25 minutes.

4. Analyses and Write-Up (AWU) – Due Week 11 via Sakai Dropbox
With your partner, you will write a condensed manuscript with an introduction, methods, results, and discussion section based around pre-existing data. The paper should include at least two (2) analyses – one means-comparison and one correlational. The manuscript should include a brief literature review for the introduction section (~5-6 peer-reviewed sources), rationale and background on the analysis in the methods section, accurate statistical write-ups in the results section, and inferences and areas for future research in the discussion section.

Please note that I am a believer in a “smarter-not-harder” mentality. That is, your critiques can be the sources for the condensed manuscript and the literature reviews can be taken from a previous course – this is allowed to encourage you to build these materials to a publishable state for the benefit of you and your colleagues.

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<tr>
<th>Date</th>
<th>Assignments Due</th>
<th>Discussion Topics</th>
<th>Readings (read for discussion in the corresponding week)</th>
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<tr>
<td>Week 1</td>
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<td>No Class – New Yearsish</td>
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<td>Week 2</td>
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<td>Overview, Syllabus, Experimental &amp; Quasi-</td>
<td>Mujis Ch. 1&amp;2 Article: Cokley &amp; Awad (2013)</td>
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<td>Experimental Research</td>
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<td>Week 3</td>
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<td>No Class – Dr. Martin Luther King Jr. Day</td>
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<td>Week 4</td>
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<td>Non-Experimental Research &amp; Key Quantitative</td>
<td>Mujis Ch. 3&amp;4 Article: Harmon-Walker &amp; Kaiser, 2015;</td>
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<td>AC</td>
<td>Concepts</td>
<td>Maffini &amp; Wong, 2015</td>
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<td>Week 5</td>
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<td>SPSS &amp; Univariate Data</td>
<td>Mujis Ch. 5&amp;6 Article:</td>
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<td>Week 6</td>
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<td>Bivariate Data</td>
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<td>Week 7</td>
<td>RQA</td>
<td>Multivariate Data</td>
<td>Mujis Ch. 9&amp;10 Article: Osborne &amp; Waters (2002)</td>
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<td>Week 8</td>
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<td>Quantitative Research Ethics,</td>
<td>Articles: Cohen (1992)</td>
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<td>Common Issues</td>
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<td>Week 9</td>
<td>QAP</td>
<td>Presentations</td>
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<td>Week 10</td>
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<td>Scale Development</td>
<td>Mujis Ch. 11 Article: Mvududu &amp; Sink, 2013</td>
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<td>Week 11</td>
<td>AWU</td>
<td>Intro to Advanced Analysis</td>
<td>Mujis Ch. 12 Article: Crockett, 2012</td>
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**ASSESSMENT CRITERIA FOR PH.D. STUDENTS**

Ph.D. students are assessed in nine (9) competency areas across four (4) competency levels as defined below. In order to be granted credit for a specific course, students must demonstrate an overall **required level of competency**.

**DEFINITIONS OF COMPETENCY AREAS**

- **Critical Thinking** - shows ability to think abstractly, recognize multiple sides of an issue and generate creative solutions; demonstrates intellectual curiosity, flexibility, and active engagement with new knowledge.

- **Verbal Communication** - articulates ideas effectively and maintains congruence between verbal and non-verbal behaviors; shows understanding of group dynamics and awareness of own impact on the group.

- **Oral Presentation** - able to present ideas in a well-organized format; open and able to respond to questions.

- **Written Communication** - writes clearly, presents ideas and information in an organized format; demonstrates technical writing skills including appropriate punctuation, spelling, quotations, grammar, and APA style.
Cultural Awareness and Responsiveness - understands influence of culture on self and others; holds multicultural awareness, knowledge, and skills sufficient to work effectively with people of diverse cultures and world-views.

Social Responsibility - aware of social, political, and economic inequalities and their psychological effects; shows willingness to address needs of underserved populations.

Emotional Maturity - willing to examine and take responsibility for personal and professional choices; open and non-defensive in receiving and responding to feedback; flexible and willing to change.

Ethical Conduct - demonstrates personal integrity, honesty, and responsibility; works toward integration of personal and professional identity.

Interpersonal Skills - demonstrates empathy, patience, respect, caring, and sense of humor; willing and able to tolerate ambiguity; maintains appropriate boundaries.

Definitions of Competency Levels

Below Competency: Fails to meet the minimum course requirements as outlined in this syllabus. This includes attendance, class participation, and successful completion of all assignments in a manner which demonstrates a basic understanding of quantitative research in the counseling field.

Required Competency: Demonstrates a basic understanding of quantitative research in the counseling field as outlined above, and by meeting all of the minimum requirements for the class as outlined in the syllabus.

Intermediate Competency: Meets Required Competency as well as demonstration of critical thought in terms of topics, axiology, methodology, and multicultural considerations related to counseling research.

Advanced Competency: Meets Intermediate Competency as well as demonstrated level of expertise in course knowledge and/or skills areas expected of entry-level counselor educators; knowledge and skills that would be expected of a beginning-level counselor educator in relation to counseling research.

Counselor Competency and Fitness

Antioch University is obligated, as a CACREP institution, to hold our students to the highest professional, personal, and ethical standards and to respond when those standards are compromised. The 2014 American Counseling Association *Code of Ethics*, in Section F.5.b, states in part, “Students and supervisees monitor themselves for signs of impairment from their own physical, mental, or emotional problems and refrain from offering or providing professional services when such impairment is likely to harm a client or others. They notify their faculty and/or supervisors and seek assistance for problems that reach the level of profession impairment, and, if necessary, they limit, suspend, or terminate their professional responsibilities until it is determined that they may safely resume their work.” Section F.9.b states in part, “Counselor educators, throughout ongoing evaluation, are aware of and address the inability of some students to achieve counseling competencies. Counselor educators do the following: 1) assist students in securing remedial assistance when needed, 2) seek professional consultation
and document their decision to dismiss or refer students for assistance, and 3) ensure that students have recourse in a timely manner to address decisions to require them to seek assistance or to dismiss them and provide students with due process according to institutional policies and procedures."

In this course you will be required to demonstrate competencies that cannot be adequately evaluated based on written assignments and classroom discussion alone. Therefore a passing grade for this course requires successful performance on nine factors that have been established as essential for performance as a competent and ethical counselor (Wiggins-Frame & Stevens-Smith, 1995*). You are expected to be: 1) open, 2) flexible, 3) positive, 4) cooperative, 5) willing to use and accept feedback, 6) aware of impact on others, 7) able to deal with conflict, 8) able to accept personal responsibility, and 9) able to express feelings effectively and appropriately. You will be informed by your instructor if your performance on any of these factors is substandard and will be given specific, written feedback with guidelines for improvement.

Counseling not only demands the highest levels of performance, it also subjects counselors to stresses and challenges that may threaten individuals’ coping abilities. You are encouraged to seek professional assistance and notify your supervisor if you feel that your work is being compromised.

**Antioch University Evaluation Procedures**

1. **Attendance:** Students are expected to attend all scheduled classes. Credits may be denied for failure to attend classes.

2. **Conduct:** Students are expected to be treated and to treat others with respect. Failure to do so may result in suspension, dismissal, or exclusion from class.

3. **Plagiarism:** Plagiarism is defined as the presentation of an idea or a product as one’s own, when that idea or product is derived from another source and presented without credit to the original source. “Idea or product” includes not only written work but also artworks, images, performances or ideas expressed orally or via any electronic or other medium.

4. **Communication Protocol:** All students must have access to computer technology. AUS maintains computer access in the AUS Library on the third floor and the study center on the second floor.

   E-mail accounts and addresses are assigned for all Antioch Seattle students. Students are required to check their e-mail accounts at least weekly and are responsible for being aware of information posted as official announcements and through their programs. To comply with students’ record confidentiality and security requirements, official e-mail communication with Antioch Seattle, including e-mail between students and instructors, should originate from and be conducted within the Antioch University Seattle e-mail system.
5. **Incompletes:** If a student does not satisfactorily complete the assigned work in a course by the end of the term, he or she will be granted No Credit. If a student is unable to complete the work due to extraordinary extending circumstances, he or she should discuss the matter with the instructor and, if approved, the instructor can assign an incomplete (INC) and set a deadline of no more than thirty (30) days for required submission of all remaining assignments. The incomplete will be calculated in the same way as No Credit is when determining the student’s academic standing. Upon satisfactory completion of the INC, it will no longer count against the student’s academic standing. If the work is not completed by the deadline and an assessment has not been submitted, a No Credit (NC) will be assigned, not subject to change. To earn credit for a course deemed No Credit or permanently incomplete, the student must reenroll in and repay for the course. Incomplete contracts are not available to non-matriculated or visiting students.

Upon withdrawal from Antioch, outstanding incomplete courses are converted to NC (No Credit). An NC is permanent and not subject to change. Students must complete all course and degree requirements prior to or on the last day of classes of a term to be eligible to graduate that term.

**Audio- or Video-Recording of Classes**

Your instructor may identify times when recording a class session may have educational or academic value. In these cases, the recordings will be used and shared by your instructor in accordance with the Guidelines for Lecture Capture and Audio/Video Recording. The Guidelines provide information about when it is necessary for faculty to obtain permission to use and/or share class recordings. Students will be asked to provide their verbal consent to have the sessions recorded. Faculty may not share or transfer the recordings to third parties outside the class without students’ written consent. Students who receive copies of recorded classes may use the recordings for their own personal educational purposes only; for the duration of the course. Students may not share or transfer the recordings to third parties outside the class under any circumstances.

**Reasonable Accommodation for Students with Disabilities**

Antioch University is committed to providing reasonable accommodations to qualified students with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 2008. Students with disabilities may contact the Disability Support Services office to initiate the process and request accommodations that will enable them to have an equal opportunity to benefit from and participate in the institution’s programs and services. Students are encouraged to do this as early in the term as possible, since reasonable accommodations are not retroactive. The Disability Support Services office is available to address questions regarding reasonable accommodations at any point in the term.

For more information, please contact: Jill Haddaway, Disability Support Services Coordinator  
206.268.4151  
dss.aus@antioch.edu.
LIBRARY SERVICES AND RESEARCH SUPPORT
The AUS Library is here to serve you throughout your academic career. On our physical shelves, you’ll find books carefully vetted to help you in your academic pursuits. In addition, you’ll also find journals, masters’ theses, dissertations, and videos/DVDs. The AUS Library provides computers including PCs and Macs, a printer/copier, and scanners available for you to use. You may also bring your laptop and connect to the campus wireless system.

To search the library catalog and beyond, please see the AUS Library web page, http://www.antiochseattle.edu/library. Both the catalog and our extensive research databases may be searched from off campus. Please call the AUS Library at 206.268.4120 if you need information on how to access the databases.

The Library teaches workshops throughout the year that are designed to help you in your research. Students may also make an appointment with the librarian for individual research help. Call or email Beverly Stuart, Library Director, at 206.268.4507 or bstuart@antioch.edu.

WRITING SUPPORT AT ANTIOCH UNIVERSITY
Much of your learning is writing intensive, and you will write in a variety of genres, from critical reflections to more formal research papers. Writing for an academic audience can also require one to gain new understandings about style and format. All students are encouraged to seek writing support for their courses throughout their career at Antioch. Students at AUS have multiple venues for free writing support:

AUS Writing Lab (room 323 Library/CTL): Formerly the Academic Support Lab. The Writing Lab offers free peer-based writing consultation, both in-person and via webcam, phone, or messaging. Students can schedule directly online at www.antiochseattle.edu/tutoring, call: 206.268.4416 or email: writinglab.aus@antioch.edu. We offer drop-in hours as well as workshops and other resources for successful writing at AUS. Writing Lab consultants are graduate students in various programs at AUS and thus have deep understanding of the types of writing done by AUS students. Check the website for future workshops on topics related to academic writing.

The Virtual Writing Center (VWC): The VWC is located on the AU Drive at antioch.edu/vwc and allows busy AU students to get quality peer-based feedback of their writing within 48 hours. Live conversations with peer e-tutors may also be arranged by emailing vwc@antioch.edu.

The Writers’ Exchange (WEX): Fee-based writing support: The Writers’ Exchange (WEX) was developed at Antioch University in direct response to the increase demand of graduate students’ need for specialized editing support that exceeded the free peer-editing available at the Virtual Writing Center. If you’re working on your thesis or dissertation, or just want professional writing support, visit WEX at wex.antioch.edu.

All WEX editors are professionals who have been vetted for their range of editing experience and the breadth of their expertise. Our fees are competitive and further discounted for the entire AU community.