

PROGRAM LEARNING OUTCOME (PLO) 2: USE OF RESEARCH ANALYSIS AND REPORT SPRING, 2017-SPRING, 2019

Program Learning Outcome (PLO) 2: Students in the master's degree programs (CMHC, RC, and SC) within the Department of Counseling and Human Services at the University of Scranton will: "formulate, conduct, and evaluate master's level research procedures and assessment processes."

EXECUTIVE SUMMARY

A systematic assessment of PLO 2 (formerly PLO 4) was conducted last in January, 2015. At that time, outcomes for three designated assignments from COUN 535: SC Research and Accountability and COUN 505: Research Methods in Counseling were used to conduct the analysis for this PLO. Two-and-a-half years of outcomes (AY12-13, AY13-14, and F14) informed the analysis for the previous assessment cycle. Due to ongoing development of the department's PLO cycle and changes to the assessment artifacts to be used, the anticipated three-year cycle was delayed by one year. The current cycle includes information from 5 Counselor Preparation Comprehensive Examination (CPCE) test administrations (SP17-SP19) and represents a revised approach to assessment for this Program Learning Outcome. Previously, three primary course assignments were used (see previous reports- "PLO4 14-15 REPORT SCHOOL" and PLO4 14-15 REPORT for CMHC and RC"). Currently, student performance on the "Research and Program Evaluation" subsection of the CPCE is used. All students in our three master's degree programs have been required to take the exam since the fall of 2015. While "completion" of the exam has been required since that time, "pass" requirements and remediation consequences for students who do not meet departmental

expectations on the exam (as outlined in the Program Manuals) only went into effect for incoming students in the current (F19) semester.

Due to program revisions within the department in the last few years, COUN 505: Research Methods in Counseling, is now the required graduate class for *all* graduate students enrolled in our master’s degree programs (sample syllabus attached). COUN 535: SC Research and Accountability is no longer offered. The current course is designed to meet CACREP standards for learning in this content area. Formative assessment for all students is conducted by monitoring performance on the midterm and final exams in this course.

RESULTS

Results for this PLO are reported in the tables below. Areas of note are noted and followed by a “Recommendations” section and an “Action Report” section to document the department’s ongoing “Closing the Loop” activities.

Table 1: Aggregate CPCE Mean Scores By Semester: Research and Program Evaluation Subsection

Research x Date	SP17	F17	SP18	F18	SP19	Overall
ALL Programs	<i>m</i> = 8.3 (<i>s.d.</i> = 5.1) <i>n</i> = 4	<i>m</i> = 11 (<i>s.d.</i> = 2.6) <i>n</i> = 17	<i>m</i> = 10.8 (<i>s.d.</i> = 3.8) <i>n</i> = 15	<i>m</i> = 11.6 (<i>s.d.</i> = 2.6) <i>n</i> = 7	<i>m</i> = 9.3 (<i>s.d.</i> = 1.4) <i>n</i> = 12	<i>m</i> = 10.5 (<i>s.d.</i> = 3.1) <i>n</i> = 55

*Maximum score on this subsection = 17; *n* = Number of students tested

Table 2: Program-Specific CPCE Mean Scores By Semester: Research and Program Evaluation Subsection

SPC x	SP17	F17	SP18	F18	SP19	Overall
Date						
CMHC	<i>m</i> = 15 <i>n</i> = 1	<i>m</i> = 11.5 (<i>s.d.</i> = 2.7) <i>n</i> = 11	<i>m</i> = 13.4 (<i>s.d.</i> = 2.6) <i>n</i> = 7	<i>m</i> = 12.8 (<i>s.d.</i> = 1.9) <i>n</i> = 5	<i>m</i> = 8.8 (<i>s.d.</i> = 1.5) <i>n</i> = 5	<i>m</i> = 11.9 (<i>s.d.</i> = 2.8) <i>n</i> = 29
RC	<i>n.d.</i>	<i>m</i> = 10.8 (<i>s.d.</i> = 1.7) <i>n</i> = 4	<i>m</i> = 8.7 (<i>s.d.</i> = 4.0) <i>n</i> = 3	<i>m</i> = 8 <i>n</i> = 1	<i>m</i> = 9.6 (<i>s.d.</i> = 1.5) <i>n</i> = 5	<i>m</i> = 9.6 (<i>s.d.</i> = 2.3) <i>n</i> = 13
SC	<i>m</i> = 6 (<i>s.d.</i> = 3) <i>n</i> = 3	<i>m</i> = 8.5 (<i>s.d.</i> = 3.5) <i>n</i> = 2	<i>m</i> = 8.4 (<i>s.d.</i> = 3.1) <i>n</i> = 5	<i>m</i> = 9 <i>n</i> = 1	<i>m</i> = 10 (<i>s.d.</i> = 1.4) <i>n</i> = 2	<i>m</i> = 8.2 (<i>s.d.</i> = 2.8) <i>n</i> = 13

*Maximum score on this subsection = 17; *n* = Number of students tested

The maximum score on this subsection of the CPCE is 17. The aggregate student mean for ALL students completing the exam (*n* = 55) during this cycle was 10.5 (*sd* = 3.1) with a minimum score of 3 and a maximum score of 16 (see Table 1, Overall). Referring to the “Overall Column” in Table 2, students in the CMHC Program (*m* = 11.9) scored above the aggregate student mean while students in the RC Program (*m* = 9.6) and SC Program (*m* = 8.2) scored below. A visual review of Program-Specific scores by semester *may* indicate longitudinal improvements in scores by students in the SC Program (from *m* = 6 in SP17 to *m* = 10 in SP19). No other consistent upward or downward trends appear to exist.

RECOMMENDATIONS

1. Compare student performance pre-2019 and post-2019 when the new program requirements for passing the CPCE went into effect.
2. Monitor program-specific CPCE Mean Scores (see Table 2) during the next evaluation cycle to determine whether or not the consolidated course approach is

- strengthening SC and RC outcomes on this subsection in relationship to the aggregate mean and CMHC students.
3. Maintain the CPCE assessment throughout the next PLO cycle in order to insure greater reliability and validity as well as future outcomes analysis/comparison.
 4. Monitor formative assessments (midterm and final exam performance in COUN 505 Research Methods course) to track student learning progress related to this PLO. Discuss the merits of establishing a *benchmark target* for the formative assessments based on current data in order to enhance summative outcomes on this PLO throughout the next cycle.
 5. Monitor student course feedback and formative assessments for ongoing course improvements (including quality of learning assignments, satisfaction with course textbook, etc.).
 6. Establish benchmarks for performance on the Research section of the CPCE.

ACTION REPORT

1. Preliminary working draft sent to Standards Work Group via e-mail for preview and discussion at upcoming meeting (DATE).
2. The Standards Work Group discussed the report on February 20, 2020 and decided to bring it to the Assessment Action Committee in the next meeting.
3. The Assessment Action Committee (AAC) reviewed the report on February 25, 2020. The AAC added the recommendation on benchmarks (recommendation 6). There was a proposal to set a benchmark of 70% of students score at or above the national mean for the Research section. The AAC moved the report to the next CHS Department for an official vote of approval on March 5th.

4. AAC met on 2/23/21.
 - a) Discussed SC scores as relatively lower in relationship to RC and CMHC students. Previous course (COUN 535) focused on Program Evaluation instead of technical details of statistics and research methods in 505. This probably explains the relatively lower scores. We will monitor this in the next evaluation cycle.
 - b) The department now has a robust assessment plan that includes KPI's, PLO's, individual student monitoring, and an established report cycle that should allow us to monitor this PLO more completely in the next cycle. This report serves as a "baseline" for that future work.
 - c) There will be a gap in the CPCE data in the next cycle due to COVID which resulted in the exam being suspended for students in the SP and F of 2020.
 - d) Spell out all acronyms within this report before posting in order to assist stakeholders with overall understanding.
 - e) All advisors/mentors now have access to students performance on this KPI domain (Midterm and Final Exam results). It will be important to update each student's Curriculum Planning Guides prior to each advising cycle on a regular basis in order to begin working with them on this. This is happening for the first time in SP21.

Appendix A

COUN 505: Research Methods Syllabus

Department of Counseling and Human Services
THE UNIVERSITY OF SCRANTON
COUN 505 Research Methods
Mondays, 4:30-7:10 p.m., 110 McGurrin
Fall, 2019

Kevin Wilkerson, Ph.D., NCC, ACS
 445 McGurrin Hall
 E-mail: kevin.wilkerson@scranton.edu
 Office Phone: 941-6649
 Department Phone: 941-4236

Office Hours: M 3:00-4:30
 W 3:00-4:30
 or by appointment

COURSE CATALOG DESCRIPTIONS

An introduction to research issues and methodology in the field of counseling. Emphasis is placed on gaining the knowledge necessary to evaluate the conclusions of published research.

COURSE OBJECTIVES/STANDARDS

CACREP Section 2:F.8. RESEARCH AND PROGRAM EVALUATION

- a. the importance of research in advancing the counseling profession, including how to critique research to inform counseling practice
- b. identification of evidence-based counseling practices
- c. needs assessments
- d. development of outcome measures for counseling programs
- e. evaluation of counseling interventions and programs
- f. qualitative, quantitative, and mixed research methods
- g. designs used in research and program evaluation
- h. statistical methods used in conducting research and program evaluation
- i. analysis and use of data in counseling
- j. ethical and culturally relevant strategies for conducting, interpreting, and reporting the results of research and/or program evaluation

PDE Core Standard III.A. RESEARCH AND PROGRAM EVALUATION

1. Understand the importance of research in advancing the school counseling profession
2. Know research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research
3. Understand statistical methods used in conducting research and program evaluation
4. Conceptualize principles, models, and applications of needs assessments, program evaluation, and the use of findings to effect program modifications
5. Understand ethical and culturally relevant strategies for interpreting and reporting the results of research and/or program evaluation studies
6. Understand how to critically evaluate research relevant to the practice of school counseling

PDE Chapter 49 Standards- ACCOMMODATIONS AND ADAPTATIONS FOR DIVERSE LEARNERS

- V.I. Use research supported methods for academic and non-academic instruction for students with disabilities

PDE Chapter 49 Standards- MEETING THE INSTRUCTIONAL NEEDS OF ENGLISH LANGUAGE LEARNERS (ELL)

- II.A.2. Implement appropriate research-based instructional strategies to make content comprehensible for all ELL's

STUDENT LEARNING OUTCOMES (SLO's) and RELATED ASSESSMENT ACTIVITIES

***SLO 1:** Students will demonstrate the knowledge and ability to incorporate a five-stage Evidence-Based Practice Model into their counseling practice.*

RELATED ASSESSMENT ACTIVITIES:

- 1) Comprehensive Learning Assignment Applied Outcome/Action Research Project

***SLO 2:** Students will be able to analyze site-based data and conduct action research using SPSS software.*

RELATED ASSESSMENT ACTIVITIES:

- 1) Data Analysis Performance Evaluation

***SLO 3:** Students will demonstrate an understanding of varied research methodologies.*

RELATED ASSESSMENT ACTIVITIES:

- 1) Midterm Exam
- 2) Final Exam

COUNSELOR PREPARATION COMPREHENSIVE EXAM (CPCE) AND PURCHASE OF COURSE TEXTBOOKS

Beginning in the 2015 fall semester, all matriculated master's degree students are required to take the Counselor Preparation Comprehensive Exam (CPCE) near the conclusion of their degree. The content from this course represents one of the eight Council for the Accreditation of Counseling and Related Educational Programs (CACREP) common-core areas as defined by their Standards for Preparation. The common-core area for this course, COUN 505, is *Research and Program Evaluation*. Students are ***strongly urged to purchase and keep the resources from this course in order to prepare for the CPCE at the conclusion of their master's degree work.***

REQUIRED TEXTS

COUNSELING PROGRAM TEXTS

**** Students are encouraged to maintain copies of "Program Texts" for the duration of their master's degree work. These texts will be utilized in various courses throughout the program.**

American Psychological Association. (2009). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

COURSE SPECIFIC TEXTS

Rubin, A. (2013). *Statistics for evidence-based practice and evaluation* (3rd ed.). Belmont, CA: Brooks/Cole, Cengage Learning.

ADDITIONAL RESOURCES

Supplemental course materials can be accessed via D2L/Brightspace, the university's web-based course enhancement software accessed via my.scranton.edu.

ATTENDANCE

Students are expected to attend all classes and to participate in the various in-class and out-of-class experiences related to this course. The course instructor reserves the right to reduce student grades for ***unexcused absences*** depending on the number of classes missed. Students are expected to consult with their peers regarding missed material in the event of any absence.

COMMON COURTESY IN THE LEARNING ENVIRONMENT

Cell phone use, texting, and other non-class related behaviors are a distraction in the learning environment. Students are asked to refrain from ALL non-class related behaviors during class time. The instructor reserves the right to collect cell phones or other electronic items if students are unable to manage their use. Students who have a situation-specific need to access their cell phones during a particular class period should consult with the instructor prior to class and should expect to conduct any instructor approved communications during class outside of the classroom.

INSTRUCTOR ASSISTANCE AND OFFICE HOURS

Students are **encouraged** to raise questions and issues **in class** for all course participants to consider. However, if your question is of a very personal nature, please feel free to schedule an appointment with the instructor. Unscheduled drop-ins will be accommodated if possible. Send an e-mail or call to schedule an appointment.

INSTRUCTOR COLLABORATION

This course is designed to introduce students to numerous technology competencies as well as evidence-based practice evaluation design. Projects and assignments are geared towards the development of these competencies. The instructor is available to consult with students as they are learning. Please schedule appointments if you would like additional assistance with some of the content you are learning.

WRITING STYLE

Unless otherwise noted, written assignments must be prepared and referenced in the style specified in the current edition of the *Publication Manual of the American Psychological Association* (6th ed.).

WRITING CENTER SERVICES

The Writing Center focuses on helping students become better writers. Consultants will work one-on-one with students to discuss students' work and provide feedback at any stage of the writing process. Scheduling appointments early in the writing progress is encouraged.

Students can make an appointment through the My.Scranton portal: my.scranton.edu -> *Self Service* -> *Student & Financial Aid* -> *CTLE Menu*.

For more information, please contact Amye Archer at amy.e.archer@scranton.edu or visit the [Writing Center webpage](#).

ACADEMIC HONESTY

Students will exhibit honesty in all academic endeavors as explained in *The University of Scranton Student Handbook*. Please consult with the course instructor if you have any questions regarding specific requirements.

GRADING POLICIES

Late assignments will result in grade deductions. **One grade level will be deducted for each day the assignment is late** (e.g. a B+ will be reduced to a B on the first day, a B- on the second day, a C+ on the third day, etc.). Assignments not handed in by the end of class on the date due are considered one day late.

No extra credit assignments will be given. Ordinarily, no incomplete grades will be given.

STUDENTS WITH DISABILITIES

Reasonable academic accommodations may be provided to students who submit relevant and current documentation of their disability. Students are encouraged to contact the Center for Teaching and Learning Excellence (CTLE) at disabilityservices@scranton.edu or (570) 941-4038 if they have or think they may have a disability and wish to determine eligibility for any accommodations. For more information, please visit www.scranton.edu/disabilities.

FACULTY REPORTING OBLIGATIONS AS A RESPONSIBLE EMPLOYEE

As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. Additionally, if you come to me with other non-course-related concerns, I will do my best to help.

It is important for you to know that all faculty members are required to report incidents of sexual harassment or sexual misconduct involving students. This means that I cannot keep information about sexual harassment, sexual assault, sexual exploitation, intimate partner violence or stalking confidential if you share that information with me. I will keep the information as private as I can but am required to bring it to the attention of the University's Title IX Coordinator, Elizabeth Garcia, the Deputy Title IX Coordinator, Christine M. Black, or Deputy Title IX Coordinator/Dean of Students, Lauren Rivera, who, in conversation with you, will explain available support, resources, and options. I will not report anything to anybody without first letting you know and discussing choices as to how to proceed. The University's Counseling Center (570-941-7620) is available to you as a confidential resource; counselors (*in the counseling center*) do not have an obligation to report to the Title IX Coordinator.

Counseling Department Faculty and Staff will not be considered “responsible employees” when they are acting in a clinical capacity that would require confidentiality consistent with the ethics and expectations of the counseling profession. This applies to faculty and staff who are acting in a supervisory capacity with counseling students who are practicing and developing counseling skills. During this time

a professional and ethical expectation of confidentiality is assumed.
(<https://www.counseling.org/resources/aca-code-of-ethics.pdf>)

NON-DISCRIMINATION STATEMENT

The University of Scranton is committed to providing a safe and nondiscriminatory employment and educational environment. The University does not discriminate on the basis of race, color, national origin, sex, disability, religion, age, veteran status, gender identity or expression, sexual orientation, or other status protected by law. Sexual harassment, including sexual violence, is a form of sex discrimination prohibited by Title IX of the Education Amendments of 1972. The University does not discriminate on the basis of sex in its educational, extracurricular, athletic, or other programs or in the context of employment.

Students who believe they have been subject to sexual harassment, sexual misconduct or sex or gender discrimination should contact Elizabeth Garcia, Title IX Coordinator, at (570) 941-6645 or elizabeth.garcia2@scranton.edu, Christine M. Black, the Deputy Title IX Coordinator, at (570) 941-6645 or christine.black@scranton.edu or Ms. Lauren Rivera, AVP for Student Formation & Campus Life and Dean of Students, at (570) 941-7680 or lauren.rivera@scranton.edu. The United States Department of Education's Office for Civil Rights (OCR) enforces Title IX. Information regarding OCR may be found at www.ed.gov/about/offices/list/ocr/index.html

The University of Scranton Sexual Harassment and Sexual Misconduct Policy can be found online at www.scranton.edu/diversity. All reporting options and resources are available at www.scranton.edu/CARE.

JESUIT IDENTITY AND MISSION AT THE UNIVERSITY OF SCRANTON

Many core beliefs and practices of Counseling and Human Services professionals complement Jesuit tradition and the Ignatian mission of the University of Scranton. An active and positive regard for each person creates an environment conducive to high-quality care and positive human development. Caring for people (mind, body, and spirit) and assisting each individual to reach her or his human potential is highly honored in the Ignatian tradition of *cura personalis*, "care for the whole person." For people to reach their full potential, society has a vested interest in the quality of our families, services, supports, and structures. Counseling professionals work at the nexus of these various constructs, assisting individuals, families, and systems to grow and mature. As counselors and educators, we value the contributions that empathic care, critical thinking, deep personal reflection, sensitivity to diversity, and systemic leadership make to those we serve and to our wider society. St. Ignatius also valued these activities, highlighting the importance of discernment and leadership of *magis*, always searching for "the more universal good." Engaging in advocacy and social justice, with a mutually local and global perspective, are intrinsic parts of this work and in keeping with the Jesuit vision to "*set the world on fire.*"

ASSIGNMENTS

Professionalism

10% of final grade

20 points

DUE: Ongoing

Professional functioning and graduate learning require students to conduct themselves with a great deal of maturity. Large and small group discussions as well as in-class activities depend on each student's readiness and willingness to participate. Students are expected to complete all reading assignments prior to class and to come prepared with their thoughts, questions, and comments. If you are unable to attend class, you are expected to communicate this with the instructor and to make arrangements to make up for missed content. You will be asked to **evaluate your own professionalism** at the conclusion of this course. Self-evaluations will be considered along with the instructor's own assessment. **Professionalism includes, but is not limited to: class attendance, acceptance of personal responsibility, the timely completion of assignments, assertiveness, strong communication skills, appropriate use of class time, and active engagement in all aspects of the course.** These dispositions are consistent with the department's "Fit for the Profession" document. To earn an A in this area, all elements of professionalism as outlined above must be demonstrated. Students are encouraged to stretch themselves in order to develop these key counselor competencies.

Comprehensive Learning Assignment
Applied Outcome/Action Research Project

30% of final grade
100 points
 DUE: See below

An important foundation of ethical and professional counseling practice is one's ability to identify and understand important issues faced by various stakeholder groups in one's place of work or within the greater community (particularly clients, patients, students, and/or families). Students will be involved in a semester-long small-group project designed to teach the systematic steps to follow for implementing research-based, best practices within their preferred work settings. In small groups of 2-3 students each, teams will work together throughout the semester to "build" their projects. Appropriate instruction, knowledge and practice competencies, feedback, and consultation with the instructor will be infused throughout the course. Teams will present their completed projects to the entire class at the conclusion of the semester. The project consists of five stages (see below). Appropriate scoring sheets and/or rubrics will be provided to assist students with each component of the assignment.

- Stage 1 (**DUE 9/23**)
Formulating a Question
- Stage 2 (**DUE 11/4**)
Searching for Evidence
- Stage 3 (**DUE 11/4**)
Critically Appraising the Evidence
- Stage 4 (**DUE 12/9**)
Selecting and Implementing the Intervention
- Stage 5 (**DUE 12/9**)
Evaluating Outcome

Group Member Evaluations:

15% of final grade
30 points

DUE: December 9

Comprehensive Learning Assignment team members will honestly and accurately evaluate one another's performance and contributions to the project at the conclusion of the semester. Group members will submit their assessments of one another along with their completed projects. **Honest, open, collaborative assessment is required.** A 30-point grading rubric will be provided. Group member grading will be guided by the following principles:

- 1) Members will only grade their work partners. No self-assessments will be considered.
- 2) Group member grades will be posted at the same time as project grades.
- 3) ALL group member evaluation documents MUST be accompanied by detailed feedback regarding each partner's strengths and growing edges as a collaborative group member.
- 4) Members are STRONGLY encouraged to share their evaluations with one another PRIOR to submitting them to the instructor.
- 5) Members must be prepared to openly discuss their evaluations and address any conflicts that arise.

Open-Book Midterm Exam

15% of final grade
DUE: September 30

Open-Book Final Exam

15% of final grade
DUE: December 11-15, as scheduled by registrar

Graduate work provides students with numerous opportunities to synthesize large amounts of professionally relevant material. However, due to the nature of the graduate learning experience, class time is not devoted exclusively to a reiteration of content from each week's readings. **Students are expected to read weekly assignments thoroughly and to come to class prepared to engage in learning activities that relate to this material.** To insure that students are learning important material from the text, and to provide students with practice preparing for future professional certification/licensure exams, **an exam will be administered at two different times during the semester.** The midterm exam will cover the assigned readings from the principle course text (Rubin) **through September 23 (Chapters 1-9).** The final exam will be administered on the exam night as scheduled by the registrar. Questions for this second assessment will be drawn from material covered in the Ruben text during the second half of the semester **(Chapters 10-19). These exams will be open-book.** Students should recognize that open-book exams can be quite challenging if advance preparation is not undertaken in earnest.

Open Source Data Analysis Performance Evaluation

15% of final grade
DUE: November 25

Students will complete an **open source competency evaluation.** The evaluation will assess the knowledge and skills developed throughout the course and will consist of an

in-class performance demonstration (Data Set execution). Examples and practice will be provided throughout the semester.

Program Learning Outcomes (PLO) Rubric

No grade

Content from this course forms the basis for one of our five master's degree Program Learning Outcomes (PLO's) that are used to monitor and assess student knowledge and competence: "***Students will formulate, conduct, and evaluate master's level research procedures and assessment processes.***" A rubric for these competencies is included in this syllabus. Each student will receive a copy of the instructor's completed evaluation at the conclusion of the course.

EVALUATION SUMMARY

<u>Assignment</u>	<u>Due Date</u>	<u>% Value</u>
Professionalism	ongoing	10%
Comprehensive Learning Assignment		30%
Stage 1	September 23	
Stages 2 & 3	November 4	
Stages 4 & 5	December 9	
Group Member Evaluations	December 9	15%
Open-Book Midterm Exam	September 30	15%
Open-Book Final Exam	December 11-15	15%
Open-Source Data Analysis Performance Eval.	November 25	15%
	Total	100%

*****Students are expected to complete all work by the assigned due dates.***

GRADING SCALE

A	=	95%	Superior/Outstanding work
A-	=	90%	Excellent
B+	=	87%	Very Good
B	=	84%	Good
B-	=	80%	Fair
C+	=	76%	Passing Grade
C	=	70%	Minimum Passing Grade
F	=	≤69%	Failure

CLASS SCHEDULE

SOME SOLEMN AND SERIOUS WORDS OF ENCOURAGEMENT- Please complete ALL of the assigned reading each week in order to digest as much of the content as possible prior to class. It will be OUR job during class to capture the highlights of the content in a way that will provide everyone with a 30,000 foot view of the material in important, consumable, and understandable ways. I will work with you if you will work with me. We will endeavor to learn this content together, but I need everyone to invest and engage and work hard. Believe it or not, this stuff matters for ALL of you as future practitioners who will need to be able to consume, evaluate, and utilize published research in your jobs. It MATTERS... Trust me. Come talk to me if you need help.

Course Introduction and Evidence-Based Practice

August 26	Class 1 TOPIC: Course Overview/Professional Counselors as Practitioner Scientists/Rationale for Research READ: <i>Wester and Borders (2014)</i> <i>Wester, Borders, Boul, and Horton (2013)</i>
September 2	NO CLASS- Labor Day
September 9	Class 2 TOPIC: Foundations and Evidence-Based Practice READ: Rubin, Preface and Chapters 1-3 and Appendix K, pp. 287-294 <i>Articles AS ASSIGNED</i> ACTIVITY: GROUP FORMATION

Descriptive Statistics

- September 16 Class 3
TOPIC: Descriptive Statistics, Part 1
READ: Rubin, Chapters 4-6
 Appendix M, pp. 299-308
 Outcome Research Protocol (in D2L)
 Articles AS ASSIGNED
HOMEWORK:
 Preview UMASS- Center for School Counseling
 Outcome- Research Briefs (in D2L)
 (<http://www.umass.edu/schoolcounseling/briefs.htm>)
- September 23 Class 4
TOPIC: Descriptive Statistics- Part 2
READ: Rubin, Chapters 7-9
 Appendix M, pp. 308-309
 Articles AS ASSIGNED
DUE: STAGE 1, COMPREHENSIVE LEARNING
ASSIGNMENT
- September 30 Class 5
Open-Book Midterm Exam
 (Chapters 1-9)

Inferential Data Analysis: Conceptual Foundation

- October 7 Class 6
TOPIC: Probability, Hypothesis Testing, and Statistical Significance
READ: Rubin, Chapters 10-11
 Articles AS ASSIGNED
- October 14 No Class- Fall Break
- October 21 Class 7
TOPIC: Error and Strength/Importance of Relationships
READ: Rubin, Chapters 12-13
 Articles AS ASSIGNED

Inferential Data Analysis: Parametric and Nonparametric Procedures

- October 28 Class 8
TOPIC: T-Tests and Analysis of Variance
READ: Rubin, Chapters 14-15
 Appendix M, pp. 309-312
 Articles AS ASSIGNED

- November 4 Class 9
TOPIC: Cross-Tabulation, Chi Square, and Correlation
READ: Rubin, Chapters 16-17
 Appendix M, pp. 312-316
 Articles AS ASSIGNED
**DUE: STAGE 2 & 3, COMPREHENSIVE LEARNING
 ASSIGNMENT**
- November 11 Class 10
TOPIC: Regression and Single-System Evaluation
READ: Rubin, Chapters 18-19
 Appendix M, pp. 317-318
 Articles AS ASSIGNED
- November 18 Class 11
CLASS ACTIVITY: Data Lab and Prep for Open-Source Data
 Analysis Performance Evaluation, Project Consultations
- Synthesis and Integration***
- November 25 Class 12
Open-Source Data Analysis Performance Evaluation
- December 2 Class 13
 Project Presentations (as assigned)
- December 9 Class 14
 Project Presentations (as assigned)
TOPIC: Course Wrap Up
**DUE: STAGE 4 & 5, COMPREHENSIVE LEARNING
 ASSIGNMENT**
GROUP MEMBER EVALUATIONS
- December 10-14 **Open-Book Final Exam** (as scheduled by Registrar)
 (Chapters 10-19)