DOANE COLLEGE

Research in Counseling COU675

3 Credits Autumn 2014 August 17-October 18, 2014

Wednesday evenings, 6:00-10:30 p.m.

Instructor: Ray M. Zeisset, Ph.D., rzeisset@aol.com, 402-435-0933

I. **Catalog Description and Credit Hours of Course:**
This course provides students with the skills necessary to critically evaluate counseling and clinical research literature. Students are introduced to the nature of scientific psychology, the process of research inquiry, and the role of the mental health counselor as a knowledgeable research consumer. Students are also introduced to the application of descriptive and inferential statistics, reliability, and validity to the research endeavor.. At the completion of this course, students will be able to read and understand research reports in the literature as well as critically examine literature that is non-empirically based. Students will also understand the process for designing their own research and program evaluation. 3 credit hours.

II. **Prerequisite:**
Graduate standing and permission of the Dean

III. **Course Integrated in to the Program Requirements**
Required in all focus areas.

IV and V. **Course as Relates to External Requirements and External Standards**
c. statistical concepts, including scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, and correlations;
d. reliability (i.e., theory of measurement error, models of reliability, and the use of reliability information);
e. validity (i.e., evidence of validity, types of validity, and the relationship between reliability and validity);

8. studies that provide an understanding of research methods, statistical analysis, needs assessment, and program evaluation, including all of the following:
a. the importance of research in advancing the counseling profession;
b. research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research;
c. statistical methods used in conducting research and program evaluation;
d. principles, models, and applications of needs assessment, program evaluation, and the use of findings to effect program modifications;
e. the use of research to inform evidence-based practice; and
f. ethical and culturally relevant strategies for interpreting and reporting the results of research

and/or program evaluation studies.

1. Understands how to critically evaluate research relevant to the practice of clinical mental health counseling.
2. Knows models of program evaluation for clinical mental health programs.

VI. **Purposes or Objectives of the Course**
The purpose of this course is to provide students with a foundation of understanding of basic principles of psychological research, statistics, and measurement. The focus is on the ability to be a good consumer of research.

At the end of the course students will be able to interactively read and critically evaluate psychological research literature as well as non-psychological literature. Students will understand basic statistical techniques used in research and how they are interpreted. Students will be familiar with a variety of models of research. Students will have a conceptual grasp of the value of research and the importance of basing counseling practice on a solid foundation supported by research.

VII. Methods of Instruction
This is an interactive course that includes a high level of pre-class preparation, followed by classroom participation. Reading all of both texts, class discussion of topics, lectures, demonstrations, and exercises are utilized. Because many students approach statistics and research with fear and trepidation, the course encourages taking a calm, unflustered approach to these topics, offering relaxation techniques as an aid. In addition, a variety of strategies are offered for managing test anxiety. Comprehensive summaries, with reflections and reactions, are prepared by the student for all assigned readings in the Stanovich text to aid learning and monitor understanding. Critical reading of research is fostered through five sets of critiquing questions, used on four articles during the course, two of which are done independently by the student. A final project requires synthesizing course content.

VIII. Basis for Student Evaluation
Evaluation is based on class participation, class assignments, weekly summaries of readings, a quiz on statistics and measurement concepts, a quiz on research terms and concepts, a self-evaluation, and a final project.

Class Participation. **Attendance at all class sessions is expected.** A student missing a class is requested to let the instructor know in advance, if possible. To partially offset the loss of class participation points for the session, the student may demonstrate grasp of the material from that session in a paper (3-5 pages) or another format agreed to by the instructor, but will not be reminded to do this. A student missing more than two sessions should not expect to pass the course. (For make-up papers, length is based on double-spaced typed pages using one inch margins and using a proportional 12 point font. Other formats are acceptable, but length should be adjusted accordingly.) Class participation is 15% of the final grade and is based on quality as well as quantity of participation.

Chapter summaries. Students prepare a one-page summary of each assigned chapter in the Stanovich text, approximately 2/3 content summary and 1/3 reflection on the content. An example of a Stanovich chapter summary, for the reading for the first class session, is provided during the first session. All other summaries are due at the beginning of class on the date for which assigned. These summaries constitute 5% of the final grade in the course.

Statistics and measurement. Early weeks of the class focus on basic descriptive and inferential statistics and measurement concepts of reliability and validity. Mastery of these areas are assessed by an *objective exam.* This exam is 15% of the final course grade.

Critiquing Articles. As knowledge is gained about key components of research, application of that knowledge in actual critiquing of research is the focus. A list of questions about different aspects of a research study are the basis for five *critiquing assignments.* Two articles are critiqued in class before students attempt the critique on their own completed during the following week. These five critiques constitute 5% of the final grade.

Final project. The final project, due at the last class session, has two parts: A critique of a full published article distributed by the next-to-last session, using the same questions as the five individual critique assignments, is completed. The second part is a listing and brief description of the 20 most important concepts covered in the course, in the student's judgment. The final project is 30% of the course grade.

Research Terms and Concepts Exam. A multiple-choice exam covering non-statistical terms and concepts is given during the last class session. This exam is 15% of the course grade.

Self-evaluation. Each student completes a self-evaluation of his or her performance in course, to be completed by the last session. The student awards himself or herself a grade that is 10% of the final grade.

Quizzes. Five quizzes will be given during the course, three covering statistics and measurement and two covering research concepts, to help students prepare for the two exams. These quizzes are 5% of the course grade.

It is preferred that all assignments submitted for this course are typed. To facilitate this process, formats for critiques and self-evaluations are available electronically.

Grading of individual course components will be based on the following grade equivalents:

A+	98-100%
A	92-97%
A-	90-91%
B+	88-89%
B	82-87%
B-	80-81%
C+	78-79%
C	72-77%
C-	70-71%

Note: This table is given as a general guideline. Course assignments and the exact final letter grade are at the discretion of the instructor.

IX. Course Content or Outline

	Class hours
A. Introduction to Research	4
1. Scientific Psychology Overview	
2. Nature of Scientific Inquiry	
3. Characteristics and Organization of Research Articles	
B. Statistics	9
1. Coping with Anxiety and Apprehension about Statistics	
2. Descriptive Statistics	
3. Inferential Statistics	
C. Introduction to Measurement	4
1. Reliability	
2. Validity	
3. Factor Analysis	
D. Research Issues	8
1. Operational Definitions	
2. Correlational Issues: Directionality, Selection Bias & 3rd Variables	
3. Samples and Sampling Issues	
4. Connectivity Principle	
5. Converging Evidence & Scientific Consensus	
6. Confounding Variables	
7. Artificiality, Control & Manipulation	
8. Limitations of Case Studies and Testimonials	
9. Multiple Causation	
10. Probability Issues	
11. Clinical vs Actuarial Prediction	
12. Pseudopsychology, Self-help Literature, & Recipe Knowledge	

E. Critiquing Research Articles 7
1. Parts of Research Articles
2. Critiquing the Introduction
3. Critiquing the Sample
4. Understanding and Critiquing Variables and Measures
5. Understanding Research Designs
6. Critiquing Results, Discussion, Abstract
7. Critiquing Qualitative Research

F. Understanding and Applying Research Terms and Concepts 4
1.Qualitative Research Compared to Quantitative
2. Applying Critiquing Concepts to Future Reading, including Qualitative Research
3. Applying Course Concepts in Doing Program Evaluation and Research

X. Textbooks

Stanovich, K. E. (2013). *How to Think Straight About Psychology* (10th Ed.) Boston: Allyn & Bacon. ISBN: 9780205914128 (Used 9th Ed. not acceptable substitute)

Zeisset, R. M. (2009), *Statistics & Measurement: An Introduction* (4th Ed.) Gainesville, FL: Center for Applications of Psychological Type. ISBN 978-0-935652-90-1

XI. **Expectations for Students**

A. The student is expected to actively participate in class.
B. The student is expected to complete the required readings and all assignments.
C. The student is expected to demonstrate satisfactory performance on examinations.
D. The student is expected to respond satisfactorily to a variety of skill assessment techniques.
E. The student is expected to know about and use a variety of technological strategies to enhance learning.
F. The student is expected to be able to critically read professional literature and understand the importance of having a research base for professional practice.

XII. **Academic Policy Statement:**

Academic honesty is one of the most important qualities influencing the character and vitality of Doane College. Academic dishonesty is defined to include those acts which would deceive, cheat, or defraud so as to promote or enhance one's scholastic record. It includes: academic misconduct, dishonesty, plagiarism and cheating, or knowingly or actively assisting another person in doing the same. Violations of academic honesty represent a serious breach of discipline and may be considered grounds for disciplinary action, including dismissal from the College. Students are responsible for upholding the principles of academic honesty as they would any other professional and ethical standard. Refer to www6.Doane.edu/judaffairs/code.html.

Note: Faculty may add specific sanctions regarding academic dishonesty within the parameters outlined in the Doane College Policy for Academic Honesty.

XIII. **Students with Disabilities Statement:**
If a student has a special need addressed by the Americans with Disabilities Act (ADA), please notify the instructor at the beginning of the course. You must register as a student with a disability in the office of Dean, Master of Arts in Counseling. It is the responsibility of the student to notify the instructor prior to requesting reasonable accommodation. Failure to do this may result in not receiving the requested accommodation. Refer to www.doane.edu/cs/services/disability.htm.

XIV. **Civility, Respect and Classroom Etiquette:**
Doane College strives to offer learning experiences and opportunities designed to help students think effectively, develop the capacity to communicate, differentiate values, and make relevant judgments. To do this successfully, many times multiple perspectives will be presented; some of which may represent points of view on which everyone will not agree. A successful educational experience requires a shared sense of respect among and between the students, the instructor and various points of view.

Further, it is to be expected that the instructor will treat all students with dignity and respect–it is also expected that the students will treat both the instructor and other students with this same respect. In order to facilitate this process more effectively, students are asked the following:
1) before class turn off all pagers and cell phones; 2) refrain from text messaging during class;
3) avoid distracting behavior (e.g., popping gum, noisy eating, clipping fingernails, etc.);
4) minimize side conversations; and 5) maintain respectful interactions. Personal harassment of any kind will not be tolerated. Any texting in class will result in major loss of grade points.

XV. **Professional Performance Evaluation:**
Professional Performance, as assessed within the Master of Arts in Counseling program is guided by the characteristics identified in the Graduate Catalog and described in the rubrics published in the Student Handbook. The beliefs and attitudes related to the areas of competence, reflection, and caring are the guiding influence with nine foundational counselor dispositions assessed throughout the program. These are: 1) Genuineness, 2) Congruence, 3) Non-judgmental Respect, 4) Emotional Awareness, 5) Ethical Understanding, 6) Concreteness, 7) Empathy, and 8) Professional Commitment. See Student Handbook.

XVI. **Professional Identity and Theoretical Orientation**
An online portfolio is maintained in the student's personal file on the Program website. Artifacts from this class appropriate for inclusion in the portfolio are the 20 Key Concepts paper and the final article critique.

Tentative Course Schedule–*Research in Counseling*

Week	Topic	Readings
1	Scientific Method; Reading, Thinking Critically APA Style and Communicating Research	Stanovich Ch. 1 Zeisset, Ch. 1
2	Theories and Falsifiability Frequency Distributions & Levels of Measurement Measures of Central Tendency and Variability	Stanovich Ch. 2 Zeisset Ch. 2 (p. 7-27)
3	Research Questions & Hypotheses Operational Definitions Correlation Critiquing the Introduction	Stanovich Ch. 3, 5 Zeisset Ch. 2 (p. 28-36) & Ch. 7
4	*Quiz 1, Descriptive Statistics* Samples, Sampling, and Tests of Significance Hypothesis Testing and Errors Artificiality is a Strength Critiquing the Sample,	Stanovich Ch. 7 Zeisset Ch. 3 & Ch. 8 (131-139), Appendix B
5	*Quiz 2, Inferential Statistics* Connectivity and Convergence Reliability and Validity Independent and Dependent Variables Critiquing Criteria, Variables, and Measures	Stanovich Ch. 8 Zeisset: Ch. 4, Ch. 5, & Ch. 8 (p. 139-147)
6	*Quiz 3, Reliability/Validty; Quiz 4, Research 1* Testimonials and Case Study Evidence Looking for Confounding Variables Critiquing the Research Design Applying statistics & measurement knowledge	Stanovich Ch. 4, 6 Zeisset: Ch. 8 (p. 147-155)
7	*Statistics & Measurement Exam* Critiquing Results, Discussion and Abstract	Zeisset: Ch. 9
8	Multiple Causation, Probabilistic Reasoning Actuarial vs. clinical prediction Qualitative research Designing research, program evaluation *Quiz 5, Research Concepts 2* Discuss Final Projects	Stanovich Ch. 9, 10,11
9	*Research Concepts Exam* Final Projects due Course wrap-up	Stanovich Ch. 12 (no summary required)