Instructor: Bradley T. Erford, Ph.D., Professor
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Class Meeting: Wednesday 4:10-7:00 p.m.
Prerequisites: None

## CATALOGUE COURSE DESCRIPTION

A survey of research conducted on the process of counseling, with attention to research design and interpretation of counseling outcomes and methods.
Summary: This course examines various approaches to research methodology, statistical analysis, and program evaluation in counseling. The methodological focus is on qualitative, quantitative, action research, and evidence- or outcome-based research. Students will develop skills in data collection and basic statistical analysis. Research aimed at improving counseling effectiveness as well as opportunities, challenges, ethics, and legal issues in research and evaluation are considered. By the end of the semester, each student will have had the opportunity to learn and apply the skills needed to evaluate the methodological adequacy of published research and will understand the critical steps in designing and conducting a research project.

## RESOURCES

## Required Textbook

Erford, B. T. (2015). Research and evaluation in counseling (2nd ed.). Boston, MA: Cengage Learning. Purchase at least a 6-month subscription to SPSS Statistics Standard GradPack (standard, not base)

## Recommended Resources

American Psychological Association. (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: APA.
Erford, B. T., Hays, D. G., \& Crockett, S. (2015). Mastering the NCE and CPCE (2nd ed.). Boston, MA: Pearson.

## KNOWLEDGE AND SKILL OUTCOMES

(NOTE: 2016 CACREP standards are coded below and are assessed via Exam I [I], Exam II [II], applied research project [P], SPSS exam [S], CITI certificate [N], class exercises [E], and APA style exam [A].) At the conclusion of the course, the student will be able to:

1. Understand the importance of research and challenges in conducting counseling research (2.F.8.a [I, P, E]);
2. Summarize, analyze, and critique research documents in counseling culminating in a formal review of the research literature (2.F.8.a,e [P, E, A]);
3. Demonstrate mastery of information gathering and analysis strategies as well as familiarity with appropriate technology for doing so (2.F.8.d,h-i, 5.G.3.b, n [I, II, P, S, E]);
4. Identify sources of information for professional research, such as libraries, indices, archives, and databases and conduct literature searches (2.F.8.a [I, P, E, A]);
5. Conduct basic data analyses and basic statistical applications, including the use of SPSS (2.F.8.i [S, II, E]);
6. Present research findings in APA style (2.F.8.j [A, P]);
7. Understand basic qualitative and quantitative research methodology including experimental, quasiexperimental, single-subject, action and outcomes-based research (2.F.8.f-g [II, E, P]);
8. Understand ethical and legal considerations, and culturally relevant conditions in counseling research and evaluation (G.8.j [I, N, E]);
9. Understand and design a needs assessment (G.8.c [I, E]);
10. Understand procedures for conducting program evaluation (2.F.8.g, 5.G.3.b,n [I, E, P]); and
11. Use extant literature to use and improve counseling effectiveness and evidence-based practices (2.F.8.a-b [I, E, P]).

## CURRICULUM STANDARDS ADDRESSED

2016 CACREP Core Standards

| Standard |  | How Measured in HDC 7810 |
| :--- | :--- | :--- |
| 2.F.8.a | the importance of research in advancing the <br> counseling profession, including how to critique <br> research to inform counseling practice | Exam I, applied research project, class <br> exercises, APA style exam |
| 2.F.8.b | identification of evidence-based counseling practices | Exam I, class exercises |
| 2.F.8.c | needs assessments | Exam I, class exercises |
| 2.F.8.d | development of outcome measures for counseling <br> programs | Exam I, applied research project, class <br> exercises |
| 2.F.8.e | evaluation of counseling interventions and programs | Exam I, class exercises, applied research <br> project |
| 2.F.8.f | qualitative, quantitative, and mixed research <br> methods | Exam II, applied research project, class <br> exercises |
| 2.F.8.g | designs used in research and program evaluation | Exam II, applied research project, class <br> exercises |
| 2.F.8.h | statistical methods used in conducting research and <br> program evaluation | SPSS exam, Exam II, applied research <br> project, class exercises |
| 2.F.8.i | analysis and use of data in counseling | SPSS exam, Exam II, applied research <br> project, class exercises |
| 2.F.8.j | ethical and culturally relevant strategies for <br> conducting, interpreting, and reporting the results of <br> research and/or program evaluation | Exam I, CITI certificate, applied research <br> project, class exercises, APA style exam |
|  |  |  |

## 2016 CACREP School Counseling Specialty Standards

| Standard | How Measured in HDC 7810 |  |
| :--- | :--- | :--- |
| 5.G.3.b | design and evaluation of school counseling <br> programs | Exam I, applied research project, class <br> exercises |
| 5.G.3.n | use of accountability data to inform decision making | Exams I \& II, applied research project, class <br> exercises |

## COURSE EXPECTATIONS AND GUIDELINES

## Use of Electronic Devices

As counselors-in-training it is essential that you develop the disposition of being fully present in the moment and able to avoid distractions to the counseling and learning process. Please be respectful of your instructor and fellow classmates by silencing your phone and putting it away. Engaging in activities not related to the course during sessions (e.g., gaming, email, chat, text, etc.) will result in a significant reduction in your grade at the discretion of the instructor. Notify the instructor prior to class if you have an emergency that requires accommodation.

## Disability Statement

Vanderbilt University is committed to providing reasonable accommodations for all persons with disabilities that may affect your ability to complete course assignments or otherwise satisfy course requirements. If you require accommodations, please contact the Office of Equal Opportunity, Affirmative Action, and Disability Services at Baker Building, Suite 108 (615)322-4705 (V/TDD) to discuss and determine any accommodations. If you have a disability for which you may request accommodation in Vanderbilt University classes and have not contacted them, please do so immediately. You are also encouraged to apprise your instructor(s) privately regarding this matter, ideally no later than the second week of the semester, to ensure that your needs are met appropriately and in a timely manner.

## Attendance Policy

On-time attendance at every class meeting is expected. Five points will be taken off the final course grade for each additional absence after the first absence. Tardiness of 15 minutes or more will be considered an absence. Leaving early before class is dismissed will also be considered an absence. Notify the instructor prior to class if you have an emergency that requires accommodation.

## Diversity Statement

It is intended that students from diverse backgrounds and perspectives will be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit. Materials and activities are intended to be respectful of diversity including affective orientation, gender identity, disability, age, socioeconomic status, ethnicity, race, religion, culture, and other areas of human difference. We are all constantly striving to improve ourselves in this area, so your suggestions for improvement are encouraged and appreciated.

## Trigger Warning Note

At times this semester, we may discuss topics that may be disturbing and even traumatizing to some students. If you ever feel the need to "step outside" during one of these discussions, either for a short time or for the rest of the class session, you may always do so without academic penalty. You will, however, be responsible for any material you miss. If you ever wish to discuss your personal reactions to this material, either with the class or instructor, the instructor would welcome such a conversation as an appropriate part of your professional development. Learning to manage personal reactions to potentially disturbing material that our clients discuss is an important part of preparing to be a counselor.

## COURSE REQUIREMENTS

Each student is expected to: (1) complete all reading assignments before class, (2) actively participate in discussions and exercises, (3) regularly check Vanderbilt email, and (4) access documents and materials as assigned through the online system (BrightSpace).

## Non-Graded Course Components (Debit Components)

## Assignment Policies (Required)

Admission to the profession of counseling means acceptance of and submission to the principles of scholarship and writing proficiency required of a master's degree. APA6 is a recommended text for this course and the student is expected to be thoroughly familiar with the application of this publishing format. Failure to adhere to APA6 will result in a failure for a specific course component. As professionals-in-training, all counseling master's degree candidates take very seriously their responsibility to write effectively and professionally. All assignments are due by start time of class on the due date, and must be submitted electronically. Late assignments will not receive full credit, as determined at the discretion of the instructor. If you have special circumstances that prevent you from completing the assignment on time, please speak to the instructors before the due date for the assignment.

## Human Subjects CITI Certificate Completion (Required)

Complete and pass online training on the protection of human subjects in behavioral science research. Once you pass and complete the course, electronically submit a copy of your certificate of completion by the beginning of class \#2. Full credit will be given for certificates completed any time in the previous six months. Completion on time is a REQUIRED element of the final grade.

- Proceed to Vanderbilt: https://www4.vanderbilt.edu/irb/
o Click on the CITI/GCP Training link, register and complete the Basic Group 2: Social Behavioral Investigators and Key Study Personnel Course
o Save a pdf version of the CITI certificate and submit it to the instructor electronically.


## Class Participation/Facilitation (Required)

Regular participation in class discussions and in-class exercises is expected and required. For each class period, you should develop three multiple choice questions/answers based upon the readings that contribute to our understanding of the concepts or their application to counseling or other relevant issues. E-mail them to the instructor ahead of time. The goal of class participation is to think critically (and challenge others to think critically) about the readings and not just demonstrate that you read or understand the readings.

## Graded Course Components

## 1. Examination I (25\%) \& Examination II (25\%)

Each student will complete two examinations consisting of multiple-choice questions. Information from all assigned readings and classes may be included on the exams. Each exam accounts for $25 \%$ of the final grade.

## 2. SPSS Examination (10\%)

Each student will complete an SPSS examination consisting of application problems. The SPSS exam accounts for $10 \%$ of the final grade.

## 3. APA Examination (10\%)

Each student will complete an APA examination consisting of multiple-choice, application and/or brief response questions. The APA exam accounts for $10 \%$ of the final grade.

## 4. Applied Research Project (30\%)

Each student will review the literature and write an empirical research paper on a counseling topic of interest. The paper will be comprised of a literature review which efficiently leads to the development of a research question, hypothesis, operational definitions of relevant variables, and a description of methodology for how the research question can be explored using quantitative $\& /$ or qualitative procedures. A study proposal is due at the beginning of class \#4 and all topics must meet with the instructor's approval. The manuscript must be approximately 15 pages in length, typed, double-spaced, adhere to APA style, and use a minimum of 15 professional journal articles. This activity is worth $30 \%$ of the final grade. One-half of the grade will reflect the quality of the written content, and the remaining half reflects adherence to APA style and writing mechanics (e.g., spelling, capitalization, punctuation, grammar, sentence structure). An electronic copy of the completed paper in MSWord MUST be submitted to the instructor no later than the beginning of class \#13.

## COURSE GRADING

| CITI Certificate | Required |
| :--- | :--- |
| Participation | Required |
| APA Style Exam | $10 \%$ |
| Exam I | $25 \%$ |
| SPSS Exam | $10 \%$ |
| Applied Research Project | $30 \%$ |
| Exam II | $25 \%$ |

## Applied Research Project Evaluation Rubric

## Rating Scale

4=Mastery: Strong mastery of skills and thorough understanding of concepts significantly beyond developmental level
3=Proficient: Understanding of concepts/skills evident
2=Emergent: Minor conceptual and skill errors; in process of developing
1=Non-existent: Significant remediation needed; deficits in knowledge/skills
NA=Not Applicable: Unable to measure with given data (do not use to indicate deficit)

|  | 4 | 3 | 2 | 1 | Stan | Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Identify Opportu nities for Research | Exceptional creativity and knowledge about research opportunities; identified meaningful, real world problem. Research questions reflect exceptional insight regarding feasibility. | Able to identify available research opportunities; identifies meaningful project; plan may not be realistic in its entirety. | Minor problems related to identification of research opportunities. May be unrealistic or poorly conceptualized. | Significant problems identifying research opportunities; unfeasible or lacks usefulness. | $\begin{aligned} & \text { F.8.a- } \\ & \text { b. } \end{aligned}$ | $\square 4$ $\square 3$ $\square 2$ $\square 1$ $\square$ NA |
| Critique <br> Existing <br> Research | Insightful and subtle critique of research; able to subtly assess strengths and limitations; sophisticated organization and flow of lit review; concise yet detailed. Exceptional writing ability; professional voice. | Good overview of literature with clear critique of research; able to assess strengths and limitations; sufficient organization. Clearly written using professional style. | Minor problems with review and/or critique of literature; may have missed significant topics or studies; writing may lack clarity or professional style. | Significant problems with review and critique of literature. Significant literature not included and/or inaccurately critiqued. Writing ability or style may detract significantly. | F.8.a | $\square 4$ $\square 3$ $\square 2$ $\square 1$ $\square \mathrm{NA}$ |
| Participa nts: <br> Legal, <br> Ethical, <br>  <br> Diversity <br> Issues | Considers all major and subtle legal, ethical issues related to research or program evaluation, esp. as it relates to protecting participants, obtaining consent, human subjects review, diversity issues. | Considers major legal, ethical issues related to research or program evaluation, esp. as it relates to protecting participants, obtaining consent, human subjects review, diversity. | Vague description or minor problems in handling legal, ethical issues related to research or program evaluation, esp. as it relates to protecting participants, obtaining consent, human subjects review, diversity. | Misses one or more significant legal, ethical issue related to research or program evaluation, esp. as it relates to protecting participants, obtaining consent, human subjects review, diversity. | F.8.j | $\square 4$ $\square 3$ $\square 2$ $\square 1$ $\square \mathrm{NA}$ |


| Choice <br> of <br> Assessm <br> ent <br> Measure <br> s | Exceptional understanding of reliability and validity, strengths and weaknesses of various assessments, including those for addictions; able to identify subtle issues related to clinical application and diversity; uses literature to support. | Clear understanding of reliability and validity, strengths and weaknesses of assessments; able to identify major issues related to clinical application and diversity. | Minor problems in understanding of reliability and validity or other problems with instrument; does not identify issues related to clinical application or diversity. | Significant problems understanding of reliability and validity or other problems with instrument; unable to identify issues related to clinical application and diversity. | $\begin{aligned} & \text { F.8.d- } \\ & \text { e \& g } \end{aligned}$ | $\square 4$ <br> $\square 3$ <br> $\square 2$ <br> $\square 1$ <br> $\square$ NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Design: <br> Researc <br> $h$ and Program Evaluati on | Exceptional mastery of methods and/or program evaluation design; includes both quantitative and qualitative elements. Sophisticated design is both theoretically sound and highly feasible; design clearly accounts for numerous potential logistical problems. | Clear research methods and/or program evaluation design. Feasible; accounts for most major potential logistical problems. | Minor problems with research methods and/or program evaluation design. Design vague or does not account for likely logistical problems. | Significant problems with research methods and/or program evaluation design; design not very feasible. | $\begin{aligned} & \text { F.8.f-g } \\ & \text { G.3.b } \end{aligned}$ | $\square 4$ <br> $\square 3$ <br> $\square 2$ <br> $\square 1$ <br> $\square$ NA |
| Quantita tive <br> Analysis <br> Adminis <br> ter and <br> Interpre <br> t <br> Assessm ents | Exceptional skill in assessment administration and interpretation; choice of assessment and description of analysis reveals subtle attention to setting and population needs; highly feasible; proposed analysis, use or interpretation appropriate for instrument. | Solid skills in assessment administration and interpretation; choice of assessment and description of analysis appropriate to context; generally feasible; proposed analysis, use or interpretation appropriate for instrument. | Minor problems with assessment administration and interpretation; not feasible or appropriate to context; problems with proposed analysis, use or interpretation appropriate for instrument. | Significant problems with assessment administration and interpretation; not feasible or appropriate for context; significant problems with proposed analysis, use or interpretation appropriate for instrument. | F.8.h-i | $\square 4$ <br> $\square 3$ <br> $\square 2$ <br> $\square 1$ <br> $\square$ NA |
| Qualitati ve Design and Analysis | Sophisticated conceptualization of qualitative research that clearly identifies epistemological assumptions, interview method, analysis approach, and trustworthiness issues. Cites specific methodologies. | Clear conceptualization of qualitative research that identifies interview method, analysis approach, and trustworthiness issues. Cites general method. | Minor problems with conceptualization; vague method and analysis approach. Problems with trustworthiness. Does not cite specific method. | Significant problems with conceptualization; significant confusion and/or misunderstandings of qualitative methodologies and analysis. | $\begin{aligned} & \text { F.8.f } \\ & \text { \& h } \\ & \text { G.3.b } \end{aligned}$ | $\square 4$ <br> $\square 3$ <br> $\square 2$ <br> $\square 1$ <br> $\square$ NA |
| APA <br> Format | Consistently adheres to APA format, including cover sheet, running head, headings, in-text citations, paragraph format, references, etc. | No more than one or two minor APA errors; overall, follows general format. | Numerous APA errors that are distracting; numerous inconsistencies. | Significant problem following APA style; numerous problems in several areas. | F.8.j | $\square 4$ <br> $\square 3$ <br> $\square 2$ <br> $\square 1$ <br> $\square$ NA |
| Quality of Writing | Sophisticated writing style that is clear, concise, smooth; maintains professional voice; pleasure to read; has developed unique and effective writing style; virtually no grammatical errors. | Clear, concise writing; maintains professional voice; minor and few grammatical errors. | Minor problems with writing style and/or grammar; vague or wordy; does not maintain professional voice. | Significant problems with writing; ideas not clearly communicated due to writing ability; numerous grammatical errors. | $\begin{aligned} & \hline \text { F.8.j } \\ & \text { G.3.n } \end{aligned}$ | $\square 4$ <br> $\square 3$ <br> $\square 2$ <br> $\square 1$ <br> $\square$ NA |

Final grades will be assigned based on the percentage of points earned:
A 94-100
A- $90-93$
B+ $\quad 87-89$
B $\quad 80-86$
C+ 77-79
C $\quad 70-76$
F $<70$

## Honor Code

Vanderbilt University places a high priority on and strives to uphold the highest standards of academic integrity while protecting the rights of students and faculty. Should the instructor find evidence of cheating, plagiarism, other inappropriate assistance in work presented by a student, or any other violation of the honor code, the student will receive no points on the assignment/exam, and will be referred to the Honor Council for further disciplinary action. Honor code violations include:

1. Falsifying or cheating on a report, paper, exercise, problem, test or examination, tape, film, or computer program submitted by a student to meet course requirements. Cheating includes the use of unauthorized aids (e.g., crib sheets, discarded computer programs, the aid of another person on a take-home exam); copying from another student's work; soliciting, giving, and/or receiving unauthorized aid orally or in writing; or similar action contrary to the principles of academic honesty.
2. Plagiarism on an assigned paper, theme, report, or other material submitted to meet course requirements. Plagiarism is defined as incorporating into one's own work the work of another without properly indicating that source. A description of plagiarism related to papers is given below.
3. Failure to report a known or suspected violation of the Code in the manner prescribed.
4. Any action designed to deceive a member of the faculty, a staff member, or a fellow student regarding principles contained in the Honor Code, such as securing an answer to a problem for one course from a faculty member in another course when such assistance has not been authorized.
5. Submission of work prepared for another course without specific prior authorization of the instructors in both courses.
6. Use of texts or papers prepared by commercial or noncommercial agents and submitted as a student's own work.
7. Falsification of results of a study or research.

## The Honor Code Applied to Preparation of Papers

- Papers are to express the original thoughts of the student. If a topic for a paper has been discussed fully among students prior to an assignment, then the students should consult the instructor about writing on that particular topic.
- Failure to indicate the source of ideas, expressions, phrases, or sentences constitutes plagiarism.
- A student may not submit papers substantially the same in content for credit in more than one course, without specific and prior permission of all instructors concerned.

COURSE SCHEDULE

| Week | Date | Topics | Standard | Before the Session |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  | Introductions; Review syllabus; CITI certification; Ethics in counseling research, IRB and informed consent; Conducting research overview; Variables; Research questions and hypotheses | 2.F.8.g \& j | Chapters 1-2; ACA Code of Ethics (Section G) |
| 2 |  | ***CITI Certificate Due***; Intro to SPSS; Designing instruments and gathering data; Reliability and validity; Individual Applied Research Project topic discussion | $\begin{aligned} & \text { 2.F.8.d, h, } \\ & \text { \& i } \end{aligned}$ | Chapter 11-12, 15 |
| 3 |  | Interpreting data and standardized scores; Types of statistics; Overview of descriptive statistics; Individual Applied Research Project topic discussion; SPSS descriptive statistics (variance) exercise | $\begin{aligned} & \text { 2.F.8.h-i } \\ & \text { 5.G.3.n } \end{aligned}$ | Chapters 13-14 |
| 4 |  | ***Paper Topic Due***; Introduction to APA Style; Locating literature | 2.F.8.a | Chapter 3, APA6, |
| 5 |  | ***APA STYLE EXAM***; Discussion of counseling outcome research and evidence-based practices; Needs assessment; Construct a needs assessment exercise; | $\begin{aligned} & \text { 2.F.8.a-d,h; } \\ & \text { 5.G.3.b, n } \end{aligned}$ | Chapters 4, 9 |
| 6 |  | Review for the Midterm Exam; Program evaluation END OF CONTENT FOR MIDTERM | $\begin{aligned} & \text { 2.F.8.d-e, } \\ & \text { g; 5.G.3.b } \end{aligned}$ | Chapter 10; PPT Review, Mastering |
| 7 |  | ***Midterm Exam***; Sampling; Threats to validity | 2.F.8.f-g | Chapter 7 |
| 8 |  | Qualitative research methodology and design application | $\begin{aligned} & \text { 2.F.8.d-g; } \\ & \text { 5.C.3.b } \end{aligned}$ | Chapter 5-6 |
|  |  | NO CLASS - SPRING BREAK |  |  |
| 9 |  | Quantitative research methodology and design application; Action research; SPSS practice exercises | $\begin{aligned} & \text { 2.F.8.e-h } \\ & \text { 5.G.3.b, n } \end{aligned}$ | Chapter 7-8 |
| 10 |  | Correlation and regression; SSRD \& Action research application; SPSS application | $\begin{aligned} & \text { 2.F.8.a-b, f- } \\ & \text { j; 5.G.3.b } \end{aligned}$ | Chapter 7, 17 |
| 11 |  | SPSS Applications | 2.F.8.h-i | Chapter 15 |
| 12 |  | **SPSS Exam**; Statistical hypothesis testing; <br> Parametric statistics; | $\begin{aligned} & \hline \text { 2.F.8.h-i } \\ & \text { 5.G.3.n } \end{aligned}$ | Chapter 14, 16 |
| 13 |  | ***Applied Research Project Due*** <br> Review for the Final Exam; Nonparametric statistics; Multivariate statistical analysis; Meta-analysis; Wrap up; END OF CONTENT FOR EXAM II | 2.F.8.h-i | Chapter 18-19 PPT Review Slides; NCE Research chapter for review |
| 14 |  | ***Exam II*** |  |  |

