WAYLAND BAPTIST UNIVERSITY

Virtual Campus Division of Social Sciences

Wayland Baptist University exists to educate students in an academically challenging, learning-focused and distinctively Christian environment for professional success, lifelong learning, and service to God and humankind.

CNSL 5302 VC03 and VC04 - Research Methods and Data Analysis (EDUC 5302)

TERM - Spring 2014

Instructor: Dr. Don Knox

Contact Information: 806.292.7021 Email: knox@wbu.edu

Office Hours:

Class Time and Location: Blackboard

Catalog Description: Review of basic research processes, including ethics, designs, and data analysis, and application to the field of counseling.

There is no prerequisite for this course other than the stats prep course if you have not already taken undergraduate statistics (and a good idea even if you have!) - Research for the Behavioral Sciences – Privitera 9781412975117 Sage 2014

Optional Materials: There may be various handouts and weblinks posted.

Course outcome competencies:

- Explain why scientific research is needed in counseling.
- Understand the APA and ACA ethics codes for research.
- Able to find and evaluate professional research materials.
- Describe the strengths and weaknesses of the types of research used in counseling.
- Explain the basic designs of experimental and non-experimental research.
- Describe techniques of measurements and sampling,
- Explain basic principles of probability and the normal curve.
- Understand when to use basic descriptive and inferential statistics.
- Read and explain the results of major statistical techniques in counseling journals.
- Apply knowledge to evaluate an area of counseling research.

Attendance: Online Student Attendance Policy:

Online Students - Students are expected to participate in all required instructional activities in their courses. Online courses are no different in this regard; however, participation must be defined in a different manner.

- 1. Student "attendance" in an online course is defined as active participation in the course as described in the course syllabus. Instructors in online courses are responsible for providing students with clear instructions for how they are required to participate in the course. Additionally, instructors are responsible for incorporating specific instructional activities within their course and will, at a minimum, have weekly mechanisms for documenting student participation. These mechanisms may include, but are not limited to, participating in a weekly discussion board, submitting/completing assignments in Blackboard, or communicating with the instructor.
- 2. Students aware of necessary absences must inform the professor with as much advance notice as possible in order to make appropriate arrangements.
- 3. Any student absent 25 percent or more of the online course, i.e., non-participatory during 3 or more weeks of an 11 week

term, may receive an F for that course. Instructors may also file a Report of Unsatisfactory Progress for students with excessive non-participation.

- 4. Any student who has not actively participated in an online class prior to the census date for any given term is considered a "no-show" and will be administratively withdrawn from the class without record. To be counted as actively participating, it is not sufficient to log in and view the course. The student must be submitting work as described in the course syllabus.
- 5. Additional attendance and participation policies for each course, as defined by the instructor in the course syllabus, are considered a part of the university's attendance policy.

<u>ADA:</u> In compliance with the Americans with Disabilities Act of 19990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university. The Coordinator of Counseling Services serves as the coordinator of students with a disability and should be contacted concerning accommodation requests at (806) 291-3765. Documentation of a disability must accompany any request for accommodations.

The University is an institution of higher education. Students are assumed to have the appropriate academic skills and maturity to act responsibly for their education and conduct. You are responsible for the posted timelines, assignment dates, questions and your ISP and computer.

Course requirements:

10 article reviews - 20%

6 quizzes - 15%

2 exams - 30%

IRB application – 10%

Research proposal – 25%

Discussion Board - Attendance

Method of determining course grade:

The University has a standard grade scale:

A = 90-100, B = 80-89, C = 70-79, D = 60-69, F= below 60, W = Withdrawal, WP = withdrew passing, WF = withdrew failing, I = incomplete. An incomplete may be given within the last two weeks of a long term or within the last two days of a microterm to a student who is passing, but has not completed a term paper, examination, or other required work for reasons beyond the student's control. A grade of "incomplete" is changed if the work required is completed prior to the last day of the next long (10 to 15 weeks) term, unless the instructor designates an earlier date for completion. If the work is not completed by the appropriate date, the I is converted to an F.

Instructor's policy on Academic Dishonesty: Will not be tolerated - Any plagiarism in this class will be dealt with in the most severe way academically possible – including dismissal from the University.

Tentative Schedule:

Weekly quizzes
Article reviews are due weeks 4 – 8 (2 per week)
Test 1 – week 5
Test 2 – week 11
IRB application – Week 6
Research proposal (that Monday) – week 10

Additional Information: This is a tough course, no matter who teaches it. There are a couple of good reasons for this statement.

- 1. This is a course that is quantifiable in nature and to this point; most of your coursework (and your eventual practice for that matter) has been qualitative. This course is quantitative and your research proposal must be quantitative. The statistics coursework presented here will be reflected in your certification exam. Your papers need to be objective "I feel..." "this paper"... type of statements will not work. These are not to reflect your opinion but rather they are to evaluate current research is out there over a subject you may encounter in practice. Please do not pick a topic because you are emotionally attached to it, for instance, autism if you know an autistic child. This is not a place for self-exploration.
- 2. Statistics and research rolled into one course and it is only 11 weeks long. I have to get you the information for both areas. I have tried to reduce the homework and increase the article reviews to make the project easier to write. The quizzes prepare you for the exams and if they were not graded then most of you would not take them and then your test grades would suffer.
- 3. Student anxiety about the course. Nothing I can do here except to tell you we all have gone through this class. I took it in both of my Masters' programs and in my Doctoral program as well. It is always the same. My goal is to get everyone through this class with a "B" or better. This does not always occur because some students believe that they are exceptions to rules and can do whatever they want instead of what I ask them to do. For instance they have late homework, turn in shoddy papers, use wikipedia, write a qualitative research paper and/or commit plagiarism.

Instructor goals:

- 1) Your basic knowledge of people, terms and characteristics will be evaluated by a series of quizzes and exams.
 - A) You will be required to take four online quizzes on basic ideas covered in the readings. The computer will provide some feedback on your score as soon as you finish the quiz. Quizzes are timed this isn't an exercise to see how fast and efficient you are at looking answers up it would be closed book in class why should this be any different. This ensures that you have indeed encountered the most basic elements of the course (the kind of things that might pop up on a state exam!). Quizzes will count at 10% of your final grade. Many of these questions will also be on the tests and serve as your "study guide" for exams.
 - B) Two formal exams will also be given at the end of weeks 5 and 11. Just like a traditional test, you will only have one shot on this one. They will be given online in a timed format. The exam may have some multiple choice type questions, but may also have short answer and essay questions that ask you to write out responses to a more thought provoking questions. I will grade these, and feedback will be a bit slower! Your total score on these exams will be 30% of your final grade. Questions will appear one at a time with no backtracking allowed.
- 2) Other weekly assignments will be made. These will be listed by weekly sections under the 'Assignments' section on the main menu. They are article reviews and should make your literature review project a little easier to write really! Assignments will be due by the last day of the week (Saturday) for that section. Your scores on these assignments will be 20% (totaled) of your final grade.
- 3) You will also complete a research proposal during the term. Your research question(s) needs to be approved by me no later than the end of week 2. I will post a discussion thread for this purpose. Do not send me a private email please post. A few reason for this one it allows everyone to see what is being researched. If someone comes across an article that might help you they can let you know. It also helps me to keep track of what has been approved and what has not been approved. Yes, students will actually try to go the entire term and wait until week 10 to write a paper and then find out their topic is disapproved. This proposal will involve searching for

published scientific articles relating to a specific question, reading and evaluating the articles and writing a report that describes what we know and don't know about this area of research and about where you think the research should go next. See page 177 of your textbook. Start this project (and I recommend that you START THIS NOW – or very soon!) by thinking about a question that needs to be addressed. Try to choose a specific question. A few examples: Do antidepressant medications really increase suicides in adolescents? Is ADHD diagnosed too often? Are medications necessary to treat ADHD? Has high-stakes testing in public schools improved math achievement? I encourage you to choose a topic that would be relevant to work that you see happening around you right now. Teachers and counselors, and the organizations they work for, are often involved in evaluating the effectiveness of the work that they do. This can involve surveys to determine needs or attitudes or experiments to determine outcomes, as well as other issues. Counselors might also become involved in testing more theoretical issues about the aspects of specific counseling techniques or about the nature of a particular disorder.

Once you have a question, you will need to begin to read and find out what is already known about the area. It will need to draw exclusively on professional sources like research articles published in scientific journals. Time magazine, Psychology Today and Lifetime are NOT professional sources. Here you will get lots of good ideas about how real research is done. You will also begin to learn a lot about the subtleties and complexities of your question. You may find issues you had never really considered! AN IMPORTANT CAUTION: In order to get a complete set of journal articles for your topic, you will likely have to use interlibrary loan. Our library databases carry a number of journals, but there are thousands out there and we cannot subscribe to them all. We can, however get virtually any article that you need (for free!) if you put in a request to the library. This process usually takes a week or two – so DO NOT WAIT TO START looking for and requesting articles!! We will start the searching process in week 2, so get ready!

Another important note – NO INTERNET SOURCES are allowed – please do not try me on this one. Textbooks also do not count as sources – again – do not try to slip one by me. Using a site like Wikipedia or Answers.com is not an acceptable practice at this level (or any level) of education. Using a site like "freetermpapers.com" is plagiarism at its worse form and it will get you removed from the university. I am fanatical about this!

You will then need to read and evaluate the articles, using the principles that you are learning in this class. This also takes some time! Compare the different articles side-by-side to see if they agree. Often you will find research that covers the same topic, but that have different conclusions. You will need to think about why. What conclusion will you make? Compile the information into a report (10-12 pages – not including the cover page, abstract and bibliography – while these are required –please remember this is a graduate class) done in APA 6 style that describes, discusses, and evaluates the different pieces of evidence. Draw conclusions about the current state of the research (which may be that we really don't know yet!) and tell where you think research needs to go next – what questions and studies could be done to further our understanding.

There will be an opportunity for you to submit a draft copy of your project to "SafeAssignment" to check for inadvertent plagiarism. I strongly encourage you to use this feature. There will be no excuses for the final project turn-in. The final paper will also be checked using SafeAssignment. I do not check you draft assignment. I will not "proof or check" your paper before turn in. Do NOT send me your papers via email "just in case Bb does not work". Bb works and all you do is send my blood pressure through the roof because I feel that my instructions about "I never open email attachments" is somehow untrue. I will deduct 50 points from your paper if you send me an email attachment.

I will give you assignments along the way to make sure you are making progress. This project will count as 30% of your final grade. The <u>completed project will be due the Monday of week 10 at 11:59 PM CT</u>. All other assignments are due no later than 11:59 PM CT on the Saturday of that week. Late assignments are not accepted. Not for any reason.

WEEK	DATE	Topic/Assignment	Notes
1	2/24 - 3/1	1. Read chapters 1 − 3	
		2. Discussion Board entry	
2	3/3 - 3/8	1. Read Chapters 4 - 6	Research hypothesis will
		2. Quiz 1 (chapters 1 – 3)	be approved only via
		3. Discussion Board entry	discussion board – no
		4. Post preliminary Research hypothesis (see page 5)	email traffic for this item
3	3/10 - 3/15	1. Read chapters 7 – 8	
		2. Quiz 2 (chapters 4 – 6)	
		3. Discussion Board Entry	
	3/16 - 3/23	SPRING BREAK	
4	3/24 - 3-29	1. Article Reviews 1 and 2	You can turn article
		2. Discussion Board entry	reviews in early (and are
		3. Quiz 3 (chapters 7 – 8)	encouraged to do so).
			One assignment per link
			and assignments will only
			be accepted via the
			assignments link –
			assignments emailed will
			not be accepted.
5	3/31 - 4/5	1. Article Reviews 3 and 4	Please go to my grades and
		2. Discussion Board entry	click on your individual
	This is a very	3. Read chapters 9 - 10	quiz grade. You should
	busy week – try	4. Test 1 (chapters 1 – 8)	see you quiz and your
	to get some		answers. You need to look
	things		up the correct answer.
	completed early		The answer is in the book
	to avoid a		– no need to ask me the
	crunch at the		answer (my way of making
	end!		you read the book and
			study)
6	4/7 - 4/12	1. Article Reviews 5 and 6	IRB application gets
		2. IRB Application	turned in via the
		3. Read chapters 11 – 12	"Assignments" tab. Please
		4. Discussion Board entry	use the template I provide
			– DO NOT submit this to
			the IRB. You are not
			really going through with
			this research!!!
7	4/14 – 4/19	1. Article reviews 7 and 8	Note – Easter Holiday is
		2. Discussion Board entry	4/18 – 4/20
		3. Read chapters 13 – 14	
		4. Quiz 4 (chapters 9, 10)	I will not check the course
			after 3:00 PM CT 4/17
			until 4/21. Early turn in is
			recommended

8	4/21 – 4/26	 Article reviews 9 and 10 Discussion Board entry Quiz 5 (chapters 11-12) Read chapter 15 	
9	4/28 – 5/3	1. Discussion Board entry 2. Quiz 6 (chapters 13-15)	
10	5/5 – 5/10	Discussion Board entry Completed Research proposal due via SafeAssignment	Research proposal will only be accepted via SafeAssignment It is due no later than 11:59:00 PM CT on Monday. No late submissions allowed. You, and only you, are responsible for what is turned in – no "I accidently submitted the wrong paper" – one submission.
11	5/12 – 5/17	Test 2 (chapters 9 – 15)	

Research proposal guidelines – see page 505 for a short example. For this course – you will need 9all page number totals are minimums and are whole pages – stopping in the middle of page 4, for example, is really 3 1/2 pages – not 4 pages. Less than minimum will not be graded.

Title page

Abstract (1/2 page – about 250 words)

Main Body to include:

Introduction

Literature review (8 pages)

Research hypothesis (to include research questions – the stats behind the study) about 1 page

Method

Participants

Materials (to include surveys)

Procedure

Statistical process to be used to evaluate data collected.

Results – NOT NEEDED

References used – please pay attention to the requirements posted in the syllabus about sources.