

UNIVERSITY OF TEXAS AT EL PASO

College of Health Science Health Science Program

HSCI 3315 – 001

CRN: 22236

Research for the Health Professions: Spring 2020

Course credits: 3.0

Maria Creciun Browne, MD, MPH, MS

Email: mcbrowne@utep.edu

This syllabus is considered a contract between you and the professor. It is an agreement that includes the "rules" to be observed during the course, both by students and the instructor. Although this syllabus can change, none will be made without prior notification.

COURSE DESCRIPTION:

This course addresses the importance of planning for research in health related fields, and although it is mainly intended for students pursuing a health related degree, its multidisciplinary approach can fit most degree plans. It will introduce students to the fundamentals of research study design, methods, and collection of data, as well as ethical issues when conducting research, always under a public health perspective. It is expected that enrolled students have previous knowledge of basic statistics and statistical analysis.

This course is offered **as a full, online course** using an asynchronous format, meaning that no traditional classroom face-to-face meetings will take place during the semester. **Time commitment is essential to complete the course requirements.** Usually, an online course will require the student to spend more time reading and learning than the typical face-to-face course. **A time commitment of at least 9 hours per week REQUIRED.** Online “attendance” is determined by the students’ quantity and quality of participation, time spent on accessing material posted on Blackboard[®] and assignments completed on regular bases. For some this could be a convenient arrangement since the students can access the course either in or off campus and work on your own. However, if this is the first time you are considering enrolling in an online course, it is recommended that first you visit the following services to assess if that is the right option for you:

UTEP’s Instructional Support Services’ and “Prospective Online Students” website, and complete the “Self Evaluation for Potential Online Students” survey which is also directly available at:

<http://www.ion.uillinois.edu/resources/tutorials/pedagogy/selfEval.asp>

IT IS STRONGLY RECOMMENDED THAT YOU COMPLETE THIS SELF-TEST

ON THE FIRST DAY OF CLASS, then make a decision to continue or withdraw from the course.

Even though this is an online course, learning techniques will emphasize a critical thinking approach to learning. A critical thinking approach takes the view that a student's knowledge is not passively absorbed from the instructor. In contrast with other learning techniques, critical thinking assumes students will create knowledge in their own mind by actively thinking about the material. It is going to be crucial that you study independently on a regular bases not just before the deadline for assignment or before engaging in on line discussions. For more information please visit “The Critical Thinking Community” at: <http://www.criticalthinking.org/pages/defining-critical-thinking/766>

Because the course is designed to challenge you intellectually, you may be required to conduct multiple activities and assignments. Additional readings might be offered and posted on Blackboard[®] for activities and discussions. ALL course material is testable.

RESTRICTIONS:

In order to enroll for this course you will need to meet the following pre-requisites: 1. Must have already completed and passed, with at least a “C”, an undergraduate statistics course (PSYC 1303 or equivalent). For additional information, send an email to: mcbrowne@utep.edu.

COURSE OBJECTIVES:

After completing the course, students will develop the following list of competencies:

1. To practice his/her ability to critically review research-based materials related to public health or health promotion field and identify area of potential research; to elaborate a research question.
2. To describe and select appropriate research design methods, measurements and data analysis tools to answer identified research question related to public health/health promotion problems.
3. To acquire and/or increase skills for interpreting research findings, and to demonstrate scientific writing skills through writing assignments.
4. To produce an undergraduate-level research protocol, including background, methods, measurements, data analysis and publication plans.

COURSE REQUIREMENTS:

You will need the following required textbook:

INTRODUCTION TO HEALTH RESEARCH METHODS: A PRACTICAL GUIDE 1st or 2nd edition

Author: Kathryn H. Jacobsen
Publisher: Jones & Bartlett Learning

THIS COURSE IS BUILT ON THE 1st edition, however If you are using the 2nd addition here is the transition guide for your convenience.

TRANSITION GUIDE (Transitioning from the 1st edition to the 2nd edition)

<i>Chapter in 1st Edition</i>	<i>Where is the updated content located in the 2nd edition?</i>
1	1 This revised introductory chapter emphasizes the process and purposes of health research.
2	2 This revised chapter on the selection of a research question features new ideas for deriving research questions from clinical practice.
3	3 This revised chapter on reviewing literature features new information about health research databases, critical reading, assessment of validity, and annotated bibliographies.
4	4 This revised chapter about focusing the research question features new content about conceptual and theoretical frameworks.
—	5 This new chapter presents recommendations for seeking mentorship and other professional development opportunities.
5	6 This revised chapter features new ideas about how to be a good collaborator, since most researchers first experience research in the role of a coauthor rather than as a lead author.
6	7 This chapter presents an overview of all the study designs.
7	22 This new chapter presents a comprehensive overview of systematic reviews and meta-analyses, including new sections on search strings, search limiters, and statistics for pooled analysis.
8	14 This revised chapter about correlational studies features a new section about age adjustment.
9	8 This chapter on case studies includes new information about the use of photographs and other ethical considerations.
10	9 This revised chapter features new sections on knowledge, attitudes, and practices (KAP) surveys and repeated cross-sectional surveys.
11	10 This revised chapter about case-control studies features new information

		about case and control definitions, matching, and statistical analysis and interpretation.
12	11	This revised chapter about cohort studies features new content about statistical analysis and interpretation.
13	12	This revised chapter about experimental studies features new information about advanced study designs (e.g., factorial and crossover studies), randomization, quasi-experimental studies, and statistical analysis and interpretation (including efficacy, effectiveness, likelihood ratio tests, and inter-rater agreement).
14	13	This new chapter about qualitative studies features sections on theories and paradigms, qualitative interviewing, focus group discussions, coding and analysis, mixed methods research, and monitoring and evaluation.
15	15	This revised chapter about writing research protocols features new information about the research process, including the use of Gantt charts (timelines) for research planning.
16	16	This chapter presents information about sampling methods for common primary study designs.
17	17	This chapter presents information about sample size and power estimation, including examples of how to make these calculations.
18	18	This revised chapter about questionnaire development features lengthy new sections about reliability and validity.
19	19	This chapter presents information about how to conduct surveys and interviews when collecting primary data.
20	20	This revised chapter on additional assessments features new information about ethical practices, reliability, and environmental assessment.
21	23	This revised chapter on research ethics features new content on the foundational documents and principles of research ethics and expanded coverage of sensitive research questions, confidentiality, and community-based research ethics.
22	24	This revised chapter on institutional review boards (IRBs) features new content on IRB documentation, exempted research, and conflicts of interest (COI).
23	21	This revised chapter features new information about research ethics, health informatics, and data mining.
24	22	This new chapter presents a comprehensive overview of systematic reviews and meta-analyses, including new sections on search strings, search limiters, and statistics for pooled analysis.
—	25	This new chapter on grant writing features sections on funding sources, finding grant opportunities, writing proposals, budgeting, and managing grants.
25	26	This revised chapter on data management features expanded content about recoding and calculating derived variables.
26	27	This revised chapter on descriptive statistics features expanded content about variance, standard errors, and confidence intervals.
27	28	This revised chapter on comparative statistics features expanded content about type 1 errors, <i>p</i> -values, and correlation.

28	29	This new chapter focuses on regression analysis, multivariable statistics, and causal theory.
—	30	This new chapter introduces several analysis tools that move beyond standard biostatistical techniques, such as geographic information systems (GIS), mathematical modeling, and economic analysis.
29	32	This revised chapter on article structure features a new emphasis on outlining and drafting strategies.
30	33	This revised chapter on citing features new information about paraphrasing and comparing AMA and APA citation styles.
31	35	This revised chapter on writing success strategies features dozens of ideas for how to get started on writing, stay motivated, and successfully complete writing projects.
32	34	This chapter presents information about how to critically revise one's own writing.
33	31	This chapter presents a guide to preparing posters and oral presentations for academic and professional conferences.
34	37	This revised chapter on selecting target journals features new sections about open-access publishing.
35	38, 39	These chapters provide step-by-step instructions for the manuscript submission, review, and publication process.
36	36	This chapter presents the many reasons to publish one's research findings.

All chapters will be covered.

In this course you are required to study course material posted on Blackboard, follow the instructions and carry out the following activities on weekly basis.

1. PPPs and/or chapters (highly recommend!) from your textbook as assigned
2. Finish with quizzes as assigned by due date and time (by the end of Steps due date)
3. Participated in LIVE on-line class
4. Finish with Assignment 1, MIDTERM, Assignment 2, and FINAL on due date.

Please mark your calendar for important events and assignments

**Schedule for a Research Methods Course,
Spring of 2020 (Jan 20-May 15)**

Weeks	Date, the week begins	Research Steps	Topics	Chapters
1	Jan 20-	Step 1: Identifying a Study Question	Getting started	1-6, 2
1	Jan 20-		Literature reviews	3
2	Jan 27-		Getting focused	4
2	Jan 27-		Collaboration	5, 6
3	Febr 3-	Step 2: Selecting a Study Approach	Descriptive study approaches	7-9
3	Febr 10-		Analytical study approaches	10, 11
4	Feb 17-		Experimental study approaches	12
4	Feb 17-		Qualitative and correlational studies	13, 14
5	Feb 24-	Step 3: Designing the Study and Collecting Data	Research protocols and grant writing	15, 25
6	Feb 24-		Study populations	16, 17
7	March 2-		Questionnaire design	18
7	March 2-		Surveys and interviews	19, 20
8	March 9-		Secondary and tertiary studies	21, 22
8	March 9 -		Ethical considerations	23, 24
MIDTERM, FRIDAY MARCH 13				
<i>March 16th- 20th spring vacation</i>				
9	March 23 -	Step 4: Analyzing Data	Data management and descriptive statistics	26, 27
10	March 30 -		Comparative statistics	28
11	April 6 -		Advanced statistics	29, 30
12	ASSIGNMENT April 17			
13	April 20-	Step 5: Reporting Findings	Working on the poster	31
13 -14	April 27-		Familiarizing with writing and editing paper	32-35
15	May 4-		Selecting a Publishing journal	36
FINAL EXAMINATION, WEDNESDAY, MAY 13 due at midnight same date, cumulative content covering ch 1-36				

TECHNICAL REQUIREMENTS

Since this is an online course, all students are required to:

Have access to a computer that connects to the Internet and a working e-mail account (miners.edu account). Other e-mail systems should not be used for this course. If you do not own a computer, you can make use of several computer labs on campus.

Be able and have the means of accessing the online course by way of Blackboard[®].

The course is only accessible online by logging in to your “My UTEP” portal at <http://my.utep.edu> and accessing the Blackboard[®] tab that will show your entire course list. For information on how to log in you can contact the UTEP Help Desk at (915) 747-5257, or check their information page at <http://admin.utep.edu/Default.aspx?tabid=63402>.

Have some abilities in using a mouse and keyboarding, and how to use a Web browser to access the internet, email and Blackboard[®].

Be able to perform Internet searches, use e-mail, chat.

Be able to assess **Blackboard Collaborate** and test the system prior to the first online LIVE session

Be able to study independently, be self-disciplined, and have good study and time management skills.

Have knowledge of how to use word processing, spreadsheet, visual media software, as well as capability to open pdf-type files. Usually, on-campus computers will provide the necessary software and connectivity. However, if you plan not to work on campus, it is your responsibility to make sure you have the software and connectivity requirements.

Have the means to store all assignments and if necessary turn them in electronically (disks, flash drives, etc.).

GRADING CRITERIA

Completion of course will require that the student fulfill multiple tasks (check under Course Tools, see Tasks section for more detailed information and due dates)

1. 40% -- TESTS (5 TESTS – 8% EACH)
2. 15% ---MIDTERM
3. 20% ---ASSIGNMENT
4. 25% ---FINAL

NO EXTRA CREDIT ACTIVITIES WILL BE OFFERED.
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Student progress

Grades will be available through Blackboard[®] Grade Center; feedback from the instructor be sent by e-mail.

COURSE POLICIES

Attendance

Attendance is mandatory and an important component of this course. In this regard, online courses are no different than other face-to-face traditional courses; however attendance must be considered differently. For this course attendance will be MEASURED by active and quality participation during the course, which will be directly monitored by login on, and completing other activities in the course's UTEP's Blackboard[®] learning management system shell. The requirement for weekly attendance can be documented by any or all of the following methods: student tracking records in Blackboard[®]; submission/completion of assignments; and communication with the instructor. If a student does not log on to the course within the drop/add period for the course he/she will be dropped from the course.

In order to get attendance, the students MUST actively participate in the scheduled LIVE sessions on weekly basis via Blackboard Collaborate

Communication and Feedback Plan

All communication with the course instructor to be online. UTEP email is the preferred method; send all emails to mcbrowne@utep.edu. You can expect to receive an answer to your questions within 48 hours. Occasionally, a Skype[®] session can be scheduled to clarify issues and individual online "office hours" or face-to-face meeting on campus (will be announced additionally).

Being successful in an online class.

Online learning is not a spectator sport. It is everyone's responsibility to participate as fully as they can so everyone can get the most from the experience. Here are some simple rules to follow to ensure your participation and engagement in the learning process:

Ask questions: If you do not know the answer, someone else will. Email your course instructor.

Reach out to others: Offer a fact, article, link or other item that can help others learn.

Be appropriate: The online classroom is not the place for insulting or insensitive comments, attacks, or venting. Inappropriate behaviors will usually subject to disciplinary action, as well.

Be diplomatic: When sending messages on emotionally charged topics, make sure you write the message and then walk away for at least an hour before re-reading the

message and then sending it. Re-reading emotionally charged messages ensures that they are constructive instead of destructive. Think of the person at the other end.

Stay focused: Stay on topic to increase the efficiency of your learning.

Take advantage of all the resources given to you to succeed in the class.

Effective electronic communication. It is important to share a word of caution, so we can become wiser about interpersonal distance learning communications. When communicating electronically, many of the feelings or impressions that are transmitted via body language in face-to-face communications are lost. Consequently, interpreting emotions and innuendos is much more difficult. Only what is written, or drawn, carries the message. Often, excitement can be misinterpreted as anger or insult. It is important that we all keep this in mind as we communicate. Words in print may seem harmless, but they could emotionally injure us when working at a distance. Hence, it is vitally important that we are conscious of how we communicate while working at a distance. For example, avoid the use of caps in your electronic messages, as wording in caps comes across as shouting.

The standard practice ("Netiquette") for participation in networked discussion requires that all participation be focused on the topic at hand, not become personalized, and be substantive in nature. (Translation: you may certainly disagree with others, but you must do so respectfully; you may express strong beliefs or emotions, but you may not get so carried away that you lose all perspective on the course itself.) More information on Netiquette, the etiquette of Internet communication, can be found at www.albion.com/netiquette.

Policy on examinations

Exams will be accessible online using Blackboard® platform and will be available on the scheduled day from 6:00 AM (Mountain Time Zone) and until midnight of the same day. You may access it at any time; however, once you begin the exam you will have a time limit to complete it. **You will NOT be able to start the exam, stop, and then re-start again.** There will be no retaking examinations unless proven Blackboard® platform failures. If a student misses the final exam, a written make-up exam may be taken only if the student has informed the instructor of the absence *prior* to the beginning of the examination or confirmed family/medical emergency, and only if the absence is legitimized by the Dean of students). Nobody will be excused from the examination.

Notice on dropping the course, withdrawals, and incomplete.

Students may drop individual courses or completely withdraw from the University as described below. Refer to the on-line Academic Calendar at www.utep.edu/calendar or to the *Class Schedule* to identify the dates during which adds, drops, withdrawals, and pass/fail registration changes may occur.

a) Student-initiated Drops

It is the student's responsibility to officially drop a course that s/he no longer wishes to take. Failure to do so may result in a grade of "F" on the student's academic record. Athletes must receive permission from the Miner Athletic Advising Center before dropping a course. International students with F or J visas must receive permission from the Office of International Programs before dropping a course.

b) Administrative Drops

During registration periods for upcoming semesters, students will be dropped from registered courses for failure to meet prerequisites or co-requisites after final grades have been posted for the current semester and before the beginning of late registration for next semester. A student may petition the department chair of the course in question for a prerequisite or co-requisite waiver.

At the discretion of the instructor, a student may be dropped from a course because of excessive absences or lack of effort. Students may also be administratively withdrawn from a course during the semester for other reasons, with the concurrence of the academic dean or department chair. A grade of "W" will be assigned before the course drop deadline and a grade of "F" after the course drop deadline. A grade of "F" received due to disciplinary action imposed by the University overrides a grade of "W" received through a student-initiated or faculty drop. Students will be notified of their drop through their UTEP e-mail account.

c) Incomplete coursework

If eligible, the student may receive a grade of Incomplete (I) that will appear on the academic transcript; an "I" (incomplete grade) can be considered only if requested by the student in advance of the conclusion of the course and only for legitimate, documented emergencies. Failure to request and negotiate the terms of an "Incomplete" grade before the conclusion of the course will result in a denial except in the most extraordinary circumstances.

Notice of Policy on Scholastic/Academic Dishonesty

Academic dishonesty is an assault upon the basic integrity and meaning of a University. Cheating, plagiarism, and collusion is dishonest activities are serious acts which erode the University's educational and research roles and cheapen the learning experience not only for the perpetrators, but also for the entire community. It is expected the UTEP students will understand and subscribe to the ideal of academic integrity and that they will be willing to bear individual responsibility for their work. Materials (written or otherwise) submitted to fulfill academic requirements must represent a student's own efforts. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. Violations will be referred to the Dean of Students Office for possible disciplinary action. Students may be suspended or expelled from UTEP for such actions.

American Disabilities Act

If you have or suspect a disability and need accommodations, you should contact the Disabled Student Support Services Office (DSSO) at (915) 747-5148. You can also email the office at: dss@utep.edu or go by Room 106 Union Building East. For additional information, visit the DSSO website at: www.utep.edu/dsso

COURSE ASSISTANCE AND SUPPORT:

Course related: Your instructor is available to assist you online, and by email throughout the semester.

Technical support: Click on the “Help” hyperlink in Blackboard[®] platform after logging in to your “My UTEP” portal at <http://my.utep.edu>. Furthermore, The University of Texas at El Paso offers complete technical information and help desk support at: <http://admin.utep.edu/Default.aspx?alias=admin.utep.edu/ts>