

**THE UNIVERSITY OF TEXAS AT TYLER  
DEPARTMENT OF PUBLIC HEALTH  
COURSE SYLLABUS**

**SEMESTER: Fall 2024**

Course Title: **RESEARCH DESIGN**  
Course Number: **HECC 5303.060 & .001**  
Credits: 3 Hours  
Prerequisites: None  
Days/Hours of Class: 100% Online (virtual platform)  
Class Location: Online via Canvas or Hybrid

### **Instructor Information**

**Name and Title:** Fletcher Njororai, Ph.D., MPH, MCHES, ACUE  
Associate professor

**Office Location:** HPC Suite 3105  
**Phone Number:** (903) 566-7058

**Email Address:** [fnjororai@uttyler.edu](mailto:fnjororai@uttyler.edu) (\*Preferred: Please use Canvas inbox for emails).  
**Emergency Number (Office):** (903) 566-7031 (Tina Taylor, Admn. Assistant)

**Office Hours:** M 12.30 pm – 2pm; or Virtual hours any other day/time via zoom - (By appointment only. Please send email to make an appointment)

***UT Tyler Ethics Honor Code: I embrace honor and integrity that will not allow me to lie, cheat, or steal nor to accept the actions of those who do.***

### **Required Textbooks**

1. Creswell, J. W. & Creswell, J. D. (2018). Research Design (Quantitative, Qualitative and Mixed Methods) 5th Edition. Sage Publications, ISBN 978-1-5063-8670-6
2. Jacobsen, K. H. (2017). Introduction to Health Research Methods: A Practical Guide. Jones & Bartlett Learning. 2<sup>nd</sup> Edition.
3. Thomas, J. R., Martin, P.E., Etnier, J.L. & Silverman, S.J. (2023). Research Methods in Physical Activity-8<sup>th</sup> Edition. Human Kinetics Library. Print: ISBN 978-1-7182-0102-6; Loose -leaf: ISBN 978-1-7182-1304-3.

## Highly Recommended Resources

1. Bannon, Jr. W. M. (2013). *The 7 Steps of Data Analysis: A manual for Conducting a Quantitative Research Study*. Stats Whisperer Press.
2. Hulley, S. B., Cummings, S. R., Browner, W. S., Grady, D. G., Newman, T. B. (2013). *Designing Clinical Research*, 4th Edition. LWW, ISBN 9781608318049
3. Merriam, S.B. & Tisdell, J.T. (2016). *Qualitative Research: A Guide to Design and Implementation*. Jossey – Bass, A Wiley Brand. 4<sup>th</sup> Edition.

## Catalog Description

The course introduces students to the study of designs commonly employed in health professions, clinical research, and the social sciences in general. The course serves as an introduction on how to ethically do research in a broader perspective. Students will become familiar with the concepts, methods, and applications of research process and evaluation. The goal is to explore the systematic process of different approaches in research commonly used in the scientific and social settings, to review research studies with critical thinking skills, and to facilitate self-directed application of research methods in planning, development and completion of research proposals and studies.

## Course Objectives.

By the end of the course, the student will be able to:

- 1). Define research and list different research types.
- 2). Discuss the differences between quantitative, qualitative, and mixed methods research.
- 3). Describe the process of doing research based on ethical principles.
- 4). Discuss ethical issues involved in research design.
- 5). Develop the ability to formulate clear research questions.
- 6). Design a study that best fits the scientific or viable question using the principles of the scientific research process, and select an appropriate research methodology for the study (strategy to collect, analyze, and interpret data).
- 7). Discuss strengths and weaknesses of various types of research methods used in the Social science and clinical research fields.
- 8). Summarize and critique the methodological processes used in published research articles
- 9). Discuss the challenges that researchers face designing, implementing, and publishing research studies.
- 10). Communicate results of a research project in a manner appropriate to the target audience and stakeholders, research methodologies used, and research purpose.

## Methods of Instruction – Online or Hybrid

Virtual via CANVAS as the LMS.

Student learning experiences to include but not limited to: (a) Selected videos, and/or recorded lectures with related PowerPoint slides, (b) demonstrations, (c) problem solving situations, (d) observation and analysis, (e) readings of textbook and supplementary material, (f) online engagement through a variety of assignments, tests and exams.

The Course Schedule is provided for you in Canvas with module dates, assignments, and any other relevant information.

## Technical Support

The course instructor is unable to offer technical assistance, if you have technical difficulties, please contact CANVAS which provides technical support for this course. Information about technical support is available from the CANVAS main menu (Help). You can also contact UT Tyler IT team by email or call them for immediate assistance. The course top page provides more resources including the numbers to call.

## Communication

The best method to contact me is by email preferably via Canvas inbox. Every email you send to me related to the course, you have to: (1) use Canvas email/inbox to receive a faster response, I check Canvas more often than my regular work email which may delay response back to you; (2) have “HECC 5303” and some specifics of the issue in the subject line ; and (3) use salutation and my professional credential, i.e. do not use “Mrs. ” but rather **Dr. Njororai**; (4) note that I do not respond to emails between Friday late afternoon till Monday or Tuesday. Failure to follow these instructions may delay the response time. On average I will respond to your email within 48 hours so plan your work accordingly to avoid last minute frantic efforts to reach me.

## Course Syllabus and Outline

Please familiarize yourself with the tabs on the main menu on the left side of the course screen to know the links as you will use them a lot throughout the semester. Important information is provided in the “**Syllabus**” tab in CANVAS (link located in the navigation bar on the left side of the screen in the course). The course ‘**Schedule**’ is provided through this link which will have most of your learning tasks including information about assigned reading, assignments and other important information pertaining to what you are supposed to contribute. Course ‘**Modules**’ designed in CANVAS have all the assignments, instructions and due dates for completion of your work.

## Course Expectations

- 1) Participate and complete all class activities and learning tasks on time.
- 2) Except for an act or force of nature (the University being officially closed), assignments and exams will be given/completed at the time and date indicated in the syllabus. Only for

extremely extenuating circumstances and only with the prior approval of the instructor will a student be allowed to make up quiz, or an examination that is missed.

- 3) Pay close attention to assignment instructions and deadlines. Doing exactly what is instructed for a given assignment will greatly improve your chances of getting a good grade. Be sure to work on each assignment BEFORE the due date, not ON the due date. As you are given ample time to complete each assignment, past-due assignments will not be accepted, no exceptions!
- 4) Please do not email your late assignments to the instructor, follow instructions on where to submit your work. Assignments have been scheduled in advance to facilitate completion and submission on time.
- 5) Read widely beyond class assignments or texts and learn to synthesize and critique what you read.
- 6) This being a graduate-level class, the instructor serves mainly as a facilitator while a greater responsibility, initiative and drive that guides the individual learning lies with you as the student

### **Participation**

Active engagement and participation is an integral part of this course. To do well in the course, you must actively participate in the discussions, actively engage with course material, as well as with your peers and activities presented in CANVAS regularly and other relevant group communication platforms. Your contributions should be insightful for you and others to gain from your participation and vice versa consequently improving overall performance.

### **Teaching - Learning Philosophy & Embracing Diversity**

Different people learn differently or better through a variety of methods by which information is presented, acquired, synthesized and/or utilized. No single class may provide all the possibilities of individualized learning but the instructor in this course embraces a well-rounded approach which includes a variety of strategies: readings, writing, observational activities, discussions, questions and answers, and presentations/participatory approaches. It is your responsibility to strive and gain the most from each of these strategies because each serves a different purpose in the learning process. The world is complex therefore if a topic, idea, or answer seems incorrect or implausible according to your perspective; you are encouraged to bring these issues up for discussion in a respectful manner.

Diversity presents in many ways. There is richness in diversity, and there is diversity in richness of our lives, learning, our shared spaces, actions, identities, and world views. We must strive to embrace diversity.

### **Academic Obligations**

You are expected to read the entire syllabus, course schedule and related documents (including various guidelines and university policies) well in advance and ensure you comprehend what is always expected of you. Consult with the course instructor well in advance for any clarifications including clarifications of any course announcements or class/assignment instructions. Failure to do so does not constitute a reason on your part to fail in fulfilling your obligations or require exemption(s). Personal commitments (even in the seemingly clear emergencies) will not exempt you from fulfilling your academic obligations in a reasonably timely manner.

## Artificial Intelligence Statement

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course, AI is encouraged during the course, and appropriate acknowledgment is expected.

You can use AI programs (ChatGPT, Copilot, etc.) in this course. These programs can be powerful tools for learning and other productive pursuits, including completing assignments in less time, helping you generate new ideas, or serving as a personalized learning tool. However, your ethical responsibilities as a student remain the same. You must follow UT Tyler's Honor Code and uphold the highest standards of academic honesty. This applies to all uncited or improperly cited content, whether created by a human or in collaboration with an AI tool. If you use an AI tool to develop content for an assignment, you must cite the tool's contribution to your work. In this course, sections of assignments generated by AI should appear in a different colored font, and the relationship between those sections and student contributions should be discussed in a cover letter that accompanies the assignment when submitted. However, DB should be original student's work and not any AI generated or supported. The instructor will check on these and a "zero" will be given on such assignments. Integrity as a student and in all your work is of paramount importance.

## Grading

Continuous Assessments – 50%	90 % - 100% - A
Participation/DBs– 10%	80 % - 89.99 % - B
Projects – 20%	70 % - 79.99 % - C.
Final Exam - 20%	< 70 % (Fail)
<b>Total – 100%</b>	

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**Note:** The instructor reserves the right to make changes on the course (for example syllabus, assignments, and the grading plan) at any point in the semester as necessary though these will be minimized or avoided altogether. You will be notified of any changes made if it happens.

## UNIVERSITY POLICIES

Student Resources and University Policies and Information are in Canvas. Please take time to read all the policies, understanding how each impact you as a student/person and your performance as well requirements as a member of the UT Tyler community.

Reach out to the relevant authorities/persons as indicated in the policies for any questions you may have/need answered and aspects that need clarifications. When not sure always ask.

### **UT Tyler Honor Code**

Every member of the UT Tyler community joins together to embrace: *Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.*