**Course Title:** Healthcare Research Methods

**Course Number:** DHSC815

# Credit Hours: 3

**Required or Elective:** Required

**Spring Term 2:** March 3 - April 27, 2025

**Class Times:** Synchronously on Zoom Platform online Wednesday 6:30-8:30p (EST) 10 minute break at 7:20p.

**Prerequisites:** DHSC801 (Introduction to Research)

# University Mission

The mission of Campbell University is to graduate students with exemplary academic and professional skills who are prepared for purposeful lives and meaningful service. Visit our website for the full mission.

**CPHS Mission Statement**: The mission of Campbell University College of Pharmacy and Health Sciences

(CPHS) is to educate students in a Christian environment to be health care professionals who will function effectively as a part of an interdisciplinary team of health care providers to meet existing and future health care needs and who will provide leadership to their profession and professional organizations. <https://cphs.campbell.edu/about/mission-purpose/>

# Course Description:

This course builds upon the foundational work completed in DHSC 801, where students identified a healthcare problem, formulated a research question, and conducted a limited literature review. Students will refine and expand their introductory and literature review chapters, providing an opportunity for deeper reflection on the problem and a transition to evaluating the current level of evidence. Through critical appraisal of the literature, students will identify a gap in existing research within their chosen area of study. Contemporary health science research examples will be used to explore quantitative, qualitative, and mixed-method study designs, emphasizing their application to various levels of evidence, including quality improvement (QI) projects.

Students will propose a study design that best answers the research question or, alternatively, develop a quality improvement project which applies and tests the evidence. Emphasis is placed on selecting meaningful and feasible projects that align with the students’ interests and may be completed within the program timeline, such as secondary data analysis. Doctoral students will draft Chapter 3 of their research study, detailing the study design or QI project, rationale, setting, sampling methods, recruitment plan, and measurement instruments. The course concludes with an introduction to statistical analysis, guiding students in shaping a data analysis plan.

**Course Director**:

Sharon Eck Birmingham, DNSc, MA, BSN, RN

Associate Professor, Doctor of Health Sciences Program

School of Public Health

College of Pharmacy & Health Sciences, Campbell University

919-602-4770 (cell) / [eck@campbell.edu](mailto:eck@campbell.edu)

**Office hours**: The best way to reach Dr. Birmingham is via email, which is checked for student emails several times a day except for Sundays. Email faculty with best times to meet for your schedule in the eastern time zone.

# Justification:

This course promotes the mission of Campbell University by equipping students with an understanding of methodology and study design necessary to conduct accurate, ethical, and meaningful healthcare research in order to improve understanding of critical issues in healthcare management, education, and practice.

**Program Outcomes:** Upon completion of the didactic and practical requirements of the DHSc program, the student will be able to:

1. Demonstrate an understanding of the importance of assessment, planning, and action research orientations to organizational improvement.
2. Integrate knowledge, skills, and critical thinking/problem solving abilities acquired into a framework for evaluating, designing, and implementing innovations in health care systems and delivery.
3. Apply appropriate techniques of inquiry in a variety of professional settings and contexts.
4. Provide information, counsel, and guidance covering a broad spectrum of issues of importance to health care related organizations, recognizing political, financial, and social forces influencing decision making.
5. Recognize that the body of knowledge, which comprises the discipline, is continually being amended due to research efforts, and thus appreciate the need for continuing education in order to keep abreast of these changes.
6. Develop a sense of professional ethics and incorporate those ethical standards in their professional activities.

# Course Learning Objectives:

At the completion of this course, the student will be able to:

* 1. Revise the health care problem, scope and identification of variables under study (Chapter 1).
  2. Appraise current evidence in selected research area in a revised written review of the literature (Chapter 2) which identifies a gap in the literature.
  3. Examine qualitative, quantitative, and mixed-methods study designs or a quality improvement project and how they are aligned with the level of health sciences research evidence.
  4. Practice provision of substantial peer review feedback on the research problems and review of the literature.
  5. Justify study design or quality improvement project for selected research area to best answer the research question or to test a quality improvement.
  6. Develop a draft of the study methods (Chapter 3) including study design, setting, sampling and recruitment plan and measurement instruments or alternatively a quality improvement plan.

**Learning Strategies:** class and small group discussions, participatory lectures, reading literature, peer collaboration and review, and written chapters toward capstone project.

# Required Textbook & Software:

## Jacobsen, K. H. (2020). Introduction to Health Research Methods. Third Edition. Jones and Bartlett Learning. **SBN:9781284197563 (previously purchased for DHSc 801 course)**

# Perceptiv software for peer review- on BB assignment ($19.95 for the term)

**Once you select study design, the following are texts to consider for your home library:**

**Secondary Data Analysis Texts:**

Boslaugh, S. (2007). Secondary Data Sources for Public Health. Cambridge University Press. ISBN: 978-0-521-87001-6

**Qualitative Research Texts:**

Creswell, J. & Poth, C. (2024). Qualitative Inquiry and Research Design: Choosing Among Five Approaches 5th Edition. Sage Publications. ISBN: 978-1506330204

Krueger, R.A. & Casey, M.A. (2015). Focus Groups: A Practical Guide for Applied Research, 5th Edition. Sage Publications, Inc. ISBN: 9781483354095

Green, J. & Thorogood, N. (2018). Qualitative Methods for Health Research (Introducing Qualitative Methods Series) Fourth Edition. Sage Publications. ISBN: 978-1473997110

# Pitney, W., Parker, J., Mazerolle, S., Potteiger, K. (2019). Qualitative Research in the Health Professions 1st Edition

ISBN: 978-1473997110

Weaver-Hightower, M. (2019) How to Write Qualitative Research 1st Edition. Routledge. ISBN: 978-1138066311

**If writing is an area for improvement, below are excellent resources for your home library.**

**Academic, Scientific, and Medical Writing for the Health Professions:**

Allay, M. (2018). The Craft of Scientific Writing. 4th Edition. Springer. <https://www.amazon.com/dp/1441982876/ref=cm_sw_em_r_mt_dp_6K3P80J42811FAC5EDY9>

Taylor, R. (2018). Medical Writing: A Guide for Clinicians, Educators, and Researchers. 3rd Edition. Springer. <https://www.amazon.com/dp/3319701258/ref=cm_sw_em_r_mt_dp_0SH8STQ746Z2GYQBX4SX>

Terryberry, K. (2017). Writing for the Health Professions. XanEdu. 2nd Edition.

<https://www.amazon.com/Writing-Health-Professions-Karl-Terryberry-dp-150669733X/dp/150669733X/ref=dp_ob_title_bk>

# Class Attendance:

To receive credit for any course, a student must attend at least 80% of the hours prescribed for the course. In the case of absence(s) due to 1) serious illness, injury, or death in the student’s immediate family, or 2) authorized representation of the College or of the University, a student will be permitted to make up work missed. It is the student’s responsibility, whenever possible, to notify the Course Director in advance that they will be absent. These “excused” absences will still count toward the limit of missed class hours.

For this online course: Each student must login to Blackboard no fewer than three (3) times a week including synchronous and asynchronous events, complete all discussion board assignments, and complete and turn in all assignments weekly or as listed in the syllabus.

It is anticipated that students will spend about ten (10) hours each week completing course requirements.

# Assessments/ % of Grade/Week Due:

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| --- | --- | --- | --- |
| Assessment\* | Description | % of Grade | Due |
| Revised Introduction Chapter 1 | Revise chapter 1 for clarity and evidence to support the health care problem submitted to Peerceptiv.Conduct two peer reviews Week 2. | 20 | Week 1/ Mar 9Week 2/ Mar 16 |
| Revised Review of Literature Chapter 2 | Revise chapter 2 submitted to Peerceptiv. Includes literature table and summary of level of evidence.Conduct two peer reviews Week 4. | 25 | Week 3/ Mar 23Week 4/ Mar 30 |
| Matching level of evidence to a proposed study design. Faculty Consultation. | Verbal conversation with faculty about the current level of evidence and best study design to answer the research question, or alternatively propose a quality improvement project. | 20 | Week 3-6April 13 |
| Study Design & Methods Chapter 3 | Draft study design or QI project chapter 3 using template.Conduct two peer reviews Week 8. | 25 | Week 7/ April 20Week 8/ April 27 |
| Design, Statistics & IRB Review | Worksheet for review of study design selection, basic statistics and IRB resources. | 10 | Week 8April 27 |
| Total |  | 100% |  |

# \*Directions and Grading Rubrics on BB

|  |  |
| --- | --- |
| **Assignment Grading Schema** | Course Grading Schema |
| A 90-100%  B 80-89%  C 70-79%  D 60-69%  F <59 | A 90-100 %  B 80-89.9 %  F <80 % |

Students wishing to appeal a grade will discuss the matter with the Course Director. If necessary, students can continue an appeal by submitting a written description of the situation and justification for the appeal to the department chair assigned to oversee the course. Appeals of assignment grades will end with the department chair, whose decision is final. Course grade appeals can be continued in writing to the Academic Performance and Standards Committee and then in writing to the Associate Dean for Academic Affairs, whose decision is final. An appeal must start within five (5) business days of the release of a grade, and each subsequent step in the appeals process must be started within three (3) business days of a decision.

# Exam Attendance: Examinations are not given in this course.

# End of Course Remediation Policy:

Students are expected to seek individualized assistance during the course as needed. Students having academic difficulties may meet with the course director/instructor for guidance. For complete details on the DHSc remediation policy, refer to the CPHS Academic Bulletin and the Student Handbook.

# Academic Dishonesty Policy:

All students are expected to uphold the academic and professional integrity as well as the behavioral expectations of the University and the College of Pharmacy & Health Sciences. All student pharmacists should familiarize themselves with the College of Pharmacy & Health Sciences Honor Code printed in the CPHS Academic Bulletin. A student pharmacist may not use electronic devices in any manner which violates the Honor Code. This includes, but is not limited to, the use of cell phones, unapproved calculators, PDAs, iPods, cameras, etc. to provide answers or information to assist the student pharmacist during tests, quizzes, assignments, or projects in which the use of such electronic devices was prohibited. If any unapproved electronic device is observed as being used in those situations it will be confiscated and the student pharmacist will receive a zero for the exam or assignment and/or an F for the course and may be charged with an Honor Code violation. Possession of an internet-capable device during an examination will result in assignment of a zero for the exam and the student pharmacist may be charged with an Honor Code violation. (A laptop using testing software to take an exam is NOT internet-capable due to the lockdown provided by that software.) Any student pharmacist found in noncompliance of the Honor Code is subject to disciplinary action from the Student Conduct and Professionalism Committee.

# Professional Behavior:

Professional Behavior is required by all students enrolled in the course. Please make every effort to keep your video self-picture on. Individual student engagement and dialogue is enhanced for all class members by keeping your picture on and it helps students to focus on content.

# Online behavior (“Netiquette”):

Creating a sense of community is essential in an online classroom. Students must feel comfortable when participating in a discussion forum and they must know their ideas can be presented without fear of ridicule or cyber-bullying.

Please observe the following when participating in discussions and communicating with classmates and instructors:

* Do not write in all capital letters.
* Do not write in any font color other than black.
* Do not use any sort of profanity.
* Do not use text language like “LOL”.
* Be respectful and constructive in all communications.

Disrespect and bullying will not be tolerated.

***FERPA Statement:***

*“In a distance learning environment, the Family Educational Rights and Privacy Act (FERPA), a federal privacy law, continues to remain in effect and students need to understand their role in supporting the privacy of fellow students. As this course incorporates remote interactions, be cognizant that shared pictures, written assignments, audio, videos, emails, blog posts, discussion boards, etc. remain part of the content of the course, just as they would if they were shared in the face-to-face classroom setting, and the expectation is that each member of the class treat those materials with care and does not reshare or post beyond this course.*

*Accordingly, any student accessing class or other educational materials on Blackboard or any other electronic media:*

1. *Acknowledges the faculty members’ intellectual property rights and that distribution of the materials outside the course participants violates the copyright policy; and*
2. *Recognizes the privacy rights of fellow students who speak or appear on video in class; and*
3. *Accepts that recording, distributing, posting, or uploading materials to students or any other third party not authorized to receive them or to those outside the classroom is an Honor Code violation; and*
4. *Agrees that the materials are to be accessed and used only as directed by the faculty member(s) teaching the course”*

**Acceptable and Unacceptable Uses of AI Tools**

Intellectual honesty is vital to the student’s development as a critical thinker and for the faculty’s fair evaluation of student work. All work submitted must be your own, completed in accordance with Campbell University and CPHS academic honesty policy and Honor Code [Academic Bulletin](https://assets.campbell.edu/wp-content/uploads/sites/17/2022/07/CPHS-Academic-Bulletin-2022-2023_FINAL-1.pdf). The use of AI tools, such as ChatGPT, is permitted in this course, but the student can only use AI tools for the activities specified below.

The use of generative AI tools is permitted in DHSC 815 for the following activities only:

* Brainstorming and refining your ideas for an assignment/project.
* Revising research questions or existing work written by you.
* Drafting an outline to organize your thoughts on a topic.
* Checking grammar, spelling, and writing style.

The use of generative AI tools is not permitted in DHSC 815 for the following activities:

* Writing a draft of a writing assignment.
* Writing an introduction to the problem, research question, literature review and significance for a class assignment.
* Writing entire sentences, paragraphs, or papers to complete class assignments

The student is ultimately responsible for ensuring the information submitted based on an AI query does not violate intellectual property laws or contain misinformation or unethical/biased content. In addition, the student should be aware that the accuracy or quality of AI-generated content may not meet the standards of this course, even if such content is incorporated partially or after substantial revising or editing. Also, AI-generated content may not provide appropriate or accurate attribution to the author(s) of the original sources, while most written assignments in this course require the student to identify and cite highly relevant peer-reviewed scholarly publications as per referencing guidelines.

In instances where students are permitted to use AI for certain tasks, the assignment must be submitted with appropriate attribution. To be consistent with the University’s scholarly values and requirements, students must cite any AI-generated material that informed their work and use quotation marks or other indicator (e.g., colored text or italics) when appropriate. Students should cite AI tools which informed their process and specify which aspects of a paper. (e.g., spelling, grammar, writing style) Assignment submissions may be screened using AI detection software. Unauthorized use of AI tools may result in a failing grade for the assignment, a request to resubmit the assignment, or a request to submit a different assignment including an oral assignment.

In addition to the key ethical considerations above, students are encouraged to make decisions regarding AI usage within a larger socioecological framework, including environmental, social, and economic impacts of AI. Helpful information regarding the complexities of ethical decision-making re. AI include the [United Nations Environment Programme's](https://www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about) statement on AI and [Rohde et al. (2023) SCAIS Framework](https://campbell.primo.exlibrisgroup.com/permalink/01CAMPBELL_INST/h4a75h/cdi_proquest_miscellaneous_3153179119)."

# Student and Faculty Expectation

Students should:

* Always be respectful. You can agree to disagree, but never be disrespectful because someone has a differing opinion on a topic.
* Check Blackboard daily for announcements.
* Email the instructor with any pertinent questions. When you email anyone, you should follow “netiquette.” For example, always include a subject line, address the person to whom you are writing by their formal address, include your body information, include a salutation, and always put your name at the end of your email.
* Use appropriate grammar and conventions when writing discussion board threads. Also be courteous, but add meaningful information. The simple, “I agree,” will not suffice. Citations in submitted work will be AMA or APA format. Be consistent.
* Notify the instructor with any group issues that may arise (e.g., a student not participating effectively or efficiently).

Faculty should:

* Grade items in a timely manner.
* Respond to student inquiries within 48 hours.
* Provided meaningful feedback.
* Be courteous and respectful.

# Course/Faculty Evaluation:

# Near the end of the course, a link to an online course evaluation will be sent to students. Results will not be shared with the faculty until final grades for the course have been submitted. Student feedback is used by faculty to revise subsequent courses.

**Disability Services**

Students with documented disabilities may request accommodations by contacting the office of Disability Services located in the Wallace Center. A health condition may rise to the level of a disability if it substantially limits one or more major life functions, one of which is learning. A disability may be temporary or ongoing. Services are often similar to IEP or 504 plans students may have had in high school, but can also include support in campus housing, dining halls and other University events and services. Appointments can be scheduled through the [Disability Services page](https://www.campbell.edu/students/student-success/disability-services/student-dss-guide/) of the Campbell website, by emailing disabilityservices@campbell.edu or calling 910-893-7514.

**Counseling Services**

All Campbell University students are eligible to receive free, confidential counseling in Counseling Services via in-person and virtual consultations, groups, individual sessions, and participate in outreach events. CPHS and CUSOM Students are also eligible for services through Behavioral Health at CUSOM. To make an appointment, visit the office located at 233 Leslie Campbell Avenue (brick house beside Memorial Baptist Church and across from Luby Wood Residence Hall), call 910-814-5709, or request an appointment on the [Counseling Services page](https://www.campbell.edu/counseling-services/) of the Campbell website. If you are concerned about a fellow student, please complete a Student Care Referral Form on our website.

**Campus Pantry**

The Campus Pantry is open to students and staff experiencing food insecurity, offering a space for shoppers to choose their food items and personal hygiene items. With the main location at the Wallace Center and smaller satellite locations, there are multiple options to shop. Satellite Pantries are located in Counseling Services, Wiggins Memorial Library, Bob Barker Hall and Pat Barker Hall (for residents). Should you or someone you know need this level of support don’t hesitate to visit one of our locations. For more information on location hours and frequently asked questions please check our [webpage](https://www.campbell.edu/life/spiritual-life/serving-our-neighbors/campus-pantry/). For assistance and questions, contact Rev. Morgan Pajak at pajak@campbell.edu or 910-814-4769.

**Title IX**

Campbell University is committed to equality of educational opportunity. Campbell University does not permit discrimination or harassment in our programs and activities on the basis of race, color, sex, sexual orientation, gender identity or expression, age, religion, ethnicity or national origin, disability, genetic information, protected veteran status, military status and any other characteristic protected by law, except where exemption is appropriate and authorized by law. Students who believe they have been subjected to discrimination or harassment in violation of Title IX should report these concerns immediately to the Title IX coordinator. Title IX prohibits retaliation by any student and/or employee against anyone who reports an alleged Title IX violation. If students, staff, or faculty members believe someone they know has experienced sexual misconduct, they should promptly report incidents to the [Title IX coordinator](https://www.campbell.edu/policies/title-ix/file-a-title-ix-complaint/) via the Campbell website.

# Course Schedule

# \*course schedule subject to change

Synchronously Wednesdays 6:30-8:30pm.

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| --- | --- | --- |
| **Week/ Dates** | **Content** | **Assignments / Due Dates** |
| 1  Mar 3-9 | Welcome  Syllabus & BB Overview   * Revision Introduction Chapter 1 * Levels of Evidence * Selecting the right study design * QI Capstone Example * Capstone project timeline overview | Before Class:   * Submit current chapter 1 and 2 with references & literature table to BB (no revisions) * Schedule Weekly Study time for 8 weeks * Review latest chapters 1 and 2 (before class) * Purchase Peerceptiv on BB * Watch U-tube on the Intro and ROL (BB)   **\*Due: revision to chapter 1 Introduction to Peerceptiv (Mar 9)** |
| 2  Mar 10-16 | **Quantitative Study Design- secondary data analysis**   * Use of Databases/ Existing Data * Access, Strengths & Weaknesses * Reliability & Validity * Example: Kids Count Data Book   Quantitative research presentation by Dr. Moses Daniels, DHSc (’24) | * Peer review (BB)   **Due: two peer reviews for Chapter 1(Mar 16)** |
| 3  Mar 17-23 | 6:30p Capstone Methods- Dr. Paige Brown, Director, DHSc Program  **Summary of Level of Evidence & Gap** – last part of ROL (Chapter 2) | **\*Due: revision to chapter 2 ROL & literature table, summary of evidence to Peerceptiv (Mar 23)**  \*Week 3-6 prepare for and schedule faculty consultation on method due April 13 |
| 4  Mar 24-30 | **Study Design: Quantitative**   * Participation with a larger research team, positives & challenges * What is a pilot study?   7p Quantitative research presentation by Dr. Maria del Valle-Torres, DHSc (’24) | **Due: two peer reviews for Chapter 2(Mar 30)**  \*Week 3-6 prepare for and schedule faculty consultation on method due April 13 |
| 5  Mar 31- Apr 6 | **Study Design: Quantitative Survey**   * Use of Existing Surveys * Survey Modification * Recruitment * Study aligned with work role   Survey Research Presentation by Dr. Amy Fisher DHSc (’23) | \*Week 3-6 prepare for and schedule faculty consultation on method due April 13 |
| 6  Apr 7-13 | **Study Design: Qualitative**    **Faculty Dr. Missy Stancil**   * What is Qualitative research? * Methods: Interview, Focus Group, Open-Ended Questionnaire * Level of Evidence Indication for Qualitative Design | **\*Week 3-6 prepare for and schedule faculty consultation on method (due April 13)** |
| 7  April 14-20 | **Study Design Methods**   * Setting * Sampling plan * Recruitment plan * Informed Consent * Measurement Instruments * (or) Quality Improvement Plan | Examples of Methods from former students (BB)  **Draft Chapter 3 Study Design (Due April 20)** |
| 8  April 21-27 | **Study Design Questions & Discussion**  **Statistics Overview**  **IRB Resources** | **Conduct two peer reviews on Chapter 3 (Due April 27)**  **Design, statistics and IRB review (Due April 27)** |