

Draft of: March 24, 2015

**GLHLTH 371K
RESEARCH METHODS IN GLOBAL HEALTH
Fall 2015 Syllabus**

Class Times:	to be determined
Location:	large lecture room
Number of credits:	4
Instructor information:	Abu S Abdullah MD, MPH, PhD. Professor of Global Health Duke University & Duke Kunshan University E-mail: Abu.Abdullah@duke.edu
Office hours:	(to be determined) and by appointment
Teaching Assistant:	to be announced email: Office hours:

I - Course description:

The primary aim of this course is to prepare you to conduct behavioral research in global health, including fieldwork, by introducing the fundamental elements of scientific research and commonly used methodological techniques. Global health research often requires a multidisciplinary approach. Therefore, this course will be problem-based, not discipline-based, providing a broader understanding of the types of research methods that are available and appropriate for addressing global health issues. You will learn about research methodologies that are used in relevant disciplines, how they complement each other, and when to apply specific tools to create workable solutions for global health problems. This course will also help you become a more critical consumer of scientific research, including how to interpret research findings, judge the appropriateness of methods used, and understand the strengths and limitations of the approach. A major aspect of this course is the students' development of their own research proposals (individually or as a team). This proposal will be worked on throughout the course and is an opportunity for students to further develop ideas that they might actually hope to carry out in the future.

II - Specific course aims:

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

- Identify global health problems and translate abstract ideas into testable research questions
- Be aware of ethical issues related to the conduct of research with human subjects

- Understand data collection methods and related issues (e.g., sampling, reliability/validity, random assignment)
- Understand research designs that are commonly used in behavioral research (e.g., descriptive, qualitative, intervention), identify the advantages/disadvantages of each, and apply appropriate methodologies to specific research questions
- Use library resources effectively and conduct literature search
- Read primary scientific literature and conduct literature searches
- Critique published research reports
- Design and write a global health research proposal
- Present your research clearly and concisely

III - Required readings:

There is a required text book for the course (listed below). There are also required readings that will be given prior to the session or posted on the course website (<https://sakai.duke.edu/>). Some are listed in this syllabus and others will be assigned throughout the course of the semester.

Textbooks:

Required:

- Approaches to Social Research, 5th Edition, Singleton & Straits

Optional/On Reserve in the library as additional resources:

- Bernard, H. R. (2000). Social research methods: Qualitative and quantitative approaches. Thousand Oaks, CA: Sage.
- Leary, M.R. (2012). Introduction to Behavioral Research Methods (6th Edition). Boston: Pearson Ed. Inc.
- Shadish, W.R., Thomas D. Cook, and Donald T. Campbell, D.T. (2008). Experimental and quasi-experimental designs for generalized causal inference. Boston: Houghton-Mifflin.

IV - Assignments and Evaluation:

Homework assignments and/or in-class assessment: You will have both group or/and individual assignments or in-class assessment (total 5) that require you to practice applying methods topics to the basic research discussed for a given class. Upload all homework assignments to Sakai, unless noted otherwise.

Research Article Critique: You will complete a critique of a research article. You may choose one of the articles posted on the course website under this assignment. Your critique should address the following questions:

- Does the background section adequately situate this study among the existing research in this field? Does it help demonstrate why this study is important? Why or why not?
- What question or questions is this study trying to answer?
- Briefly describe the design of the study and explain why you think it is either appropriate or inappropriate given the study's purpose.
- Identify ethical issues related to the study and how they were/were not addressed.
- Identify the sampling method and recruitment strategy that was used and discuss whether these methods were appropriate.
- Identify the data collection method(s) and discuss whether the method(s) is/are appropriate.
- Identify how the data was analysed and discuss whether the method(s) of analysis is/are appropriate.
- Briefly describe the findings of the study and identify strengths and limitations.
- Discuss the transferability and usefulness of the study.
- Briefly describe, in 5 sentences or less, a new study that would logically follow this one. What question(s) would it seek to answer? What design might be employed to answer the question(s)?

Research proposal: Each student will be allocated to a group (3-4 students in each group) that will develop a research proposal. Your group, as a team, will develop a research proposal (10-12 pages, double spaced) on a global health research topic of your choice. Assignments over the semester, with feedback from your instructor and/or peers, will assist in the development of the final proposal. Your proposal must include quantitative data collection; proposals cannot be solely qualitative in nature. The study setting may be either domestic or international. There are no timeline or budget constraints. Use APA style to cite sources. The following sections should be included:

- Title page (not counted in page length)
- Abstract (paragraph or two)
- Goals, objectives and hypotheses (.5-1 page)
- Background (aka Introduction) with a minimum of 20 references (3-4 pages)
- Research design (including design overview, setting, sample, procedures, measures, data analysis plan, ethical considerations) (4-5 pages)
- Discussion: Expected findings; Strengths and limitations; ethical issues (1-2 pages)

- Impact and implications (.5-1 page)
- References (not counted in page length)

You will also give a **10-minute presentation** of your research proposal to your group that will be graded.

Peer feedback: You will work as a group for this course. Groups will provide feedback and support to each other in the research proposal development process. You will be asked to provide written feedback on assignments related to the research proposal to your peers. On the due date, you will provide a copy to your classmate(s) and turn in a paper copy.

Exams: There is only one exam. The final exam is in class. The nature of the exam will be short-answer or multiple-choice type questions. Exams assess how well students have met the course objectives.

Class participation: Students are expected to be fully prepared for class and to actively participate in class discussions and activities. Participation will be evaluated based on classroom attendance and participation in class (student participating fully in discussions, demonstrating that he or she has read the assigned materials). Two absences are granted for each student (excused or unexcused). For each additional absence the participation grade will decrease by 5 points (e.g. 1 additional absence will decrease a participation grade of 100 to 95, 2 from 100 to 90, etc.). Participation in class will be demonstrated by active participation in discussions. Students who clearly have not prepared for class (e.g., failed to complete the required readings, articles, etc) will have 5 points deducted from their grade for each time instructor notes lack of preparation.

Grades

- Homework assignments (10%)
- Research article critique (5%)
- Background section & specific aims (10%)
- Research design section (10%)
- Final research proposal (25%)
- Research proposal presentation (5%)
- Peer feedback (on group work) (5%)
- Exams (25%)
- Class participation (5%)

Grading Scale

98-100 = A+	77-79 = C+
93-97 = A	73-76 = C
90-92 = A-	70-72 = C-
87-89 = B+	0-69 = F

83-86 = B
80-82 = B-

VI - Making the Course Work - Administrative Notes

Late work: Assigned work that is turned in late on will not be graded unless prior arrangements were made with Prof. Abdullah. In the event of emergencies, written documentation will be required.

Attendance: Students are expected to attend every class. If missing class is unavoidable, obtain the lecture notes from another student in class.

Cell phones, laptops, etc.: Cell phones must be turned off during class. Lap-tops and tablets are not to be used.

Statement on disability: Any student with a documented disability needing academic adjustments or accommodations is requested to speak with the instructor during the first two weeks of class. All discussions will remain confidential. Students with disabilities will also need to contact the Student Disability Access Office (<http://www.access.duke.edu/students/index.php>).

Ethical Considerations: Students are expected to uphold the Duke Kunshan University (DKU) Community Standard. DKU is a community of scholars and learners, committed to the principles of honesty, trustworthiness, fairness, and respect for others. Students share with faculty and staff the responsibility for promoting a climate of integrity. As citizens of this community, students are expected to adhere to these fundamental values at all times, in both their academic and non-academic endeavors. To uphold the Duke Community Standard, students pledge:

- I will not lie, cheat, or steal in my academic endeavors, nor will I accept the actions of those who do.
- I will conduct myself responsibly and honorably in all my activities as a DKU student.
- I will act if the Standard is compromised.

Plagiarism, Cheating and Academic Dishonesty: Plagiarism is one form of cheating. All forms of cheating at DKU are viewed as extremely serious offenses that can be expected to result in dismissal from the school. Experience has shown us that it is extremely easy to misunderstand the meaning of plagiarism. Students have been dismissed for plagiarism and cheating on exams.

In brief:

- Never copy anyone's work, use notes, books or any other source when taking a closed book exam. If an exam is open book, do not copy anyone's work. If you help someone else cheat, you are at equal fault with the other student. Thus, if you knowingly allow someone to copy from you during an exam or you provide

them a suggestion in writing or orally, you are cheating and the penalties for cheating will apply to you and the other person.

- When writing papers, never use ideas or more than three words or data from another source in your own work without providing a specific reference and, as appropriate, placing direct quotations within quotation marks. Rephrasing someone else's work does not remove the need to provide a proper citation.

Plagiarism, cheating and academic dishonesty are emphasized because they have different meanings in different contexts and can be easily misunderstood. There are some countries where students as a matter of principle help each other on exams. To not do so would be considered dishonorable. Do not make the mistake of thinking that the explanation "this is what we do at home" will be either acceptable or sufficient as an excuse. We want to avoid any misunderstanding because the consequences of plagiarism or cheating can result in your being expelled from the School. This has happened. Please take every precaution to be certain this does not happen to you.

If you have any questions about plagiarism, cheating or academic honesty please be certain to raise them with Professor Abu Abdullah or with another DKU faculty members.

GLHTH 371K: Research Methods in Global Health

CLASS SCHEDULE & READINGS*

Date	Topic	Assignment due/remarks
	<p>Session 1:</p> <ol style="list-style-type: none"> 1. Course introduction 2. Essentials of Research 3. Selecting a research topic 4. Use of library resources 	
	<p><u>Readings:</u> Singleton & Straits Chap. 2 Rossi, 1987 (No good applied social research goes unpublished) Kaplan et al. Towards common definition of Global health. Lancet 2009; 373: 1993–9</p>	
	<p>Session 2:</p> <ol style="list-style-type: none"> 1. Plagiarism and Research ethics 2. Preparing for research 3. Overview of research proposals 	
	<p><u>Readings:</u> Singleton & Straits Chap. 3 (Research Ethics; pp 47-74) <u>or</u> Bernard Russell Chap. 3 (pp. 65-71)</p> <p>Belmont Report (1979) http://archive.hhs.gov/ohrp/humansubjects/guidance/belmont.htm</p> <p>Module 3: Identifying and prioritizing topics for research in Varkevisser CM, Pathmanathan I, Brownlee A. Designing and Conducting Health Systems Research Projects. Volume 1, Proposal Development and Fieldwork. Ottawa: IDRC, 2003: p 29-43. Available at: http://books.google.com.fj/books/about/Designing_and_conducting_health_systems.html?id=JdFDQzqPbzEC</p>	
	<p>Session 3:</p> <ol style="list-style-type: none"> 1. Research design 2. Writing the background section 	
	<p><u>Readings:</u> Singleton & Straits Chap. 4 Babbie, E, “Research Design” (Chapter 4) in The Practice of Social Research</p>	<p>In-class assessment# 1</p>

	(Eighth Edition) (1998) Wadsworth Publishing Company: Boston, pp. 88-114. Proposal outline (& Sample proposal for reference)	
	<p>Session 4:</p> <ol style="list-style-type: none"> 1. Conceptualization and Measurement of Variables 2. In-class exercise of measurements 	In-class assessment #2
	<p><u>Readings:</u> Bernard Russell, Chap. 2 (or Singleton & Straits, Chap. 5)</p> <p>Ulin Chap. 3 (Designing the study)</p> <p>*Two papers to read and prepare to present in the class</p> <p>Abdullah et al. Determinants of HIV antibody testing among selected groups of Chinese residents in Hong Kong. Int’l J of STD & AIDS 2004; 15:608-614</p> <p>Kalichman and Coley. Context framing to enhance HIV-antibody testing messages targeted to African American women. Health psychology 1995; 14: 247-254</p>	
	<p>Session 5:</p> <ol style="list-style-type: none"> 1. Qualitative research 2. Observation, focus group and interviewing 	
	<p><u>Readings:</u> Ulin et al., Chap 4 (pp 71-104) and Appendices 3, 4 and 6 MacDougall and Fudge (Planning and recruiting the sample for focus groups and in-depth interviews <u>Assignment reading:</u> Pope C and Mays N, 1995. Reaching the parts other methods cannot reach: Abdullah et al 2014. “Addressing Parental Smoking in Pediatric Settings of Chinese Hospitals:</p>	
	<p>Session 6:</p> <ol style="list-style-type: none"> 1. Study types 2. Critical appraisal of the literature 	
	<p><u>Readings:</u> Ulin et al. Appendix 9 Greenhalgh T (1997). Getting your bearings (deciding what the paper is about). Greenhalgh and Taylor (1997). Papers that go beyond numbers.... Abdullah et al (2003). SARS outbreak in HK.....</p> <p>Assignment: Read the below article and write a brief synopsis of the paper (maximum one page). Handover the assignment in the class (no e-mail).</p>	

	Abdullah et al (2003). SARS outbreak in HK.....	
	<p>Session 7:</p> <ol style="list-style-type: none"> 1. Study population & sampling 2. Group work in class <p>DUE:</p> <p>Individual assignment (HW#1): Summary of Research article (Abdullah et al...SARS outbreak in HK) due</p> <p>Group assignment: research topic; ppt for in-class presentation; Background (draft) section for Research Proposal (Hand in hard copy)</p> <p><u>Readings:</u> Singleton & Straits, Chap. 6</p>	<p>Individual assignment due (*HW#1);</p> <p>Group assignment due (to give feedback only)</p>
	<p>Session 8:</p> <ol style="list-style-type: none"> 1. Experimentation & Experimental Research <p><u>Readings:</u> Bernard Russell, Chap. 4 (or Singleton & Straits, Chap. 7 & 8)</p> <p>Burtless G (1985). Are targeted wage subsidies harmful? Evidence from a wage voucher experiment.</p> <p>Abdullah AS., et al. Smoking cessation intervention in parents of young children: a randomised controlled trial. Addiction 2005; 100: 1731-1740.</p>	<p>In-class assessment# 3</p>
	<p>Session 9:</p> <ol style="list-style-type: none"> 1. Quasi-Experimental designs <p><u>Readings:</u> Leary Ch. 13</p> <p>HW#2 assignment: Critically review the below paper and write your critiques (limited to 2 pages). (Hand in hard copy, no emails)</p> <p>Wang et al. (2007). Barriers in TB care</p>	<p>*HW#2</p>
	<p>Session 10:</p> <ol style="list-style-type: none"> 1. Survey Research 2. Designing survey questionnaire 3. Group work in class <p><u>Readings:</u> Singleton & Straits, Chap 9</p> <p>CDC Questionnaire Design</p> <p>Abdullah et al. 2001. Health risk during travel: a population based study</p>	<p>Research Topic, objectives, & background section</p>

	Huang et al., 2013. Factors associated with acceptability of circumcision among male drug users.....	
	Session 11: 1. Data analyses and management 2. Class presentations	Research design section; HW#3
	<u>Readings:</u> Singleton & Straits, Chap 15 & 16	
	Session 12: 1. Data analyses practicum 2. Class presentations	
	<u>Reading:</u> Review and study for exam	
	Session 13: 1. Writing, publishing and presenting global health research 2. Review of exams	Submission of final proposal by 3pm
	<u>Readings:</u> Singleton & Straits, Chap 17 Study for exams	
	Session 14: 1. Final exam	

*The schedule may change with due notification.