

EOH 791: *Implementation Science for Global Health*
SPRING 2019
HRC/MSM 143

Textbooks & Required Reading

No textbook is required for this course. Weekly readings will be assigned throughout the course.

Notes:

Course notes and other information will be provided through the UNLV WebCampus Website:
<https://webcampus.nevada.edu>

Course Description

The course will provide students with an understanding of implementation science as applied in global health to improve population health outcomes. It will first highlight current challenges in global health and the role of implementation science in addressing them. The course then will cover implementation research frameworks, designs and study implementation.

Course Objectives and Expected Learning Outcomes:

Aims of the course: To become familiar with concepts and methods within the area of implementation science and develop skills in applying theories, models and frameworks in order to individually develop and defend an implementation science project.

After the course, the student should be able to:

- Explain why implementation science is necessary for achieving global health goals and objectives and how it contributes to designing policies and interventions/programs that are implementation informed and fit to local contexts.
- Describe frameworks for applied implementation and implementation research and characterize the differences.
- Identify, discuss and assess the pros and cons of different implementation strategies.
- Distinguish between the different target levels of implementation science theories, models and frameworks.
- Undertake supportive peer-supervision and develop skills in providing constructive feedback.
- Propose, construct and defend an implementation science project within global health including theoretical background, implementation strategy and evaluation method.

Course Competencies

- Apply awareness of cultural values and practices to the design or implementation of public health policies or programs (MPH08)

- Demonstrate excellence in applying the theoretical and problem solving aspects of public health within epidemiology and biostatistics (PhD EAB 02)
- Demonstrate excellence in applying the theoretical and problem solving aspects of public health within health care organizations and systems (PhD HCA 02)
- Evaluate the role of environmental and global health in the top challenges facing mankind, including overpopulation, energy, pollution, climate change, and infectious disease, to develop research directions and priorities (PhD GEH 02)
- Use environmental and global health research to develop prevention and management strategies and policy recommendations (PhD GEH 04)

Course Evaluation and Grading

Completion of all assignments is required to ensure comprehension of the topic and to master application of the material to real world problems. If students cannot turn assignments in on time, an explanation must be provided to the instructor. One point per day will be deducted for assignments submitted after the deadline.

Assignments completed for this course may be used as evidence of student learning in accreditation reports. Students who do not wish their work to be used for accreditation purposes must inform the course instructor in writing by the end of late registration. Your participation and cooperation are appreciated.

Participation (25%): Participation will be evaluated by both attendance in class and active participation in in-class discussions.

Individual Assignment (25%): Each week there will be an assigned reading. Students will conduct a critical review of an article and write a 2-page paper (double-spaced). A rubric will be provided before the first assignment. The written critique should be submitted via Turnitin on Webcampus before class starts on the due date.

MPH Student – Final Assignment (50%)

- **Written (25%):** Groups will identify a global health issue for which an evidence-based intervention exists and propose an implementation research study to test an approach that would improve uptake of the evidence-based interventions (EBIs). The group should draft the specific aims, a one-page description of the project. The specific aims should discuss what is known about the problem, gaps in knowledge about the problem and a description of the intervention or implementation approach you propose to test in your research. This description should demonstrate knowledge and application of the theories, frameworks and models discussed throughout the course.
- **Presentation (25%):** Each group will present their proposal to the class. The presentation should include a description of the problem, gaps in knowledge and aims of the study.

PhD Student – Final Assignment (50%):

- **Written (25%):** Doctoral students will be required to draft a 5-6-page research proposal designed to following the National Institutes of Health (NIH) format.
- **Presentation (25%):** Each student will present their proposal to the class. The presentation should include a description of the problem, gaps in knowledge, aims of the study and overview of the research design.

Assignment of Grades (for MPH students):

Assignment	Points (% of grade)
Participation – Attendance	50 (10%)
Participation - Discussion	75 (15%)
Individual Assignment	125 (25%)
Final Group Assignment – Written	125 (25%)
Final Group Assignment – Oral Presentation	125 (25%)
Total	500 (100%)

Assignment of Grades (for PhD students):

Assignment	Points (% of grade)
Participation – Attendance	50 (10%)
Participation - Discussion	75 (15%)
Individual Assignment	125 (25%)
Final Individual Assignment – Written	125 (25%)
Final Individual Assignment – Oral Presentation	125 (25%)
Total	500 (100%)

Grading Scale

Grade	Required Percentage
A	95-100
A-	90-94.5
B+	87-89.5
B	80-86.5
C	75-79.5
D	70-74.5
F	<70

Dr. Ezeanolue reserves the right to amend this syllabus. Any changes will be announced and/or distributed in class. It is your responsibility to keep abreast of changes.

Week	Description	Required readings
1	<p>Overview of Global Health Overview of major population health issues with a focus on the burden of disease, policies and programs that have been used in the past, what worked, what did not and possible reasons why.</p>	<p>Millennium Development Goals http://www.who.int/topics/millennium_development_goals/en/ (accessed November 29, 2017)</p> <p>Sustainable Development Goals Global Sustainable Development Report https://unstats.un.org/sdgs/report/2017/ (accessed November 29, 2017)</p>
2	<p>Fundamentals of Implementation Science Define implementation, explain implementation in the context of moving research to practice, and describe the evolution of the field of implementation science.</p>	<p>Campbell J, Cometto G, Rasanathan K, Kelley E, Syed S, Zurn P, et al. Improving the resilience and workforce of health systems for women's, children's, and adolescents' health. <i>BMJ</i> 2015;351:h4148. doi: http://dx.doi.org/10.1136/bmj.h4148</p> <p>El-Sadr WM., Philip NM, Justman J. Letting HIV transform academia: embracing implementation science. <i>NEJM</i> 2014;370(18):1679-81. doi: 10.1056/NEJMp131477.</p> <p>Freedman LP, Graham WJ, Brazier E, Smith JM, Ensor T, Fauveau V, et al. Practical lessons from global safe motherhood initiatives: Time for a new focus on implementation. <i>Lancet</i> 2007;370(9595):13-9. doi:10.1016/S0140-6736(07)61581-5</p> <p>Padian NS, Holmes CV, McCoy SI, Lyerle R, Bouey PD, Goosby EP. Implementation science for the US President's Emergency Plan for AIDS Relief (PEPFAR). <i>J Acquir Immune Defic Syndr</i>. 2011;56(3): 199- 203.</p>
3	<p>Grant Opportunities in Implementation Science Understand how to search and identify funding opportunities (e.g., in Grants.gov). Discuss the different types of funding announcements.</p>	
4	<p>Implementation Science Conceptual Frameworks Discuss conceptual frameworks that can be used to guide the design and/or evaluate an intervention. Identify both applied and implementation research frameworks and differentiate between applied implementation and implementation research based on the readings and review of frameworks.</p>	<p>Kilbourne AM, Neumann MS, Pincus HA, Bauer MS, Stall R. Implementing evidence-based interventions in health care: Application of the replicating effective programs framework. <i>Implementation Science</i>. 2007; 2:42.</p> <p>Metz A, Bartley L. Active implementation frameworks for program success: How to use implementation science to improve outcomes for children. <i>Zero to Three</i>. Chapel Hill, NC. 2012;March:11-18. MHCH 890.971.SP16 8</p> <p>Meyers DC, Katz J, Chien V, Wandersman A,</p>

Week	Description	Required readings
		<p>Scaccia JP, Wright A. Practical implementation science: Developing and piloting the quality implementation tool. <i>Am J Community Psychol.</i> 2012;50:481–96.</p> <p>Wandersman A, Duffy J, Flaspohler P, et al. Bridging the gap between prevention research and practice: The interactive systems framework for dissemination and implementation. <i>Am J Community Psychol.</i> 2008;41(3-4):171–81.</p>
5	<p>Implementation Science Models Review implementation science models that can be applied in various settings to improve implementation and overcome barriers to effective replication.</p>	<p>Nilsen P. Making sense of implementation theories, models and frameworks. <i>Implement Sci</i> 2015;10:53. doi:10.1186/s13012-015-0242-0</p>
6	<p>Research Designs for Implementation Science Studies Understand different types of study designs most frequently used in implementation research studies including cohort, observational and randomized controlled trials.</p>	<p>Landsverk, J., Brown, C. H., Rolls Reutz, J., Palinkas, L. A., & Horwitz, S. M. (2010). Design elements in implementation research: A structured review of child welfare and child mental health studies. <i>Administration and Policy in Mental Health and Mental Health Services Research.</i> doi: 10.1007/s10488-010-0315-y</p> <p>Curran GM, Bauer M, Mittman B, et al. Effectiveness-implementation hybrid designs: combining elements of clinical effectiveness and implementation research to enhance public health impact. <i>Med Care.</i> 2012 Mar;50(3):217–26.</p> <p>How to study improvement interventions: a brief overview of possible study types http://qualitysafety.bmj.com/content/24/5/325</p>
7	<p>Ethics in Global Health Research Review of research protocols, institutional review boards and human subjects' protection section of a proposal. Understand the ethical and responsible conduct of research embedded in the design and implementation of research with particular focus to the process of informed consent.</p>	<p>Ng LC, Hanlon C, Yimer G, Henderson DC, Fekadu A (2015). Ethics in global health research: the need for balance. <i>Lancet Global Health</i> 3, e516–e517</p> <p>Yassi, A., Breilh, J., Dharamsi, S. et al. <i>J Acad Ethics</i> (2013) 11: 83. https://doi.org/10.1007/s10805-013-9182-y</p>
8	<p>Program Implementation I Identify and describe the common stages/phases of implementation, describe key activities in each stage of implementation and design comprehensive evaluations to assess implementation stages.</p>	<p>Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in child welfare. <i>Administration and Policy in Mental Health and Mental Health Services Research</i>, 38, 4–23.</p> <p>Saldana L, Chamberlain P, Wang W, Brown CH. Predicting program start-up using the stages of</p>

Week	Description	Required readings
		implementation measure. Admin Policy Ment Health 2012;39(6):419-25.
9	Program Implementation II Apply principles and methods of process and outcome evaluation, using mixed methods to characterize intervention implementation fidelity and evaluate impact.	Goodman. Principles and Tools for Evaluating Community Based Prevention and Health Promotion Programs. http://www.heartlandcenters.slu.edu/pdf/7_5_PrinciplesandToolsforEvaluatingCommunityBasedPrev.pdf Blasé K, Fixsen D. Core intervention components: Identifying and operationalizing what makes programs work. ASPE Research Brief. http://aspe.hhs.gov/hsp/13/KeyIssuesforChildrenYouth/CoreIntervention/rb_CoreIntervention.pdf Evaluating Policy Implementation: http://www.cdc.gov/injury/pdfs/policy/Brief%204-a.pdf
10	Proposal Writing I – Specific Aims Learn to develop research questions and specific aims based on the grant opportunity.	TBD
11	Proposal Writing II – Research Strategy Apply your learnings regarding implementation frameworks, study design and learn to write the approach.	TBD
12	Proposal Writing III – Other sections, requirements Review all required sections and learn how to develop a biosketch, program summary and narrative sections.	TBD
13	Final Assignment Due Peer Review / Student Presentations	Peer review of student papers
14	Student Presentations	
15	Study Week / Student Presentations	

University Policies

Academic Misconduct—Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility, and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at: <https://www.unlv.edu/studentconduct/student-conduct>.

Copyright—The University requires all members of the University Community to familiarize themselves with and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you, nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: <http://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC)—The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Final Examinations—The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: <http://www.unlv.edu/registrar/calendars>.

Incomplete Grades—The grade of I—Incomplete—can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student's control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

Library Resources—Students may consult with a librarian on research needs. Subject librarians for various classes can be found here: https://www.library.unlv.edu/contact/librarians_by_subject. UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at <https://www.library.unlv.edu/>.

Rebelmail—By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. Emailing within WebCampus is acceptable.

Religious Holidays Policy—Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

Transparency in Learning and Teaching—The University encourages application of the transparency method of constructing assignments for student success. Please see these two links for further information:

Tutoring and Coaching— The Academic Success Center (ASC) provides tutoring, academic success coaching and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, visit <http://www.unlv.edu/asc> or call 702-895-3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A (ASC Coaching Spot). Drop-in tutoring is located on the second floor of the Lied Library and College of Engineering TBE second floor.

UNLV Writing Center—One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>.

Any other class specific information—(e.g., absences, make-up exams, status reporting, extra credit policies, plagiarism/cheating consequences, policy on electronic devices, specialized department or college tutoring programs, bringing children to class, policy on recording classroom lectures, etc.)