Mel and Enid Zuckerman College of Public Health  
University of Arizona  

SYLLABUS  
HPS 620A: Advanced Research in Health Promotion Sciences I  
Fall 2019 (3 units)

Time: Mondays, 9-11:50am

Location: Drachman Hall, Room: A119

Instructor(s) and Contact Information:  
Patricia Haynes, PhD  
Associate Professor, Department of Health Promotion Sciences  
1295 N. Martin Avenue  
Drachman Hall, A250  
Tucson, AZ 85724  
Tel: (520) 626-1855  
E-mail: thaynes@email.arizona.edu

Instructor Availability: By appointment.

Catalog Description: This modular course provides an opportunity for doctoral level students to advance their understanding and skills in public health research and evaluation methods. The course is structured to guide students through the development of their own research project following guidelines set by federal funding agencies. This course covers priority setting, conceptual modelling, behavior change theory and intervention, research design and evaluation, and survey and measurement.

Course Description:

1. Introduction to HPS Research/Selecting a Research Question: In this module, students will learn skills in conceptualizing and developing research and evaluation projects in Health Promotion Sciences. Students will learn how to pick research questions, incorporate the scientific knowledge base, develop conceptual models, and write project goals and objectives.

2. Behavior Change Theory and Intervention: In this module, students will learn major health behavior change theories applied at the individual, interpersonal, and group/community levels. Students will evaluate recent examples of health interventions incorporating behavior change theory in order to inform their own research and practice.

3. Survey and Measurement: Students will be provided an overview of validity, reliability, and principles of test construction to inform decisions about the measurement of proposed constructs.
4. **Research Design**: In this module, students will review threats to internal validity and review common quasi-experimental designs. Students will be introduced to randomized controlled trial methodology with a focus on methods for the assessment and maintenance of group equipoise (e.g., selection of a control group, intervention training and fidelity monitoring, etc.).

5. **Ethics in Human Subjects Research**: Students will be provided with an applied overview of ethical principles relevant to the conduct of human subjects’ research.

**Course Prerequisites**: Enrollment in a doctoral program in health promotion sciences or consent of the instructor. All students must have taken or concurrently be enrolled in BIOS 576A Biostatistics in Public Health or the relative equivalent.

**Course Objectives and Expected Learning Outcomes:**

**Course Objectives**

1. During this course, students will:
2. Conceptualize a health-related project from the initial phase of project formulation incorporating:
   a. a conceptual model
   b. a theoretical framework,
3. Develop skills in key components of project planning and evaluation with particular reference to:
   a. research design
   b. survey and measurement
4. Demonstrate essential skills in communication including scientific writing and oral presentation

**Learning Outcomes (Competencies Obtained):**

Upon completion of this course students will be able to:

**Program Competencies Covered (HBHP):**

1. Articulate the importance for using multiple methodologies in the study of a health behavior health promotion.
2. Describe complex theories of health behavior health promotion that express multiple levels of causal factors or mechanisms for intervention.
3. Integrate theories, frameworks, methods or paradigms to conduct health behavior health promotion research.

**Program Competencies Covered (DrPH/MCH):**

1. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue
2. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels.
3. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems
4. Demonstrate the ability to communicate clearly through effective presentations and written scholarship about MCH populations, issues, and/or services

**Course Notes**: Reading assignments and course materials will be made available on the course web site at D2L. It is your responsibility to frequently check course announcements to ensure that you are prepared for class and also that there have not been changes or substitutions.

**Required Texts or Readings**: See Course Schedule Below. Readings are tentative and may be changed depending upon class needs. All readings will be posted on D2L.

Rev. July 19, 2019
Required or Special Materials: None.

Course Requirements:
To learn principles and skills in research and methodology, students are to write a research proposal incorporating at least one quantitative aim. The purpose of this major assignment is to prepare you for the conduct of research or evaluation in a health-related field. The proposal must include the following sections: Background, Hypotheses, Methods (Design, Participants, Procedures, Measures). The following assignments represent incremental steps to assist you with the process of writing this proposal: Topic brainstorm/brief review, Preliminary conceptual model, Revised conceptual model, Background and hypotheses, Description of primary outcome, Methods section. In addition to scientific writing skills, you are required to give a class presentation on your project in order to cultivate skills in oral communication. You will also participate in peer critique in order to improve the quality of your research plan and also to develop skills in scientific peer review. Detailed information about each assignment will be provided on D2L.

During the Theory and Intervention module, we will review select individual, interpersonal, and community/organizational level intervention research papers. You are required to write three separate 1 page reflections or “Discussion points.” The purpose of this exercise is to promote understanding of health behavior change theory as well as to critique research methods. This module is designed to provide examples of various theory-informed research designs that can inform your own research proposal.

Fifty points are provided for completion of CITI program [https://about.citiprogram.org/en/homepage/] research ethics and compliance training, social behavior sciences basic module. The purpose of this assignment is to provide historic and current information on regulatory and ethical issues important to the conduct of research involving human subjects. A CITI completion certificate is required by the University of Arizona Human Subjects Protection Program for engagement in human subjects research.

Fifty points are provided for attendance at a 30-minute tutoring session, Aspects of Research workshop, or graduate student writing group at the Writing Skills Improvement program (WSIP; http://wsip.arizona.edu). You may substitute this requirement at attendance at a Responsible Conduct of Research (RCR) workshop conducted by the Human Subjects Protection Program (http://rgw.arizona.edu/research-compliance/rcr/workshops). Other substitutions are allowed with the permission of Dr. Haynes. The purpose of this assignment is to foster your awareness of available UA research training resources outside of the classroom environment. Please document your attendance at these activities by uploading a photo of the workshop with the appropriate description or providing a tutor signature.

Grading Scale/Student Evaluation and Policies:
Grades on your assignments are provided by Drs. Haynes based on specific assignments and class participation. A word document format to the D2L dropbox is due by 9:00am on the due date. It is your responsibility to ensure that the instructor receives your assignments by the due date. Problems with technology will not be accepted as sufficient reason for late or non-submission of required assignments.

Together, the grades sum to 1000. Your course grade will be based on the following grading scale: A =1000-900 points, B = 899-800, C = 799-700, D = 699-600, E =599-0.

Policy on Late Assignments: It essential that assignments are submitted by the time and date specified since so much time in-class is spent working with your drafts. As such, a 10% point reduction will occur each day the assignment is late.

Class Attendance: Attendance and active class participation are necessary to learn and master the proposal skills in this doctoral-level course. This course meets only once per week. It is recommended that you minimize absences and plan carefully. It is highly recommended that you notify Dr. Haynes of any absence in advance.

Rev. July 19, 2019
Any student who does not attend the first two classes and does not contact the instructor may be automatically dropped from the course.

- The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, [http://policy.arizona.edu/human-resources/religious-accommodation-policy](http://policy.arizona.edu/human-resources/religious-accommodation-policy).
- Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored, [http://deanofstudents.arizona.edu/](http://deanofstudents.arizona.edu/)

Withdrawal: You may withdraw from the course with a deletion from your enrollment record through September 22 using UAccess. You may withdraw with a grade of "W" through November 3 using UAccess. After November 3, you may complete a Late Change Petition to request for a withdrawal through the college. These withdrawals are dealt with on a case by case basis, and requests for late withdrawal may or may not be honored.

Incompletes: UA policy states: “The grade of I may be awarded only at the end of a term, when all but a minor portion of the course work has been satisfactorily completed. The grade of I is not to be awarded in place of a failing grade or when the student is expected to repeat the course; in such a case, a grade other than I must be assigned. Students should make arrangements with the instructor to receive an incomplete grade before the end of the term.”

Required examinations, papers and projects: Specify the number of quizzes, examinations and papers. Identify the date and time of the final exam (or project due date), with links to the Final exam regulations: [http://www.registrar.arizona.edu/staff/courses/final-exams?audience=staff&cat1=10](http://www.registrar.arizona.edu/staff/courses/final-exams?audience=staff&cat1=10)

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<thead>
<tr>
<th>Assessment Methods</th>
<th>Due Date</th>
<th>Points</th>
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<tbody>
<tr>
<td>Topic brainstorm / brief review</td>
<td>9/3/19</td>
<td>50</td>
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<tr>
<td>Preliminary conceptual model</td>
<td>9/11/19</td>
<td>50</td>
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<tr>
<td>Discussion points 1</td>
<td>9/16/19</td>
<td>50</td>
</tr>
<tr>
<td>Discussion points 2</td>
<td>9/23/19</td>
<td>50</td>
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<tr>
<td>Discussion points 3</td>
<td>9/30/19</td>
<td>50</td>
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<tr>
<td>Revised conceptual model</td>
<td>10/7/19</td>
<td>50</td>
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<tr>
<td>Background and hypotheses</td>
<td>10/21/19</td>
<td>100</td>
</tr>
<tr>
<td>Description of primary outcome</td>
<td>10/28/19</td>
<td>50</td>
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<tr>
<td>Methods (research protocol)</td>
<td>11/20/19</td>
<td>100</td>
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<tr>
<td>CIDI Training (social sciences)</td>
<td>11/25/19</td>
<td>50</td>
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<tr>
<td>Class presentation</td>
<td>12/2/19</td>
<td>100</td>
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<tr>
<td>Peer critique (in class)</td>
<td>12/9/19</td>
<td>50</td>
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<tr>
<td>WSSIP or RCR</td>
<td>12/9/19</td>
<td>50</td>
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<tr>
<td>Final, revised research proposal</td>
<td>12/19/19 12:30pm</td>
<td>200</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>1000</strong></td>
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Description of each Assessment and Competencies Covered by the Assessment
You are required to write three separate 1 page reflections or “Discussion points” that critique theory-driven research testing health behavior change variables at multiple levels (individual, interpersonal, and community/organization). Specific guidelines for the assignments will be posted on D2L. These reflections are designed to fulfill the PhD HBHP competency #2 and DrPH MCH competency #2.

Rev. July 19, 2019
You are required to write a 10 page single-spaced research proposal (“Final revised research proposal”) that (a) involves at least one health outcome relevant to public health and (b) incorporates at least one quantitative aim. Specific guidelines for the assignment will be posted on D2L. Writing a background section for a research plan involves: (1) an articulation of research and (2) an integration of knowledge via a literature review. Writing a research design plan involves application of: (1) research design principles, (2) multiple research methods, (3) ethical issues in the conduct of research. Writing a research plan also requires writing skills that effectively communicate the significance of the research. Therefore, this major project is designed to fulfill the PhD HBHP competency #1, #3 and DrPH MCH competency #1, #3, #4. All other assessments are designed to assist you with the goal of writing this final project; they represent incremental or iterative steps to support the Revised, final project.

**Communications:** You are responsible for reading emails sent to your UA account from your instructor and the announcements that are placed on the course web site. Information about readings, news events, your grades, assignments and other course related topics will be communicated to you with these electronic methods. The official policy can be found at: [https://www.registrar.arizona.edu/personal-information/official-student-email-policy-use-email-official-correspondence-students](https://www.registrar.arizona.edu/personal-information/official-student-email-policy-use-email-official-correspondence-students)

**Accessibility and Accommodations:**
At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, you are welcome to let me know so that we can discuss options. You are also encouraged to contact Disability Resources (520-621-3268) to explore reasonable accommodation. If our class meets at a campus location: Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable. For additional information on Disability Resources and reasonable accommodations, please visit [http://drc.arizona.edu/students](http://drc.arizona.edu/students)

**Code of Academic Integrity**
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercise must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity, available through the office of the UA Dean Students: [http://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity](http://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity)

**Classroom Behavior:** Students are encouraged to engage in a respectful exchange of ideas and communicate in a manner that maintains a positive learning environment. Please turn off your cell phone during class and use your computer for classroom activities only. Students are expected to be familiar with the UA Policy on Disruptive Student Behavior in an Instructional Setting found at: [http://policy.arizona.edu/education-and-student-affairs/disruptive-behavior-instructional-setting](http://policy.arizona.edu/education-and-student-affairs/disruptive-behavior-instructional-setting)

**Threatening Behavior Policy:** The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to one’s self, [http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students](http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students)

**Nondiscrimination and Anti-harassment Policy:**
The University of Arizona is committed to creating and maintaining an environment free of discrimination, [http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy](http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy)

**UA Smoking and Tobacco Policy:**
The purpose of this Policy is to establish the University of Arizona’s (University) commitment to protect the health of University faculty, staff, students, and visitors on its campuses and in its vehicles, [http://policy.arizona.edu/ethics-and-conduct/smoking-and-tobacco-policy](http://policy.arizona.edu/ethics-and-conduct/smoking-and-tobacco-policy)

Rev. July 19, 2019
**Syllabus Changes:** Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor. It is the students’ responsibility to keep informed of any announcements, syllabus adjustments or policy changes made during scheduled classes.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-Aug</td>
<td>Class Expectations; Selection of Research Question 1</td>
<td></td>
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<tr>
<td>Date</td>
<td>Topic</td>
<td>References</td>
<td>Notes</td>
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| 7-Oct    | Theory Application exercise  
Conceptual model revision | | Revised conceptual model |  
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Recommended:  
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Rev. July 19, 2019
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<tr>
<th>Date</th>
<th>Topic</th>
<th>Details</th>
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</thead>
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| 28-Oct   | Research Design Review (Observational and Experimental Designs, Threats to Validity) | Review required readings (Epi 573a)  
- OR substitution with approval  
Description of Primary Outcome |
| 4-Nov    | Quasi-Experimental Design                                            |  
Recommended:  
| 11-Nov   | No class, veteran's day                                             |  
Methods (Design, Participants, Procedures, Measures) |
| 18-Nov   | Randomized Controlled Trial methodology                             |  
Recommended:  

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<tr>
<th>Date</th>
<th>Topic</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Dec</td>
<td>Class presentations</td>
<td>Class Presentation</td>
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<tr>
<td>9-Dec</td>
<td>Peer critique</td>
<td>In-Class Assignment</td>
</tr>
<tr>
<td>16-Dec</td>
<td>Finals Week</td>
<td>Final project write-up</td>
</tr>
</tbody>
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