Course Title: NMETH 515/EPI 549, Sociobehavioral & Prevention Research Methods for HIV & STI

Credits: 3

Schedule: Mondays, 2:00 – 4:20pm, T360 (NOTE: last week of class is Wednesday, May 30th, 2:40 in University Medical Center CC 408)

Faculty: Ann Kurth, RN, CNM, PhD
Office: T-616B
Phone: 206.685.3778
e-mail: akurth@u.washington.edu
office hours: TBD

Course Description:
This class will critically analyze factors that influence HIV and other sexually transmitted infection (STI) transmission and control including individual, relational, social and structural level influences. Methods relevant to intervention design, cultural competence, analysis, and translation or scale-up will be discussed. The course takes a population-based perspective on HIV/STI prevention, with a focus on resource-rich and resource-constrained settings.

Course Objectives:
On course completion the student will be able to:

1. Identify the role of primary and secondary prevention in controlling HIV/STI epidemics.
2. Identify a range of alternatives along the prevention continuum and which are most appropriate and feasible for various settings and populations, including international.
3. Demonstrate through independent research, written and oral presentation an in-depth knowledge of a specific prevention intervention for a particular population, and methods for evaluation of effectiveness.
4. Apply critical thinking skills to analyze challenges and innovative solutions to increase the HIV/STI prevention agenda in public health and clinical policy and practice.

Summary of course requirements and deadlines
1. 20% Class attendance / seminar discussion (3 hours of seminar per week) / critical analysis of weekly topics.

2. 60% Prevention Intervention 1) Research Proposal or 2) Critical Analysis
   Students will write either a brief (5 page) proposal for a prevention intervention in the NIH SF424 proposal format, or a critical analysis of a prevention program or intervention that can be posted onto the web in a standardized case presentation format. Students will briefly (3 minutes) verbally summarize their proposal/case study on last day of class.

3. 20% Facilitated discussion of required readings for one week
Specific Requirements

Critical Analysis. The seminar discussion format is designed to critically explore the issues related to working with high risk populations for HIV/STI prevention. Since the success of seminar discussion is based on active participation, students are expected to attend class, prepare for class by reading and thinking about the issue, and contribute to class discussions. One week will co-lead discussion of the week’s readings, eliciting study strengths and weaknesses.

Student Proposal/Case Study. The purpose of this assignment is to assist students in enhancing skills for HIV/STI prevention intervention design, implementation, and analysis. Required at the end of the quarter to briefly (3 minute oral summary, no slides needed) present their proposal or case study in the classroom, describing: population studied, approach taken, outcomes expected or seen, recommendations for future work.

Grading:
The course is offered for a numeric grade, or may be taken as Satisfactory/Not Satisfactory. Students who wish to take this course as S/NS should refer to p. 13 of the Graduate and Professional Study Catalog, 2000-2002. Grading will be based on degree of participation, with extra effort noted accordingly.

Professional Conduct: Behavior or conduct that disrupts the class or fellow students will not be allowed. Examples include, but are not limited to: note-passing, talking during lecture, interrupting classmates or speakers, use of cell phones or audible pagers. If disruptive behavior occurs, class will be dismissed after three warnings to the disruptive student, and students will be held responsible for the material. The instructor will make an appointment with the disruptive student to discuss his/her behavior.

In Case of an Earthquake: Drop, Cover, and Hold. Once the shaking stops, take your valuables and leave the building. Do not return to the building until you have received an all-clear from somebody “official”, the Web, or e-mail. Call 547-INFO or check the UW home page for updates on UW and building status.

In Case of a Fire Alarm: Take your valuables and leave the building. Plan to return to class once the alarm has stopped. Do not return to the building until you have received an all-clear from somebody “official”, the Web, or e-mail. Call 547-INFO or check the UW home page for updates on UW and building status.

Accommodations: The University of Washington is committed to providing access, and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. For information or to request disability accommodation contact: Disabled Student Services (Seattle campus, matriculated students) at 206.543.8924/V, 206.543.8925/TTY, 206.616.8379 (FAX), or e-mail at uwdss@u.washington.edu

Communication with instructor: Please use email to communicate for questions, clarifications, and scheduling of office time as needed.
**Classroom:** Health Sciences T-360 except for last week (5/30 session is in UMC CC 408)

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<tr>
<th>Week#</th>
<th>Date</th>
<th>Topics</th>
<th>Speakers</th>
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<tbody>
<tr>
<td>1</td>
<td>3/26/07</td>
<td>What Works in HIV/STI Prevention – Where are the Gaps? Epidemicology – Evidence</td>
<td>Ann Kurth, CNM, PhD&lt;br&gt;(course overview)&lt;br&gt;Lisa Manhart, PhD</td>
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<td>2</td>
<td>4/2/07</td>
<td>HIV/STI Transmission Factors and Behavioral Theories</td>
<td>Ann Kurth, CNM, PhD&lt;br&gt;Hendrika Meischke, PhD</td>
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<td>3</td>
<td>4/9/07</td>
<td>Intervention Development and Research Design Considerations:&lt;br&gt;Ethical considerations; cultural adaptation of measures and interventions</td>
<td>Carey Farquhar, MD, MPH&lt;br&gt;Cynthia Pearson, PhD</td>
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<td>4</td>
<td>4/16/07</td>
<td>Intervention Development and Research Design Considerations:&lt;br&gt;Formative research; Recruitment and retention</td>
<td>Steven Wakefield&lt;br&gt;Karina Walters, PhD</td>
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<td>5</td>
<td>4/23/07</td>
<td>Intervention Development and Research Design Considerations:&lt;br&gt;Study designs; measurement of exposures and outcomes; statistical methods</td>
<td>Devon Brewer, PhD&lt;br&gt;Jim Hughes, PhD</td>
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<td>6</td>
<td>4/30/07</td>
<td>Structural-level &amp; Policy Interventions</td>
<td>Bob Wood, MD, MPH&lt;br&gt;Social Development Res. Group&lt;br&gt;James Pfeiffer, PhD</td>
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<td>7</td>
<td>5/7/07</td>
<td>Biomedical Interventions:&lt;br&gt;Microbicides; nPEP, PREP; Male circumcision</td>
<td>Jessica Cohen, MHS&lt;br&gt;Renee Ridzon, MD&lt;br&gt;Sam Clark, PhD</td>
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<td>8</td>
<td>5/14/07</td>
<td>Biomedical Interventions:&lt;br&gt;Vaccines: HPV, HIV</td>
<td>Laura Koutsky, PhD&lt;br&gt;Nina Russell, MD</td>
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<td>9</td>
<td>5/21/07</td>
<td>Sexual &amp; Social Network-level Interventions:&lt;br&gt;Partner-delivered STI treatment; Sexual networks</td>
<td>Matthew Golden, MD, MPH&lt;br&gt;Susie Cassels, PhD</td>
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<td>*PROPOSAL or CASE STUDY DUE</td>
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<td>10</td>
<td>5/30/07</td>
<td>Translating evidence-based prevention into practice</td>
<td>Betsy Wells, PhD&lt;br&gt;Brief student summary presentations of proposal or case study</td>
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CLASS READINGS:

Week 1

Overview of the prevention continuum: intrahost factors and individual behavior change, biomedical, sexual dyad, sexual network, social/environmental change, macro community change; Evidence of effective strategies to date


Week 2

Transmission dynamics; Behavioral models & theories (common elements, gaps)


Pinkerton SD, Layde PM, DiFrancesisco W, Chesson HW. All STDs are not created equal: an analysis of the differential effects of sexual behaviour changes on different STDs. *Int J STD AIDS.* May 2003;14(5):320-328.


**Week 3**

**Intervention development: Ethical considerations in international settings; cultural adaptation of measures and interventions**


### Week 4

**Intervention development: Formative research, Recruiting & retaining hard-to-reach populations**


**Week 5**

**Study design; Measurement of exposures and outcomes: Analytic techniques**


*Individual-level RCT Alternatives:*


**Week 6**

**Structural-level and policy interventions**


Parker RG, Easton D, Klein CH. Structural barriers and facilitators in HIV prevention: a review of international research [In Process Citation]. *Aids.* 2000;14 Suppl 1:S22-32.


**Week 7**

**Biomedical interventions: Microbicides; non-occupational post-exposure [N-PEP] and pre-exposure prophylaxis [PREP]; Male circumcision**

*Microbicides:*


*nPEP / PREP:*

**Male circumcision:**


**Week 8**

**Biomedical interventions: Vaccines: HPV, HIV**


**Week 9**

**Sexual & Social Network-level Interventions: Partner-delivered STI treatment; Sexual networks**


**Week 10**

**Translating evidence-based prevention into practice**


Mandel JS, Rutherford GW. AIDS prevention research in low and middle-income countries: increasing the dissemination of study results in the scientific literature. *AIDS Behav.* Jul 2006;10(4 Suppl):S1-4.


**RESOURCES**

SF424 instructions & forms:  
[http://grants.nih.gov/grants/forms.htm](http://grants.nih.gov/grants/forms.htm)

Overview of grant info:  

Central federal grant site:  

Searchable database of awarded federal grants:
Proposal writing guides:
http://www.washington.edu/research/osp/writing.html
http://www.washington.edu/research/guide/grantwriting.html


Case Study Examples:
http://www.gatesfoundation.org/AboutUs/OurWork/Learning/ACHAP/

Textbooks (for reference):


HIV/AIDS Survey Indicators Database
http://www.measuredhs.com/hivdata/