Description: This course outline presents the required sequence of learning steps and activities to help you develop competence in the subject area of Public Health Education (EDT1). In this case, your competence will be assessed as you complete a series of performance tasks. The tasks are listed in the sequence below at the point in which you should have covered the learning necessary to build the necessary competence to successfully complete the task. Once all tasks are completed at the appropriate level of competence, you will receive a PASS on your AAP for the Public Health Education (EDT1) Assessment. As with any learning activity, steps may be completed more quickly than noted below, or they could take the full amount of time indicated. We provide the pacing (Week One, Week Two, etc.) as a guide to amount of time you should take to develop the competencies necessary and prepare to complete the required assessment on time. Completing your assessments within the required timeline keeps you on pace for Satisfactory Academic Progress and Graduation.

Subdomain background Information: The Health Core consists of four major subdomains. EDT1 is concerned with preparing the Health Educator for understanding epidemiology and environmental health as it affects the public. Public Health Education (EDT1).

Required Learning Resources (see listing on the resources tab of your AAP to enroll or order):


<table>
<thead>
<tr>
<th>✓ complete</th>
<th>To be completed prior to Week 1 of Epidemiology or may be used as a review of biostatistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Hint - How to use the tutorials</td>
<td>The tutorials listed for this week are intended to be used to supplement what you are learning in ME. You do not need to do each one but rather, should choose areas where you need more practice. If you feel competent in these areas you are free to skip the tutorials and begin with the epidemiology topics. However, you may want to quickly review them or come back and use the tutorials as review later. You will need a thorough understanding of each area to be successful in both ME and Epidemiology.</td>
</tr>
<tr>
<td>Introduction and Overview</td>
<td>Please click on this link for a brief introduction of fundamental statistical principles: <a href="http://infinity.cos.edu/faculty/woodbury/Stats/Tutorial/Data_Disc_Cont.htm">http://infinity.cos.edu/faculty/woodbury/Stats/Tutorial/Data_Disc_Cont.htm</a></td>
</tr>
<tr>
<td>Complete Tutorials as needed</td>
<td>Access the tutorials below to work on areas of ME as you go through the course. You will begin to work through the topics below on Epidemiology as you complete ME.</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1. Independent and dependent variables</td>
<td>Independent and dependent variables <a href="http://www.engr.sjsu.edu/pabacker/Practice_with_variables.htm">http://www.engr.sjsu.edu/pabacker/Practice_with_variables.htm</a></td>
</tr>
<tr>
<td>2. Types of variables</td>
<td>Types of variables <a href="http://www.engr.sjsu.edu/pabacker/types_of_variables.htm">http://www.engr.sjsu.edu/pabacker/types_of_variables.htm</a></td>
</tr>
<tr>
<td>5. Descriptive statistics</td>
<td>Descriptive statistics <a href="http://www.engr.sjsu.edu/pabacker/class_activity_descriptive_stat.htm">http://www.engr.sjsu.edu/pabacker/class_activity_descriptive_stat.htm</a></td>
</tr>
<tr>
<td>6. Assessing the Results</td>
<td>Assessing the Results <a href="http://www.uiah.fi/projects/metodi/188.htm">http://www.uiah.fi/projects/metodi/188.htm</a></td>
</tr>
<tr>
<td>Take the Practice Exam</td>
<td>Exam <a href="http://ocw.tufts.edu/data/1/306782.pdf">http://ocw.tufts.edu/data/1/306782.pdf</a></td>
</tr>
<tr>
<td>Complete Tufts Course Lectures</td>
<td>Go to <a href="http://ocw.tufts.edu/Course/1/Lecturenotes">http://ocw.tufts.edu/Course/1/Lecturenotes</a> for Tufts lectures. These are more lectures on statistics. You should determine whether you need to work through them. It is recommended that you at least use them for review. See document at the end of the syllabus for all links. As you work through each lecture you should:</td>
</tr>
<tr>
<td></td>
<td>Read all notes</td>
</tr>
<tr>
<td></td>
<td>Make concept maps of the new information</td>
</tr>
<tr>
<td></td>
<td>Make word maps of new key words</td>
</tr>
<tr>
<td></td>
<td>Study tables and figures for more information and understanding</td>
</tr>
<tr>
<td>7. Inferential Statistics I</td>
<td></td>
</tr>
<tr>
<td>8. Inferential Statistics II</td>
<td></td>
</tr>
<tr>
<td>9. Common Statistical Tests</td>
<td></td>
</tr>
<tr>
<td>10. Regression Techniques</td>
<td></td>
</tr>
</tbody>
</table>
Week 1
Competency 704.8.1 Principles of Epidemiology

The graduate demonstrates the use of epidemiological terminology and strategies to interpret and analyze outbreak data, and recognizes the role of the health educator in responding to disease outbreaks.

| Essential Questions | What is Epidemiology?  
|                     | Why study Epidemiology?  
|                     | Describe the Natural History of Disease?  

| Study Hint – Accessing Prior Conceptions | Use the essential questions to access what you already know or believe about epidemiology. Write down your answer or put your ideas into a graphic organizer that you will revisit frequently to modify and add to.  

| Read | Text 2, p 104-112 on History of Epidemiology, Science of Epidemiology, and Language of Epidemiology  
| Text 1, p 61, Definition of Epidemiology  
| Text 1, p 63-68 the Importance of Rates  

| Access PowerPoint Online presentation, Overview of Epidemiology | Go to [http://publichealth.jbpub.com/aschengrau/powerpointpresentation.s.cfm](http://publichealth.jbpub.com/aschengrau/powerpointpresentation.s.cfm)  
| Scroll to near bottom of page and click on link to open slides for Overview of Epidemiology.  
| Make a graphic organizer of the information  
| After viewing the presentation, write your own definition of Epidemiology  
| Make a list of key words in epidemiology and define each.  
| What is meant by Natural Progression of Epidemiological Reasoning?  
| Discuss Descriptive Epidemiology.  
| What are types of Epidemiological research? Describe each and when each would be appropriate to use.  
| Why is it important to evaluate validity and causality?  
| How does Random Error and Bias affect your study?  
| Complete the Solve the Mystery Activity on slides 14-15  

| Access the PowerPoint and study the epidemiologic approach to causation | Go to [http://publichealth.jbpub.com/aschengrau/powerpointpresentation.s.cfm](http://publichealth.jbpub.com/aschengrau/powerpointpresentation.s.cfm) and view the PowerPoint The Epidemiologic Approach to Causation  
| [http://progdata.umflint.edu/SELIG/HCR%20315/Ch.%2015%20causation.ppt](http://progdata.umflint.edu/SELIG/HCR%20315/Ch.%2015%20causation.ppt)  
| Use the following questions to guide your study:
1. What are the characteristics of a cause?
2. Describe the difference between causes and risk factors.
3. What are the causes of the most common major diseases (you will have to investigate these further beyond the PowerPoint).
4. What are theories of causation and how did they develop historically?
5. Describe Causal Pies and how they are used.
6. Describe Hill’s Causal Guidelines and how they are used.

Complete the Language of Health Education and Public Health/Epidemiology activities

As a health educator you will need to understand the language of Public Health and Epidemiology. At this time you will begin to develop understanding of the basic language. Later, during Measurement and Evaluation you will do a more in depth study of epidemiology.

a) Read Text 2, p 104-127

b) Activities:
   i) Answer the question: Why is infant mortality the primary indicator of the health of a community?
   ii) Complete the Exercise on p 128
   iii) Complete the Exercise on p 129 on using the National Vital Statistics Report

c) Be sure you understand the following terms. Make a word map for each one:
Example

<table>
<thead>
<tr>
<th>Term</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent, host, environment</td>
<td>Mortality rates</td>
</tr>
<tr>
<td>Endemic</td>
<td>Crude birth rate</td>
</tr>
<tr>
<td>Epidemic</td>
<td>Premature birth rate</td>
</tr>
<tr>
<td>Pandemic</td>
<td>Crude death rate</td>
</tr>
<tr>
<td>Eradication</td>
<td>Age-specific death rate</td>
</tr>
<tr>
<td>Etiology</td>
<td>Cause specific death rate</td>
</tr>
<tr>
<td>Event</td>
<td>Infant mortality</td>
</tr>
<tr>
<td>Population</td>
<td>Neo-natal mortality rate</td>
</tr>
<tr>
<td>Surveillance</td>
<td>Postneonatal mortality</td>
</tr>
<tr>
<td>Trends</td>
<td>Fetal mortality rate</td>
</tr>
<tr>
<td><strong>Vital statistics</strong></td>
<td><strong>Fertility ratio</strong></td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td><strong>Morbidity</strong></td>
<td><strong>Fertility rate</strong></td>
</tr>
<tr>
<td><strong>Prevalence</strong></td>
<td><strong>Sex ration</strong></td>
</tr>
<tr>
<td><strong>Incidence</strong></td>
<td><strong>Maternal mortality rate</strong></td>
</tr>
<tr>
<td><strong>Acute diseases</strong></td>
<td><strong>Attributable risk</strong></td>
</tr>
<tr>
<td><strong>Chronic diseases</strong></td>
<td><strong>Risk assessment</strong></td>
</tr>
<tr>
<td><strong>Attack rate</strong></td>
<td><strong>Dose response curve</strong></td>
</tr>
</tbody>
</table>

**Health Care Issues**

i) Read Text 2, p 77-101; also understand what Health People 2010 says about these issues also

ii) Understand issues of
   1) population growth
   2) Birth and death rates
   3) Hunger
   4) Housing
   5) Vector control
   6) WHO

d) Disease
   i) Major cause of death by age group – Text 2, p 136-137
   ii) 10 leading causes of death by disease – Text 2, p 134
   iii) Causes of death for women – Text 2, p 134
   iv) Health status indicators Text 2, p 118
   v) Chronic and Communicable Diseases
   vi) Underserved Populations in Community Health – Text 2, p 227-372

e) Go to http://health.jbpub.com/communityhealth/5e/webexercise.s.cfm?chapter=16&step=2 and complete the three web activities on Epidemiology Study of Disease

f) Go to http://health.jbpub.com/communityhealth/5e/webexercise.s.cfm?chapter=4&step=2 and complete the three web activities on Epidemiology Prevention and Control of Disease

Review the Epidemiology terms

http://ocw.tufts.edu/Content/1/supplementarymaterial/202862
(these are key terms you need to know!!)

http://health.jbpub.com/communityhealth/5e/glossary.cfm
Interactive Glossary

If you prefer to take a full online course access the course, Principles of Epidemiology in Public Health Practice

Go to http://www2a.cdc.gov/TCEOnline/

The course provides an introduction to applied epidemiology and biostatistics; it consists of six lessons: Introduction to Epidemiology, Summarizing Data, Measures of Risk, Displaying Public Health Data, Public Health Surveillance, and Investigating an Outbreak. Continuing education credits are offered to physicians, nurses, veterinarians, pharmacists, certified public health educators, and other professionals.
This is a full online course. To access you will have to register on the CDC site and receive a login and password. You will then be able to take courses through the CDC free. This is a good site to obtain continuing education credit for health educators after you graduate.

Week 2
Competency 704.8.1 Principles of Epidemiology

The graduate demonstrates the use of epidemiological terminology and strategies to interpret and analyze outbreak data, and recognizes the role of the health educator in responding to disease outbreaks.

What is disease?
What is disease transmission?
What is HIV and how is transmitted?
Who is affected by HIV/AIDS?

Go to http://wise.berkeley.edu/teacher/projects.php. Click on Join Wise. Click on Create a Teacher Account as you will be a lecturer in Health Education. Complete the registration information. Then click on link to All Project Families. Scroll down the list to HIV. A column will appear in green on the right. Click on title, HIV Prevention. Read through the page overview and then link to lesson plan. Read introduction. Download the Printable Assessment and take as a pre assessment to see what you already know and believe. Now click on Go to the Project at the top of the page. This will open a new window with activities along the left hand side of the page.

Begin to work through each of the three activities. Be sure to complete the What Do You Think sections noted by the notebook and pencil icon. This is important as it helps you to process what you are learning, connect it to prior experience and knowledge, and check for understanding.

Work through Activity 1 - How do you think someone can get a disease?
Work through Activity 2 – Components of HIV Transmission
Work through Activity 3 – How would you prevent AIDS?

Watch the PBS presentation: Age of AIDS and then complete each activity.

Access web sites below in the order presented.
http://www.pbs.org/wgbh/pages/frontline/aids/ Go to Watch Full Program Online
As you go through the video segments, begin to make a large time line of AIDS. On the timeline put years across the top, then beneath put the event. Under each event put the highlights you learned in the video.
<table>
<thead>
<tr>
<th>Read</th>
<th>Next to each video segment you will find complimentary documents. Link to documents and read them.</th>
</tr>
</thead>
</table>
| Complete Map Activity 1 | ![Image](http://www.pbs.org/wgbh/pages/frontline/aids/atlas/) Go to the maps page  
Access the first map, HIV/AIDS in the World. Answer the following questions:  
What countries have the highest number of people living with AIDS?  
How does this compare with the percent receiving drugs to treat AIDS?  
Are there countries where there are no people listed as living with AIDS? Why do you think this is?  
Now look at AIDS deaths. Compare AIDS deaths in countries to the percent living with AIDS and the percent receiving drug treatment. What patterns do you see? |
| Complete Map Activity 2 | Access the second map, HIV/AIDS in the US.  
Which states show the highest rates of individuals living with AIDS and deaths from AIDS? The most new cases? What patterns can you find? |
| Complete Map Activity 3 | Access the final map, HIV 1 Global Distribution  
What patterns do you see?  
What countries show the same strain of HIV as in the United States?  
Where is the greatest diversity of strains? |
| Access Timeline Answer questions about the Timeline | Look at the timeline at ![Image](http://www.pbs.org/wgbh/pages/frontline/aids/cron/)  
Is it similar to the one you made?  
If not, add or modify your timeline. |
| Go to each section on the website and access information on AIDS; then answer questions | ![Image](http://www.pbs.org/wgbh/pages/frontline/aids/virus/)  
Describe the human immune system  
Describe viruses  
Make a storyboard on how AIDS began and spread  
Why has it been difficult to develop a vaccine for AIDS? |

**Week 3**  
**Competency 704.8.1 Principles of Epidemiology**  
The graduate demonstrates the use of epidemiological terminology and strategies to interpret and analyze outbreak data, and recognizes the role of the health educator in responding to disease outbreaks.  

<table>
<thead>
<tr>
<th>Essential Question</th>
<th>What are Standard Measurements of Health Status?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read</td>
<td>Text 1, p 69-76 Standardized Measurement</td>
</tr>
<tr>
<td>Activity</td>
<td>After reading the information in Text 1 and 2, make a quick reference card that provides information about the major health status indicators and how to use them</td>
</tr>
</tbody>
</table>
Scroll down the page and click on link to open slides.  
Questions to guide study:  
What are two types of population?  
Describe disease frequency.  
What are classes of mathematical parameters and how are these used in determining disease frequency?  
Describe the three key principles of prevalence.  
What are the two incidence measures, how are they used?  
Describe the relationship between incidence and prevalence.  
How are prevalence and incidence used in epidemiology? |
| Activity | After completing your study above, complete the exercise to practice measures of disease frequency that begins on slide 31. Work out each answer before clicking on the answer. |
| Study Hint: Use Animated Flashcards to test your new knowledge | Go to  
| Complete Review Questions | Link to  
[http://publichealth.jbpub.com/aschengrau/review.cfm](http://publichealth.jbpub.com/aschengrau/review.cfm)  
and work through the review question. Then download answers to compare. |
If this is the first time you have accessed any PublicHealthLearning courses, choose and work through the courses listed in this syllabus. To access courses you must first go to the site and register. Then select the competencies on Environmental Health. Take the Pre assessment and this will then show which courses are suggested. Select and register for each course listed on this syllabus. These are free courses and you have ample time to complete each one. (Remember, do not click on the final quiz until you have completed the course or you will not be able to re-access the course)  
PH 492 Frequency Measures Used in Epidemiology:  
[http://www.uic.edu/sph/prepare/courses/ph490/resources/exercisesource.htm](http://www.uic.edu/sph/prepare/courses/ph490/resources/exercisesource.htm) |
<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 4</strong> Competency 704.8.1 Principles of Epidemiology</td>
<td>The graduate demonstrates the use of epidemiological terminology and strategies to interpret and analyze outbreak data, and recognizes the role of the health educator in responding to disease outbreaks.</td>
</tr>
<tr>
<td>Essential Question</td>
<td>What are sources of Standardized Data? What is Epidemiologic Research and how is it conducted?</td>
</tr>
</tbody>
</table>
| Read and process                                                     | Text 1, p 77-81 Standardized Data sources  
Text 2, p 121-130 Research methods  
Text 1, p 81-87 Descriptive, Analytical, Experimental Studies |
| Access Internet Presentation and review                              | Presentation on Experimental Studies (125 Kbytes) to review types of epidemiologic research |
| Study Hint                                                          | As you work through the course lectures, be sure to then complete any activities associated with it. This will help you to apply what you are learning and evaluate whether you new conceptual model is adequate. |
| Complete Tufts Course Lecture                                        | 6. Determinants of Health |
| Complete Public Health Learning Course                               | Go to [http://www.publichealthlearning.com/Public/GettingStarted/](http://www.publichealthlearning.com/Public/GettingStarted/) and complete these courses: |
|                                                                     | UNC 492f EPI Info: Relational Databases: [http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpngM%2br7CFewe9m5xZHRaSNGWbYULhPVStsXHqGhpxHJRtUbPfhwghyaGIXEm0mw%3d](http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpngM%2br7CFewe9m5xZHRaSNGWbYULhPVStsXHqGhpxHJRtUbPfhwghyaGIXEm0mw%3d) |
|                                                                     | UNC 491d Epidemiology Methods: [http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpmzB%2bpJFsFg86kZSXPQHeUBAyhsK7Ct39Elag98ZU4VJAHTGPUOOG02LxFTgtX0%2bHYk%3d](http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpmzB%2bpJFsFg86kZSXPQHeUBAyhsK7Ct39Elag98ZU4VJAHTGPUOOG02LxFTgtX0%2bHYk%3d) |
|                                                                     | UNC 492b Epidemiology Methods: Bias: [http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpmzB%2bPsJFg86kZSXPQHeUBAyhsK7Ct39Elag98ZU4VJAHTGPUOOG02LxFTgtX0%2bHYk%3d](http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpmzB%2bPsJFg86kZSXPQHeUBAyhsK7Ct39Elag98ZU4VJAHTGPUOOG02LxFTgtX0%2bHYk%3d) |
|                                                                     | UNC 492a Epidemiology Methods: Studies: [http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpkERano9m4Z91Z2Zg6FBTR1XMY8eLXglFCEUSqF7BMQGwrb7JXSmCvpZiuDN31r1%3d](http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpkERano9m4Z91Z2Zg6FBTR1XMY8eLXglFCEUSqF7BMQGwrb7JXSmCvpZiuDN31r1%3d) |
### Week 5

**Competency 704.8.1 Principles of Epidemiology**

The graduate demonstrates the use of epidemiological terminology and strategies to interpret and analyze outbreak data, and recognizes the role of the health educator in responding to disease outbreaks.

<table>
<thead>
<tr>
<th>Complete PublicHealthLearning Course</th>
<th>Go to [<a href="http://www.publichealthlearning.com/Public/GettingStarted/">http://www.publichealthlearning.com/Public/GettingStarted/</a>] and complete these courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNC 492f EPI Info: Relational Databases:</td>
<td><a href="http://www.publichealthlearning.com/Public/Catalog/Description.asp?u=kM6WW0gCRpngM%2br7CEwe9mE5xZHraSNGWbYULhPVsulsXHqGhpyzHJRutUBpFhgwbyaGIXEEm0mw%3d">http://www.publichealthlearning.com/Public/Catalog/Description.asp?u=kM6WW0gCRpngM%2br7CEwe9mE5xZHraSNGWbYULhPVsulsXHqGhpyzHJRutUBpFhgwbyaGIXEEm0mw%3d</a></td>
</tr>
<tr>
<td>UNC 491d Epidemiology Methods:</td>
<td><a href="http://www.publichealthlearning.com/Public/Catalog/Description.asp?u=kM6WW0gCRpng651566sMk%2fTiKZefg8qQm3aMzGtKFvZQppAiviXoo%2bM7mQXxtdduFs3e7vuSEw%3d">http://www.publichealthlearning.com/Public/Catalog/Description.asp?u=kM6WW0gCRpng651566sMk%2fTiKZefg8qQm3aMzGtKFvZQppAiviXoo%2bM7mQXxtdduFs3e7vuSEw%3d</a></td>
</tr>
<tr>
<td>UNC 492b Epidemiology Methods: Bias:</td>
<td><a href="http://www.publichealthlearning.com/Public/Catalog/Description.asp?u=kM6WW0gCRpmzB%2bPsJFg86kZSXPOdHeUAYvhsK7Ct39Elag98ZU4VJAHTGPGQGO2LxFTtX0%2bHYk%3d">http://www.publichealthlearning.com/Public/Catalog/Description.asp?u=kM6WW0gCRpmzB%2bPsJFg86kZSXPOdHeUAYvhsK7Ct39Elag98ZU4VJAHTGPGQGO2LxFTtX0%2bHYk%3d</a></td>
</tr>
<tr>
<td>UNC 492a Epidemiology Methods: Studies:</td>
<td><a href="http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpkERano9m64Z9lZG6FBTR1XMY8eLXg1FCUEUsF7BMQGWrb7iXSmCVpZiuDN3I1r%3d">http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpkERano9m64Z9lZG6FBTR1XMY8eLXg1FCUEUsF7BMQGWrb7iXSmCVpZiuDN3I1r%3d</a></td>
</tr>
</tbody>
</table>

| Complete Tufts Course Lecture | 1. Critiquing a Randomized Controlled Trial  
2. Observational Studies  
3. Descriptive Epidemiology and Statistics  
4. Threats to Validity  
5. Overview of Hypothesis Testing  
6. Confounding & Effect Modification  
7. Evaluating a Cohort Study  
8. Evaluating a Case Control Study  
9. Screening  |
|-----------------------------|-------------------------------------------------|
| Activity 1                  | Evaluating a Randomized Control Trial  
[http://ocw.tufts.edu/Content/1/lectures/197549](http://ocw.tufts.edu/Content/1/lectures/197549) |
| Activity 2                  | Confounding & Effect Modification  
[http://ocw.tufts.edu/Content/1/lectures/197552](http://ocw.tufts.edu/Content/1/lectures/197552) |
| Activity 3                  | Evaluating a Cohort Study  
[http://ocw.tufts.edu/Content/1/lectures/197555](http://ocw.tufts.edu/Content/1/lectures/197555) |
| Activity 4                  | Evaluating a Case Control Study  
[http://ocw.tufts.edu/Content/1/lectures/197582](http://ocw.tufts.edu/Content/1/lectures/197582) |
<p>| Complete Tufts Course Lecture | 11. Screening  |</p>
<table>
<thead>
<tr>
<th>Activity 5</th>
<th>Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://ocw.tufts.edu/Content/1/lecturenotes/198806">http://ocw.tufts.edu/Content/1/lecturenotes/198806</a></td>
<td></td>
</tr>
<tr>
<td>Complete Tufts Course Lecture</td>
<td>12. Regression II: Realities of Model Building</td>
</tr>
<tr>
<td>Activity 6</td>
<td>Evaluating a Randomized Control Trial</td>
</tr>
<tr>
<td><a href="http://ocw.tufts.edu/Content/1/lecturenotes/197628">http://ocw.tufts.edu/Content/1/lecturenotes/197628</a></td>
<td></td>
</tr>
<tr>
<td>Complete Tufts Course Lecture</td>
<td>13. Evidence-Based Medicine</td>
</tr>
</tbody>
</table>

### Week 6

#### Competency 704.8.1 Principles of Epidemiology

The graduate demonstrates the use of epidemiological terminology and strategies to interpret and analyze outbreak data, and recognizes the role of the health educator in responding to disease outbreaks.

<table>
<thead>
<tr>
<th>Essential Question</th>
<th>How is disease classified and prioritized for prevention and control efforts?</th>
</tr>
</thead>
</table>

| Read | Text 1, p 92-94 Classification of diseases and health problems |
| --- | Text 1, p 94-97 Communicable Diseases |
| --- | Text 1, p 97-101 Noncommunicable Diseases |
| --- | Text 1, p 101 Prioritizing Prevention and control |
| --- | Text 1, p 102 Levels of Prevention |

| Review the Research Study Designs on the Internet sites | Go to [http://www2.sph.unc.edu/courses/epid160/lectures/](http://www2.sph.unc.edu/courses/epid160/lectures/) and then link to the various types of study designs below: |
| --- | Study designs: Intervention studies |
| --- | Study designs: Cohort studies |
| --- | Study designs: Case-control studies |
| --- | Study designs: Cross-sectional studies |

<table>
<thead>
<tr>
<th>Essential Question</th>
<th>What is Epidemiological Surveillance and how is surveillance conducted?</th>
</tr>
</thead>
</table>

| PublicHealthLearning Course | Go to [http://www.publichealthlearning.com/Public/GettingStarted/](http://www.publichealthlearning.com/Public/GettingStarted/) and complete these courses: |
| --- | UNC 495g E is for Epi: |
| --- | [http://www.publichealthlearning.com/Public/Catalog/Description.spx?u=kM6WW0gCRpkTXlIFuMWoRcUBsxy7fxAvVFrP%2fWQCnPGu3T3a0cSoX4cswP2k6nPdwzASW%2fI%3d](http://www.publichealthlearning.com/Public/Catalog/Description.spx?u=kM6WW0gCRpkTXlIFuMWoRcUBsxy7fxAvVFrP%2fWQCnPGu3T3a0cSoX4cswP2k6nPdwzASW%2fI%3d) |
| --- | UNC 496f Embarking on an Outbreak Investigation: |
| --- | [http://www.publichealthlearning.com/Public/Catalog/Description.spx?u=kM6WW0gCRrkrk4s1yaBbSIlGIAZegCCktdwzuc4QZL](http://www.publichealthlearning.com/Public/Catalog/Description.spx?u=kM6WW0gCRrkrk4s1yaBbSIlGIAZegCCktdwzuc4QZL) |
| --- | PH 496 Investigating Outbreaks: |
| --- | [http://www.publichealthlearning.com/Public/Catalog/Description.spx?u=kM6WW0gCRrkrk4s1yaBbSIlGIAZegCCktdwzuc4QZL](http://www.publichealthlearning.com/Public/Catalog/Description.spx?u=kM6WW0gCRrkrk4s1yaBbSIlGIAZegCCktdwzuc4QZL) |
Weeks 7-9

**Competency 704.8.2 Principles of Environmental Health**

The graduate recognizes the effects of environmental exposures on human health, regulatory laws and policies, risk analysis, and the role of the health educator in educating the public.

<table>
<thead>
<tr>
<th>Essential Question</th>
<th>What is Environmental Health and why should Health Educators study about environmental health?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PublicHealthLearning Course</td>
<td>Complete at <a href="http://www.publichealthlearning.com/Public/GettingStarted/">http://www.publichealthlearning.com/Public/GettingStarted/</a> If this is the first time you have accessed any PublicHealthLearning courses, choose and work through the courses listed in this syllabus. To access courses you must first go to the site and register. Then select the competencies on Environmental Health. Take the Pre assessment and this will then show which courses are suggested. Select and register for each course listed in this syllabus.</td>
</tr>
</tbody>
</table>
| JHSPH opencourseware course | Environmental Health 180.601.81 at http://ocw.jhsph.edu/courses/EnvironmentalHealth/  
Work through Lecture 1: Introduction to Environmental Health (471 KB): http://ocw.jhsph.edu/courses/EnvironmentalHealth/PDFs/Lecture1.pdf  
As you view each slide in this PowerPoint presentation, make your own concept maps of the major issues and concepts  
Make word map card for key terms |
|---|---|
| CDC site | Access information on environmental health on the CDC site at http://www.cdc.gov/node.do/id/0900f3ec8000e044  
i. This will be an ongoing resource on specific environmental health issues |
| Environmental Health Risk Assessment - JHSPH opencourseware course | Begin, Environmental Health 180.601.81 at http://ocw.jhsph.edu/courses/EnvironmentalHealth/  
Lecture 5: Principles of Exposure, Dose, and Response (1,975 KB): http://ocw.jhsph.edu/courses/EnvironmentalHealth/PDFs/Lecture5.pdf  
Lecture 8: Occupational Health (547 KB): http://ocw.jhsph.edu/courses/EnvironmentalHealth/PDFs/Lecture8.pdf  
Lecture 9: Risk Assessment and Management (3,675 KB): http://ocw.jhsph.edu/courses/EnvironmentalHealth/PDFs/Lecture9.pdf  
Remember to make concept maps of what you are reading  
Write down questions you still have about the content  
Answer any questions and complete all activities |
<p>| PublicHealthLearning Course | Environmental Risk Assessment UNC 473a: <a href="http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpnOwty%2fwQ2VTFubboh">http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpnOwty%2fwQ2VTFubboh</a> |</p>
<table>
<thead>
<tr>
<th>Framework for Assessing Risk PH 473:</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpmYUf8zIIFICLe4bPoWfmxQI7z3ED5Qiw5TWymphcyOYswf67gJwQLE4fBvnFGf%2bBw%3d">http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpmYUf8zIIFICLe4bPoWfmxQI7z3ED5Qiw5TWymphcyOYswf67gJwQLE4fBvnFGf%2bBw%3d</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>If possible, work on the lesson with several of your peers. If you cannot, you can still complete the activity by yourself.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JHSPH opencourseware course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin, <strong>Environmental Health 180.601.81</strong> at <a href="http://ocw.jhsph.edu/courses/EnvironmentalHealth/">http://ocw.jhsph.edu/courses/EnvironmentalHealth/</a></td>
</tr>
<tr>
<td><strong>Lecture 2: How Humans Impact the Environment</strong> (396 KB): <a href="http://ocw.jhsph.edu/courses/EnvironmentalHealth/PDFs/Lecture2.pdf">http://ocw.jhsph.edu/courses/EnvironmentalHealth/PDFs/Lecture2.pdf</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Text 2, p 493-516 The Air We Breathe</td>
</tr>
<tr>
<td>Read Text 1, p 449-457 Air Pollution</td>
</tr>
<tr>
<td>Begin JHSPH opencourseware course, <strong>Environmental Health 180.601.81</strong> at <a href="http://ocw.jhsph.edu/courses/EnvironmentalHealth/">http://ocw.jhsph.edu/courses/EnvironmentalHealth/</a></td>
</tr>
<tr>
<td><strong>Lecture 12: Indoor and Outdoor Air Pollution</strong> (3,430 KB): <a href="http://ocw.jhsph.edu/courses/EnvironmentalHealth/PDFs/Lecture12.pdf">http://ocw.jhsph.edu/courses/EnvironmentalHealth/PDFs/Lecture12.pdf</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water and Food and Vectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Text 2, p 519-541 Water Quality</td>
</tr>
<tr>
<td>Read Text 2, p 544-570 Food Safety</td>
</tr>
<tr>
<td>Read Text 1, p 472-474 Waterborne Disease</td>
</tr>
<tr>
<td>Read Text 1, p 475-476 Foodborne Disease</td>
</tr>
<tr>
<td>Read Text 1, p 476-479 Vectorborne Diseases</td>
</tr>
<tr>
<td>Read Text 1 p 457-464 Water and Its Pollution</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JHSPH opencourseware course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Health 180.601.81</strong> at <a href="http://ocw.jhsph.edu/courses/EnvironmentalHealth/">http://ocw.jhsph.edu/courses/EnvironmentalHealth/</a></td>
</tr>
<tr>
<td>Topic</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
</tbody>
</table>
| Physical Hazards      | Go to [http://www.ehponline.org/members/2002/suppl-1/119-128debruin/EHP110s1p119PDF.PDF](http://www.ehponline.org/members/2002/suppl-1/119-128debruin/EHP110s1p119PDF.PDF) and read the article, Perspectives on the Chemical Etiology of Breast Cancer | Read Text 1, p 487-488 Radon Contamination  
Read Text 1, p 488-489 Ultraviolet Radiation  
Read Text 1, p 465-467 Noise Pollution |
| Drinking Water        | Go to [http://www.ehponline.org/members/2002/suppl-1/43-52levin/EHP110s1p43PDF.PDF](http://www.ehponline.org/members/2002/suppl-1/43-52levin/EHP110s1p43PDF.PDF) and read the article U.S. Drinking Water Challenges in the Twenty-First Century | Read Text 1, p 479-481 Pesticides  
Read Text 1, p 481-483 Environmental Tobacco Smoke  
Read Text 1, p 483-487 Lead |
| Chemical Hazards      | Complete Chemical Hazards UNC 472a: [http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpn%2bPQpWxGrU2sU90FYOJJgyiLOMKgmPK3JslZ0130UEoCA2idyM4zVxTYwxlew%3d](http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpn%2bPQpWxGrU2sU90FYOJJgyiLOMKgmPK3JslZ0130UEoCA2idyM4zVxTYwxlew%3d) | Read Text 1, p 479-481 Pesticides  
Read Text 1, p 481-483 Environmental Tobacco Smoke  
Read Text 1, p 483-487 Lead |
Read Text 1, p 481-483 Environmental Tobacco Smoke  
Read Text 1, p 483-487 Lead |
| Wastes                | Text 2, p 573-600 The Throwaway Society  
Text 1, p 437-440 Residues and Wastes from Human Activities  
Text 1, p 441-446 Solid wastes  
Text 1, p 446-449 Hazardous Waste | Read Text 1, p 495-497 |
| Natural Disasters     | Go to [http://health.jbpub.com/communityhealth/5e/webexercises.cfm?chapter=15&step=2&resource=flashcards](http://health.jbpub.com/communityhealth/5e/webexercises.cfm?chapter=15&step=2&resource=flashcards) and work through the animated flash cards for Environmental Concerns: Wastes and Pollution and The Impact of Environment on Human Health as a practice of what you have learned  
Go to [http://health.jbpub.com/communityhealth/5e/webexercises.cfm](http://health.jbpub.com/communityhealth/5e/webexercises.cfm) | Go to [http://health.jbpub.com/communityhealth/5e/webexercises.cfm?chapter=15&step=2&resource=flashcards](http://health.jbpub.com/communityhealth/5e/webexercises.cfm?chapter=15&step=2&resource=flashcards) and work through the animated flash cards for Environmental Concerns: Wastes and Pollution and The Impact of Environment on Human Health as a practice of what you have learned  
Go to [http://health.jbpub.com/communityhealth/5e/webexercises.cfm](http://health.jbpub.com/communityhealth/5e/webexercises.cfm) |
| Environmental Protection and Control | Complete PublicHealthLearning Course  
Environmental Prevention & Control PH 477:  
[http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpkkHvnyOcZsbeJ06zFE0GkoCfMtK6kI8XzMX5YHhiLkm6m%2fdEQO1uizb9fQiwu7qx0%3d](http://www.publichealthlearning.com/Public/Catalog/Description.aspx?u=kM6WW0gCRpkkHvnyOcZsbeJ06zFE0GkoCfMtK6kI8XzMX5YHhiLkm6m%2fdEQO1uizb9fQiwu7qx0%3d) |
| Interactive web sites | Go to  
[http://health.jbpub.com/communityhealth/5e/webexercises.cfm?chapter=15&step=2](http://health.jbpub.com/communityhealth/5e/webexercises.cfm?chapter=15&step=2) and complete the three web activities  
Crossword Puzzles on Environmental Health  
[http://health.jbpub.com/communityhealth/5e/crossword/index.cfm?chapter=15&step=2](http://health.jbpub.com/communityhealth/5e/crossword/index.cfm?chapter=15&step=2) and  
| Risk Communication | To find out more about Risk Communication:  
| Activity | Design a Public Service Announcement on an Environmental Health Issue  
Environmental Health Perspectives is a free online journal that will provide a wealth of research articles on environmental issues  
[http://www.ehponline.org/docs/allpubs.html](http://www.ehponline.org/docs/allpubs.html) |
| Assessment | Complete Case Study Performance Task |