Formerly the Department of Preventive Medicine and Community Health

# EPID 600 - Introduction to Public Health Course Administrative Notes 3 Credit Hours - Room 4-026

## **PDF for session 1**

Before you do anything else: Be sure you have an ACTIVE VCU Email address. When you registered for the course an email address was assigned to you. I must use this email address in the Blackboard scoring & tracking system. Before the class starts on August 28, 2006. If you do not have an active VCU EMail account go to the <u>Technology Site</u> and activate your email. If you have any problem with this call the Student help desk. The number is 804-828-2227

If you want me to use a different email address for routine contact with, you please <u>email me</u> with your full name and preferred email contact address, also include your VCU email address.

# **MPH Program - Mission Statement**

# The Mission of the Virginia Commonwealth University's MPH Program is:

#### to promote, preserve and restore health.

**The Mission** of the MPH program at Virginia Commonwealth University is to promote health and well-being through commitment to public health education, excellence in research, and dedication to community service.

This program is one of two Council on Education for Public Health accredited programs in Virginia. Click here for information on the population perspective in public health, provided by the Association of Schools of Public Health.

#### Americans with Disabilities Act.

The Americans with Disabilities Act of 1990 requires Virginia Commonwealth University to provide reasonable accommodation for any individual who advises us of a physical or mental disability. If you have a physical or mental limitation that requires an accommodation, or an academic adjustment, please arrange a meeting with me at your earliest convenience.

"Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 require Virginia Commonwealth University to provide an 'academic adjustment' or a 'reasonable accommodation 'for students with documented disabilities. Students seeking academic adjustments or accom0odations must self-identify with the Coordinator of Services for Students with Disabilities on the appropriate Campus. After meeting with the Coordinator, students are encouraged to meet with

their instructors to discuss their needs, and if applicable, any lab safety concerns related to their disabilities

If you have not identified yourself to the Coordinator of services for Students with disabilities please do so immediately.

Coordinator: Cheryl Chesney-Walker (<a href="mailto:clchesneywal@vcu.edu">clchesneywal@vcu.edu</a>)
Campus location: VMI Building, 1000 E. Marshall Street, Room 301
Mailing address: PO Box 980124, Richmond, Virginia 23298-0214
Voice: 804-828-9782 | TTY: 804-828-4608 | FAX: 804-828-4609

Web: <a href="http://www.vcuhealth.org/vp/sassdss">http://www.vcuhealth.org/vp/sassdss</a>

You should also explore Americans with Disabilities web site

#### **Honor system notice**

All students are at all times expected to conduct themselves in accordance with the VCU Honor Code, the full text of which can be found at the <u>Medical School's website</u>: . It is your responsibility to familiarize yourself with its provisions. In brief, however, appropriate conduct includes but is not limited to:

- <u>Refraining from committing</u> any act of cheating, plagiarizing, facilitating academic dishonesty, abusing academic materials, stealing, lying or soliciting others to engage in any of the above.
- <u>Refraining from acts of intimidation</u>, threats of physical harm, or threats of retribution in an attempt to prevent the testimony of another member of the University community at any time after charges have been made.
- <u>Reporting every instance</u> in which the student has a suspicion or knowledge that academic conduct which violates this policy or its spirit has taken place to the faculty member responsible for instruction, or to a member of the Honor Council.

## **Personal Safety**

What to Know and Do To Be Prepared for Emergencies at VCU

- 1. Sign up to receive VCU text messaging alerts <a href="http://www.vcu.edu/alert/notify">http://www.vcu.edu/alert/notify</a>. Keep your information up-to-date.
- 2. Know the safe evacuation route from each of your classrooms, Emergency evacuation routes are posted in on-campus classrooms.
  - 3. Listen for and follow instructions from VCU or other designated authorities.
  - 4. Know where to go for additional emergency information <a href="http://www.vcu.edu/alert">http://www.vcu.edu/alert</a>.
- 5. Know the emergency phone number for the VCU Police (828-1234). Report suspicious activities and objects.

#### **COURSE DESCRIPTION:**

This 3 credit course, consistent with the above Mission Statement, is designed to provide students with an overview of the broad field of public health with an emphasis on its application at the community level focusing on under served populations. Upon completion of this course students should be able to describe the skills necessary for the various public health specialists to practice their craft in the community. It is usually taught in room 110 inthe Grant house, but check the syllabus for any change the day before class. Students should be able to describe the organization of community health services and their relation to, and interdependency with, national and state public health agencies. They should be able to describe the major tracts within public health in which the various public health specialists apply their skills and how these skills are melded together to improve community health status. This includes the organization of public health within various levels of government, and the components of health care as it relates to under served populations.

The course is taught in 14, sessions conducted by experienced public health and clinical faculty, with direction, coordination and presence of the course director. The students are expected to read current journals on public health issues and be conversant with relevant public health matters currently under discussion in local, state and national media as well as scholarly publications.

The various faculty, teaching this course, have many years of experience. Some have experience since the end of the second world war, the time at which the recommended reference, by Rosen, finishes. During the course we will update you on important policies and activities that have occurred in the last 50 years.

## **PREREQUISITES:**

The prerequisite courses include completion of an undergraduate degree, which contained courses basic to public health such as history, biology, and chemistry, statistics, psychology & behavioral science.

The Director of the MPH Program admits students to the course

#### **Blackboard**

**All students** must use the Blackboard to get credit for this course. you will find this at <a href="http://blackboard.vcu.edu">http://blackboard.vcu.edu</a>

Use your VCU logon and password (given to you when you got your school email account) to logon to the course. If more than one of your courses is available on the blackboard system choose PMCH-600 (Introduction to Public Health, 2006). When you get to the Blackboard you will find the course discussion web. The the tests (quizzes) are available after each class, and found in the assignment section. Use of 'Blackboard' discussion fora and tests will be covered in the introductory session to be held during the first week of the Summer Semester. I will email all students enrolled on August 26th to be sure you can receive and respond to me by email.

After logging on to Blackboard be sure to visit the "help" tab in case you do not have readers for the programs listed.

#### **Course Web Pages**

It is the intention of the lecturers that the **students** prepare for each weekly session by reviewing the material on the web pages in this course, plus the readings, and by using the web to search for topical information using the web links provided on the department's main web page, plus other links they may find for themselves and share with the class. Each lecture session is intended to be a give and take using the discussion board, to be sure that you understand the principles identified for each session. This survey course will provide you with examples of more than 30 different areas of public health practice.

**Note on course Material:** To avoid unnecessary resort to printed materials I have provided pdf. files for all the slides shows and for the text material for each session for those of you who really want printed matter. These should be downloaded into Adobe Acrobat unless you have some other valid .pdf page viewer, from which you can print the pages.

Journal Articles: Reading articles for this course is best done by going to the Libarary web page, selecting the TML (Medical Library) web page, then using the "E-Journal Search" option on the "Research" tab, to find the journal and article on-line.

Student Email list

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Formerly the Department of Preventive Medicine and Community Health

# MPH 600 - Introduction to Public Health - 2007 Course Objectives

#### **Upon completion of the course**, you will be able to:

- 1) Describe the breadth of Public Health & Preventive Medicine Practice in the U.S. specifically, and the world in general
- 2) Describe the content and technology of public health practice, with an emphasis on its application to under served populations in a community.
- 3) Differentiate between the public health professions contributing to improvement of the public's health
- 4) Articulate the functions of national, state and local public health providers/agencies
- 5) Describe the major categorical functions of public health in relation to the year 2010 national health goals.
- 6) Better understand the forces of change impacting the public health profession by health care reorganization.
- 7) Describe the links between public health & medical care.
- 8) Be able to describe how public health activities strengthen the community's health status and interrelate to public and private human service agencies.,

## **Key Words**

Public Health, Goals, Objectives, Health Care System, Content of Public Health, Core Content, Expanded Content, Resources. Public Health Law, Public Health Ethics.

## READINGS.

The <u>required</u> readings for the Introduction to Public Health practice are found in: **Introduction to Public Health, 2nd Edn. by Mary Jane Schneider. Published by ASPEN in 2006.** 

Essentials of Public Heath - BJ Turnock. Jones & Bartlett, 2007

<u>Strongly recommended</u>: The Future of Public Health (available on-line - <u>see below</u>), published by Institute of Medicine in 1988, and 'The Future of the Public's Health in <u>the 21st Century</u>' these should be scanned before each class.

Additional appropriate readings can also be found in:

Maxcy-Rosenau-Last's Textbook of Public Health & Preventive Medicine. 13th Ed. edited by Last or 14th Ed. edited by Wallace, published by Appleton and Lange, Norwalk CN., (13th Ed. 1992. 14th Ed 1998). The 13th edition is more focused on public health while the 14th edition is more focused on clinical preventive medicine. This particular reference wll only be of value to MDs, DDS, DMVs. Most of the material provided in the PMCH-600 course will be found in Dr. Buttery's essays which update the original ones , that were the basis for his 'Handbook for Health Directors' published by Oxford University Press in 1990. That material is now out of date. Click Here for these essays updated for 2006

Other supplementary readings may be recommended by special guest lecturers, or experts on specific topics, designed to augment sessions presented by the course director. Students are also advised to become familiar with:

The American Journal of Public Health

The Journal of the American Medical Association

Millbank Memorial Fund Quarterly

**Epidemiology** in Medicine. Charles H. Hennekens, Julie E. Buring, editor Cheri Mayrent; Publisher, Little, Brown & Co.

Public Health & Human Ecology: Last J. M. Appleton & Lange. 1997 2nd Ed.

The following references **should be consulted frequently** during the course:

**US Preventive** Service Task Force: <u>Guide to Clinical Preventive Medicine</u> 3rd edition **Reading & understanding** Applied Statistics, A Self Learning Approach, Stahl & Hennes (CV Mosby)

**Socioeconomic Characteristics** of Medical Practice. AMA Center for Health Policy Research. **Control of Communicable Disease** in Man. Ed: Vavid L. Heymann, 18th Ed. 2004, APHA Students are expected to become familiar with current public health issues, such as:

- new medications for AIDS/HIV and TB
- prevention of violence
- emerging infections of public health interest such as SARS, and monkeypox
- aging
- chronic diseases
- Bioterrorism

#### SPECIAL REFERENCES:

You should visit the MMWR Weekly Report and click on the FREE MMWR subscription. This will send you the MMWR each week as an email attachment. You will be able to read the MMWR in html or adobe format. You should read this each week and be prepared to use the material in class, in examination answers, and to enhance class material.

Prior to each session visit <u>Healthy People 2010</u> and review the criteria related to the evening's topics by clicking on the <u>Leading Indicators</u>. You may want to visit <u>HP 2000</u> and see how the criteria have changed since 1990. Think about why they have changed. What data has been used to develop indicators?

You should also visit the National Academy of Sciences publication list to look at <a href="The-Future of Public Health">The Future of Public Health</a> and consider whether the Recommendations of this 1988 are currently being implemented, or why they are not yet implemented. What differences can you find in the above reference to the "PH in the 21st century". Be prepared to discuss these issues with your lecturers.

You are expected to read a daily regional newspaper of general circulation (e.g. Richmond Times Dispatch, Washington Post. New York Times) and at least one weekly news magazine such as US News & World Report or Newsweek. Students will also find useful information for the course by accessing the Internet either through the school's intranet or their personal computers. The course director will provide Web addresses (URLs) for the CDC, the NIH, the AMA the IOM of NAS and the APHA.

Accumulated Bookmarks for course

#### **EVALUATION**

This course is designed to provide you with general knowledge of the scope and content of public health, and its relation to health care services.

**Mid term and Final** examinations will assess your ability to describe the scope and content of public health practice in written form. The final Summary Grade will be a standard letter grade summing the results of mid term, and final written exams. [Note about grading. Although the each question is assessed a letter grade, the letter is determined by first grading each answer on a 100 point scale with 92-100=A, 81-91=B, 71-80=C, <71 =D/Fail]

#### Mid Term Examination: (15 points)

The examination will consist of an open book examination, for which the student will be required to complete one 700 word (minimum) essay, from 3-5 topics related to the first 6 weeks of presentations.

# Final Examination: (35 points)

This examination will also be an open book examination for which the student will be required to complete 2 (two) 700 word (minimum) essays, from 5 topics that will be presented at the last session of the course. The essays should be presented as an <a href="mailto:emai

The other 50 points are distributed equally among the **Weekly Quizzes and Discussion Board** items, after first grading on a 100 point scale.

The <u>Weekly Quizzes</u> are found on the discussion board by clicking on the assignment tab and choosing the assignment of the week. <u>A week starts</u> from 00:01am each Monday through 11:59pm the following Sunday. The quizzes are marked as they are completed. If you do not get 100% on your quiz on your first attmpt you may repeat the quiz within the study week. For this reason you are urged to take your quiz early enough to allow grading and potential repeat. Waiting until Sunday to complete a quiz negates any attempt to repeat the quiz to improve your score. All Blackboard submissions have a time & date stamp. Material turned in late will not be graded unless an extension has been granted 24 hours before the end of the study week.

**Guide** to answering <u>written</u> examination questions. Carefully review the Keywords and Concepts for the topics. Additional points are given for using material provided in the lectures, readings and from Web Research. This additional review is likely to lead to an "A" for the question answered.

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#### **EPID-600 Introduction to Public Health**

# **Introductory session**

# History, goals and organization of public health.

Students should be able to describe:

- How public health issues have affected health status over more than 4000 years.
- The purpose and outline methods used to develop public health policy and goals.
- The organization of federal, state and local health departments.
- Common activities carried out at each level, as well as certain special activities restricted to a particular organizational level.
- Who, what, when, why that make up the practice of public health

The scope & expertise necessary to practice public health requires a study of the fundamentals of biostatistics, epidemiology, environmental science, toxicology, ethology, physiology and behavioral science will permeate each sessions of this course.

Federal and State organizations and their responsibilities for Public Health Services. The major players in the game. An overview of traditional public health programs, the disciplines needed to carry them out are a focus of this course.

#### References

A History of Public Health. George Rosen, 'Future of Public Health'. IOM. Maxcy Rosenau 13th Edition: Scan Chaps. 1 & 69, HD Handbook, Chapter 2 pp 9 - 11. 14th Edn. Scan Chaps 1 & 6

#### Reading

Introduction to Public health: Schneider. 2nd Edn. Chapters 1 & 2 and 13 Essentials of Public Health- BJ Turnock, Jones & Bartlett, 2007, Chapters 1 & 3. Review the USPHS & Virginia Department of Health [VDH] Web pages'

The continuing theme of this course is that epidemiologic and biostatistical expertise are the underlying skills needed for all activities, whatever the field, in public health. <u>Visit Healthy People</u> <u>2010</u> before each evenings' session and review that part of the Healthy People Process which relates to the evening's discussion, to prepare your thoughts for the discussion boards.

The first, and probably the only material you need to memorize from the entire course is:

- The Ten Essential Public Health Services which are further expanded in
- The Essential Public Health Functions.

• Principles of Ethics for Public Health

These functions are the basis of public health as it enters the second millennium. They are the most recent consensus among the major national public health groups, following the 1998 "Future of Public Health" book (see link to the on-line text below), produced by the Institute of Medicine of the National Academy of Sciences. This book should be part of your own permanent library.

# The triumph of public health.

Until recently, the concept of prevention was most often tied to public health efforts, in particular to the prevention of infectious diseases. These preventive interventions had their root in the 1800s.

**In 1846**, Ignaz Semmelweis instituted handwashing on his obstetrical ward in Vienna's teaching hospital, cutting the death rate among delivering mothers more than fivefold. Joseph Lister later credited his developments in antiseptic surgery to Semmelweis, "Without Semmelweis, my achievements would be nothing."

**In 1854,** John Snow, Queen Victoria's anesthesiologist, removed the handle from the Broad Street public water pump in London's Soho district, ending a cholera epidemic that had killed more than 70 people over two days. [ <a href="http://www.rethinking.wellness.com">http://www.rethinking.wellness.com</a>] Also see the new book: The Strange Case of the Broad Street pump [John Snow and the mustery of CHolera] Sanra Hempel, University of Cauiforniua Press, 2007

**The Ten Essentials** are the culmination of over 2000 years of development of 'Hygiene" practice as identified in the web page on the <u>history of public health</u>. , Dr Ted Tweel, the health director of Hanover County Health Department, has provided a short <u>history of major events in Virginia's public health</u>. Also review the <u>History of Public Health in Virginia</u>, slide show prepared by Jeff Lake, Deputy Commissioner of Health, VDH [November 2005.] (<u>.pdf version</u>) As a final historical note look at this list of events at the CDC over the last 60 years.

Take a look at <u>death rates</u> for the five leading cause of death in 1900 and see <u>how they have changed</u>. Also, look at the <u>changes in life expectancy</u> in the U.S. over the last <u>100 years</u>. Scan the WHO <u>Global Challenges</u> for Public Health -2002. How good is health care in the US, compared to other countries? Can you find the answer on the web and put your conclusion in the first section of the discussion board.?

Read Elizabeth Fee's Unfulfilled Promise (needs Adobe Reader)

I also include for your review Dr Carmona's (The US Surgeon General) talk given when he visited VCU on World Health Day, earlier this year. (See left hand column)

Also, review <u>summaries of three projects</u> from the Robert Wood Johnson Fund (RWJF) identifying weaknesses in the Public Health System.

For every lecture/discussion of the MPH program you should consider how the specific session incorporates the five basic skills of public health which are:

- epidemiology
- biostatistics
- environmental health
- social and behavioral science
- health services administration

Also be aware fo the <u>Principles of Public Health Ethics</u>. Then you should consider whether they also incorporate the following extended skill set which the <u>IOM 2003 study</u> recommended as being incorporated into all public health education:

- Informatics
- Genomics
- Communication
- Cultural competence
- Community based participatory research
- Global Health
- Policy and Law
- Ethics

These expanded core competencies add to the application of the ten essentials (above.) Each session will include a continuing focus on public health policy in practice. Policy development will be discussed in the Winter Term in Dr. Lanier's course. The outline of Dr. Nelson's discussion of goals and policies in the public health arena are found in the <u>Goals web page</u>, (pdf-<u>Handouts</u>) Part 2 of tonight's session

Recent literature on ethical <u>relationships</u> between patients and their physicians are applicable to communities and their public health agencies as <u>partners</u>

Also, in preparation for the remainder of the course review the <u>content for training in public health</u> AGAIN, recommended by the Teachers of Preventive Medicine. This outline was prepared as a supplement to the Ten Essential Functions, referred to above. This outline is pertinent to anyone planning to practice public health and should be used as a learning tool in every course you take. This will allow you to see how the various elements of each course fit into, and complement, the other courses to ensure that you will be have acquired the skills necessary to carry out the Ten Essentials. When you are awarded your MPH. Consider this <u>organization chart</u> as one way of displaying the major elements of health care provided in the U.S. If you want to print out this graphic use landscape mode. Here is the WHO Statistical Report of HS Performance ( <u>See page 13 United States</u>, right hand column) Also review the report, issued in August 2006, from the <u>Commonwealth Fund</u> about development of a "High Performance Health System" in the US. If you want to follow this up I will be happy to forward the complete report (some 18 pages) by email upon request.

#### **URLs for this session**

# Late Breaking:

WHO 2007 10 Statistical Higlights.
WHO Guide to statistics at the WHO
Annual Report of the WHO - Summary (August 23, 2007)
Snapshots on Health Care Costs (From the KFF)
Medical Technology & Health Care Costs (From the KFF)

# **Additional Reading**

from the Karolinska Institute <u>History of Diseases</u> John Graunt's <u>Bills of Mortality</u>

#### Also,

National Academies Web casts
Is American health care the best?
America's Health Rankings
The European Health Plan 2003
Wanless Report of UK Health, 2003

<u>Public Attitudes</u> to Public Health (see the summary)

Bioinformatics Standards

**Preventive** Counseling

Future Health care Issues

Health and Health Care for the 21st Century: (editorial in AJPH by Everett Koop MD)

**Prevention Database** 

Key Resources on Health Coverage and the Uninsured

Health Care Glossary - Terms you should know.

Supercourse for Public Health

60 Years of Public Health Science at the CDC

#### Additional Useful Readings:

How to read an article

WHO & US Health Care

State H.D. Organization Charts

National Academy Press

Can we afford health services

The Public's opinion about Public Health

The Future of Public Health

# **Tutorials**

<u>Self paced tutorials</u> on various aspects of the health care system (From the KFF)

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