

# PHC 6003 — EPIDEMIOLOGY AND PREVENTION OF CHRONIC DISEASES

University of Florida  
College of Public Health and Health Professions  
College of Medicine  
Spring Semester 2016

Instructor: David S. Sheps, MD, MSPH  
Email: dssheps@ufl.edu

## Course Description

This course covers the major chronic diseases and their risk factors. The importance of this subject cannot be overstated since it is the major factor driving health care costs. The U.S. now spends more money per capita than any other nation yet is behind in longevity. Chronic diseases are the major factors driving these costs. The more epidemiologists understand about these diseases, the better they will be able to continue to study them effectively and attempt to influence public policy.

## Course Objectives

1. Develop a basic understanding of the multi-factorial disease etiology and pathophysiology of the major chronic diseases.
2. Interpret the strengths and limitations of papers in the literature and research proposals by understanding the appropriate pathophysiology and clinical practices in specific disease areas.
3. Understand the risk factors for various chronic diseases and appropriate ways to define exposure and outcome variables.
4. Identify and critically evaluate sources of surveillance data for chronic diseases and their risk factors.
5. Identify evidence-based clinical and population-based preventive measures for chronic diseases.

## Conduct of the Course

- 1) Lectures: are for general orientation. Students are responsible for all the material presented in the course and assigned readings.
- 2) Readings: The required text is: Remington PL, Brownson RC, and Wegner MV. *Chronic Disease Epidemiology and Control*. 3<sup>rd</sup> Edition. American Public Health Association. 2010. ISBN: 9780875531922.

The text is available in the Health Science Center Bookstore. New or used copies may be ordered from Amazon.com.

The list of the assigned readings, has been provided with the course schedule below. The assigned reading material is intended to supplement lectures. The reading list may be supplemented during the course.

- 3) Exams: There are 3 exams in this course. The exams will be short answer and each will count for one third of the final grade.
- 4) Attendance and class participation: Consistent with the spirit of graduate education and the interactive nature of public health practice, students are expected to attend every class session.
- 5) Grading:

Course grade:		Grading Scale: The grading scale for this course is as follows:	
Exam 1	33%	95% – 100% = A (4.00)	75% – 79% = C+ (2.67)
Exam 2	33%	90% – 94% = A- (3.67)	70% – 74% = C (2.00)
Exam 3	<u>34%</u>	85% – 89% = B+ (3.33)	65% – 69% = D (1.00)
	100%	80% – 84% = B (3.00)	Below 65% = E (0.00)

Letter grades translate to the following grade points at UF:

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar’s Grade Policy regulations at

<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

### Academic Integrity

Each student is bound by the academic honesty guidelines of the University of Florida and the Code of Student Conduct, printed in the *Student Guide* and published on the University web site. The Honor Code states: *We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.* Cheating, plagiarism, other academic dishonesty or conduct violations in any form is unacceptable and inexcusable behavior and can result in dismissal from the College and/or University. ***If you have any questions about appropriate conduct, ask the course instructor.***

### Accommodations for Students with Disabilities

If you require accommodation because of a disability, you must first register with the Dean of Students Office (<http://www.dso.ufl.edu/>). The Dean of Students Office will provide documentation to you, which you then give to the instructor when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

## Counseling and Student Health

Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the UF Counseling & Wellness Center, 352-392-1575. Visit their web site for more information:

<http://www.counseling.ufl.edu/>.

The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services, including primary care, women's health care, immunizations, mental health care, and pharmacy services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at:

[www.health.ufl.edu/shcc](http://www.health.ufl.edu/shcc)

Crisis intervention is always available 24/7 from: Alachua County Crisis Center:  
(352) 264-6789

<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

*BUT – Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone, so do not be afraid to ask for assistance.*

# PHC 6003 EPIDEMIOLOGY AND PREVENTION OF CHRONIC DISEASES

## Spring 2016 Schedule

Date	Topic	Lecturer	Readings
January 5-9	Introduction to the Course Key Concepts in Studies of Chronic Disease and Risk Factors	Sheps	CDC Chronic Diseases and Health Promotion. Overview <a href="http://www.cdc.gov/chronicdisease/overview/index.htm">http://www.cdc.gov/chronicdisease/overview/index.htm</a>  Remington, et. al: Chapters 1 and 2  Guzick DS. On the Same Page. Caring for Those Without Health Insurance: Practical Implications of the Affordable Care Act. Jan 11, 2014. <a href="https://UFandShands.org/">https://UFandShands.org/</a>
January 11-16	Role of Exercise and Fitness as Risk Factors for Chronic Diseases	Sheps	Remington, et.al: Chapter 3  Haskell, et.al. Physical Activity and Public Health: Updated Recommendation for Adults From the American College of Sports Medicine and the American Heart Association <a href="http://circ.ahajournals.org/content/116/9/1081.citation">http://circ.ahajournals.org/content/116/9/1081.citation</a>
January 17-23	Chronic Kidney Disease	Bozorgmehri	Remington, et al: Chapter 20  Go, et.al
January 24-30	Community Approach to Risk Factors for Cardiovascular Disease	Pearson	Remington, et al: Chapter 13  Pearson, et.al. AHA Guide for Improving CV Health at the Community Level, 2013 Update <a href="http://circ.ahajournals.org/content/127/16/1730">http://circ.ahajournals.org/content/127/16/1730</a>  Goff, et.al. 2013 ACC/AHA Guideline on the Assessment of CV Risk. <a href="http://circ.ahajournals.org/content/129/25_suppl_2/S49">http://circ.ahajournals.org/content/129/25_suppl_2/S49</a>
<b>February 1-6</b>	Women's Health; Women's Health Initiative Study	Limacher	NHLBI WHI Overview
	<b>Exam 1</b>		
February 8-13	Addiction Psychiatric Disorders	Striley	Remington, et.al: Chapters 8 and 16
February 15-20	Depression	Sheps	Remington, et.al: Chapter 5
February 22-26	Smoking	Tomar	US Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General (2004). Chapter 1. <a href="http://www.cdc.gov/tobacco/data_statistics/sgr/2004/pdfs/chapter1.pdf">http://www.cdc.gov/tobacco/data_statistics/sgr/2004/pdfs/chapter1.pdf</a>  International Agency for Research on Cancer (2012). A review of human carcinogens: pharmaceuticals. Monograph 101A. Preamble to the IARC Monographs. <a href="http://monographs.iarc.fr/ENG/Monographs/vol100A/mono100A-4.pdf">http://monographs.iarc.fr/ENG/Monographs/vol100A/mono100A-4.pdf</a>

Date	Topic	Lecturer	Readings
<b>February 27-March 5</b>	<b>Spring Break</b>		
Mach 7-12	Cancer	Tomar	Remington, et.al: Chapter 14 Nelson HD, Tyne K, Naik A, Bougatsos C, Chan BK, Humphrey L; Screening for breast cancer: an update for the U.S. Preventive Services Task Force. Ann Intern Med. 2009;151(10):727-37, W237-42. <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2972726/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2972726/</a>
<b>March 14-19</b>	Obesity	Perri	Remington, et.al: Chapters 6 and 9
	<b>Exam 2</b>		
March 21-26	Chronic Disease Surveillance	Hopkins	Remington, et.al: Chapter 4 CDC. Surveillance Resources CDC: Florida Chronic Disease Profile CDC: Chronic Disease Indicators Florida Charts Council of State and Territorial Epidemiologists
March 28 - April 2	Clinical Trials	Pepine	Remington, et.al: Chapter 2
April 4-9	Chronic Disability and Injuries	Shorr	
<b>April 11-16</b>	<b>Exam 3</b>		

## Spring 2016 Guest Speakers

Shahab Bozorgmehri, MD, MPH. PhD candidate, UF Department of Epidemiology.

Richard Hopkins, MD, MSPH. Adjunct Professor, UF Department of Epidemiology.

Marian Limacher, MD. Professor, Division of Cardiovascular Medicine, Department of Medicine, Senior Associate Dean for Faculty Affairs and Professional Development, UF College of Medicine. Director, UF CTSI Training and Professional Development Program.

Thomas A. Pearson, MD, MPH, PhD. Professor, Department of Epidemiology and Executive Vice President for Research and Education, UF Health Science Center.

Carl Pepine, MD. Professor, Division of Cardiovascular Medicine, Department of Medicine, UF College of Medicine.

Michael G. Perri, PhD. Professor, Department of Clinical and Health Psychology and Dean, UF College of Public Health and Health Professions

Ronald Shorr, MD, MS. Professor, UF Department of Epidemiology, Director, Geriatric Research Education and Clinical Center (GRECC), Malcom Randall VAMC, Co-Director, Training and Professional Development Core, Clinical Translational Science Institute (CTSI), Director, Advanced Postgraduate Program in Clinical Investigation (APPCI)

Catherine Striley, PhD, MSW, ACSW, MPE. Assistant Professor, UF Department of Epidemiology

Scott Tomar, DMD, MPH, DrPH. Professor, Department of Community Dentistry and Behavioral Science, UF College of Dentistry.

## Spring 2016 Readings

CDC Chronic Diseases and Health Promotion. <http://www.cdc.gov/chronicdisease/overview/index.htm>

CDC Chronic Disease Prevention and Health Promotion. Index page to chronic disease surveillance resources at CDC. <http://www.cdc.gov/chronicdisease/stats/>

CDC Chronic Disease Prevention and Health Promotion. State Profile: Florida. — Florida chronic disease burden document. <http://www.cdc.gov/chronicdisease/states/florida.htm>

CDC National Center for Chronic Disease Prevention and Health Promotion - interactive access to information about 97 chronic disease indicators, includes rationale and definitions for indicators. <http://apps.nccd.cdc.gov/cdi/>

Council of State and Territorial Epidemiologists. Chronic Disease Committee. Revision to the National Chronic Disease Indicators. Pdf.

Florida Charts. Chronic Diseases. Interactive access to chronic disease information for Florida. <http://www.floridacharts.com/Charts/ChronicDiseases/>

Giovino GA, Mirza SA, Samet JM, Gupta PC, Jarvis MJ, Bhala N, Peto R, Zatonski W, Hsia J, Morton J, Palipudi KM, Asma S; GATS Collaborative Group. Tobacco use in 3 billion individuals from 16 countries: an analysis of nationally representative cross-sectional household surveys. *Lancet*. 2012 Aug 18;380(9842):668-79. <http://www.sciencedirect.com/science/article/pii/S014067361261085X>

Go AS, Chertow GM, Fan DJ, McCulloch CE, Hsu CY. Chronic kidney disease and the risks of death, cardiovascular events, and hospitalization. *New England Journal of Medicine* 2004; 351:1296-305. On PubMed.

Goff, et.al. 2013 ACC/AHA Guideline on the Assessment of CV Risk. *Circulation*. 2014; 129: S49-S73 Published online before print November 2013, doi: 10.1161/01.cir.0000437741.48606.98. [http://circ.ahajournals.org/content/129/25\\_suppl\\_2/S49](http://circ.ahajournals.org/content/129/25_suppl_2/S49)

Guzick, DS. On the Same Page. Caring for Those without Health Insurance: Practical Implications of the Affordable Care Act. Jan 11, 2014. <https://ufhealth.org/news/2014/caring-those-without-health-insurance-practical-implications-affordable-care-act>

Haskell, et.al. Physical Activity and Public Health: Updated Recommendation for Adults From the American College of Sports Medicine and the American Heart Association. *Circulation*. 2007; 116: 1081-1093 Published online before print August 2007, doi: 10.1161/CIRCULATIONAHA.107.185649 <http://circ.ahajournals.org/content/116/9/1081.citation>

International Agency for Research on Cancer (2012). A review of human carcinogens: pharmaceuticals. Monograph 101A. Preamble to the IARC Monographs. <http://monographs.iarc.fr/ENG/Monographs/vol100A/mono100A-4.pdf>

Nelson HD, Tyne K, Naik A, Bougatsos C, Chan BK, Humphrey L; U.S. Preventive Services Task Force. Screening for breast cancer: an update for the U.S. Preventive Services Task Force. *Ann Intern Med* 2009;151(10):727-37, W237-42. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2972726/>

NHLBI Women's Health Initiative Overview. <https://www.whi.org/about/SitePages/About%20WHI.aspx>

Pearson, et.al. AHA Guide for Improving Cardiovascular Health at the Community Level, 2013 Update *Circulation*. 2013; 127: 1730-1753. Published online before print March 2013, doi: 10.1161/CIR.0b013e31828f8a94. <http://circ.ahajournals.org/content/127/16/1730>.

Remington PL, Brownson RC, Wegner MV. *Chronic Disease Epidemiology and Control*. 3rd edition. American Public Health Association. 2010. ISBN: 9780875531922

US Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General (2004). Chapter 1  
[http://www.cdc.gov/tobacco/data\\_statistics/sgr/2004/pdfs/chapter1.pdf](http://www.cdc.gov/tobacco/data_statistics/sgr/2004/pdfs/chapter1.pdf)

Wilson LM, Avila Tang E, Chander G, Hutton HE, Odelola OA, Elf JL, Heckman-Stoddard BM, Bass EB, Little EA, Haberl EB, Apelberg BJ. Impact of tobacco control interventions on smoking initiation, cessation, and prevalence: a systematic review. *J Environ Public Health*. 2012;2012:961724. Epub 2012 Jun 7. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3376479/>

Wood DE, Eapen GA, Ettinger DS, et al. Lung cancer screening. *J Natl Compr Canc Netw* 2012;10(2):240–65. <http://www.jnccn.org/content/10/2/240.long>