

PHC 6003 — EPIDEMIOLOGY AND PREVENTION OF CHRONIC DISEASES

University of Florida
College of Public Health and Health Professions
College of Medicine
Fall Semester 2017
Online in e-Learning in Canvas at <http://elearning.ufl.edu/>

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Office hours: By appointment, email an appointment request

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. 3rd 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 1/3 of the final grade.

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	34%	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 classroom 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

Counseling and Student Health



U Matter, We Care

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.
- You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- 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. 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: <https://shcc.ufl.edu/>
- 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>

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.

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Fall 2017 Schedule

Date	Topic	Lecturer	Readings
Week 1 08/21 – 08/27	Introduction to the Course Key Concepts in Studies of Chronic Disease and Risk Factors	Sheps	CDC Chronic Diseases and Health Promotion. Overview http://www.cdc.gov/chronicdisease/overview/index.htm 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. https://UFandShands.org/
Week 2 08/28 – 09/04	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 http://circ.ahajournals.org/content/116/9/1081.citation
Week 3 09/05 – 09/10	Chronic Kidney Disease	Bozorgmehri	Remington, et al: Chapter 20 Go, et.al
Week 4 09/11 – 09/17	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 http://circ.ahajournals.org/content/127/16/1730 Goff, et.al. 2013 ACC/AHA Guideline on the Assessment of CV Risk. http://circ.ahajournals.org/content/129/25_suppl_2/S49
Week 5 9/18- 9/23	Women's Health Women's Health Initiative Study	Limacher	NHLBI WHI Overview
Exam 1 Opens 09/25/2017 Closes 09/30/2017			
Week 6 10/02 – 10/05	Addiction Psychiatric Disorders	Striley	Remington, et.al: Chapters 8 and 16
Week 7 10/09 – 10/14	Depression	Sheps	Remington, et.al: Chapter 5 Lichtman, et al. 2014 http://circ.ahajournals.org/content/early/2014/02/24/CIR.000000000000019.full.pdf+html#wrapper
Week 8 10/16– 10/21	Smoking	Tomar	Remington et.al: Chapter 5

Date	Topic	Lecturer	Readings
			<p>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</p> <p>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</p>
Week 9 10/23 – 10/28	Cancer	Tomar	<p>Remington, et.al: Chapter 14</p> <p>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. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2972726/</p>
Week 10 10/30- 11/4	Obesity	Perri	Remington, et.al: Chapters 6 and 9
Exam 2 Opens 11/01/2017 Closes 11/04/2017			
APHA Conference – Atlanta, Georgia – 11/4 to 11/8			
Week 11 11/13 – 11/18	Chronic Disease Surveillance	Hopkins	<p>Remington, et.al: Chapter 4</p> <p>CDC. Surveillance Resources</p> <p>CDC: Florida Chronic Disease Profile</p> <p>CDC: Chronic Disease Indicators</p> <p>Florida Charts</p> <p>Council of State and Territorial Epidemiologists</p>
Week 12 11/20- 11/21	Clinical Trials	Pepine	Remington, et.al: Chapter 2
Week 13 11/27 – 12/2	Chronic Disability and Injuries	Shorr	
Exam 3 Opens 12/04/2017 Closes 12/06/2017			

Fall 2017 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.

Fall 2017 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

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

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>