THE UNIVERSITY OF TEXAS AT ARLINGTON SCHOOL OF NURSING

N6321 – 016 Epidemiology

SYLLABUS

Spring 2011 Classroom # Pickard 216 / Web

The University of Texas at Arlington School of Nursing PhD Program

Special Topics in Nursing: Epidemiology (3 Credit and 45 Clock Hours) Spring 2011

INSTRUCTOR: Instructor: Daisha J. Cipher, Ph.D.

Office # Pickard 518

Office Hours: Wednesdays 2 to 4pm

Campus Mailbox: 19407 Email: cipher@uta.edu

COURSE WEB SITE OR WORLD

WIDE WEB SITE:

http://www.uta.edu/nursing

COURSE PREREQUISITES: Graduate standing, introductory statistics course, and

proficiency in computer use

REQUIRED TEXTBOOKS &

MATERIALS:

Required:

Gordis, L. (2008). Epidemiolology, 4th ed.

Philadelphia: Elsevier Saunders. ISBN: 9781416040026

Recommended:

Morton, R.F., Hebel, J.R., McCarter, R.J. (2001). *A Study Guide to Epidemiology & Biostatistics, 5th ed.* Gaithersburg, MD: Aspen. ISBN: 0834217589

COURSE DESCRIPTION:

The course introduces the basic principles and methods of epidemiology and demonstrates their applicability in the field of public health. Topics to be covered include the historical perspective of epidemiology, measures of disease occurrence and of association, clinical

epidemiology, disease screening, causal inference, and

study design.

COURSE LEARNING GOALS/OUTCOME OBJECTIVES: At the completion of this course, the student will have had the opportunity to:

- 1. Describe the historical evolution, landmark studies, and applications of epidemiology.
- 2. Analyze basic epidemiological concepts, including the natural history of disease, models of disease transmission, levels of prevention, and causality, including environmental and genetic causes of disease.
- 3. Compare and contrast the strengths and weaknesses of the major study designs used in epidemiology: cross-sectional, case-control, cohort, and clinical trials.

- 4. Describe the potential effects of bias, confounding, power, and attrition on validity, reliability, and generalizability in epidemiological studies, as well as standard approaches for handling them through study design and analysis.
- 5. Define and contrast: incidence, prevalence, rate, ratio, risk, exposure, and susceptibility, and when given the necessary data, calculate the first five of these.
- 6. Analyze the strengths and limitations of screening for disease.
- 7. Calculate the sensitivity, specificity, and predictive values of diagnostic and screening tests; discuss their implications.
- 8. Describe approaches to and the importance of sample selection, blinding, and randomization in clinical trials.

ATTENDANCE AND DROP POLICY:

- Regular class attendance and participation is expected of all students.
- Students are responsible for all missed course information.

A PhD student who wishes to change a schedule by either dropping or adding a course must first consult with his or her PhD Advisor. The following regulations pertain to adds and drops:

- 1. A student may not add a course after the end of the late registration.
- 2. A PhD student dropping a course or resigning from the university after the Census Date but before the final designated drop date for the enrolled semester will receive a grade of W only if at the time of dropping the student is passing the course (has a grade of A, B, or C); if the student has a D or F at the time of dropping, an F will be recorded. Students dropping a course must: (1) Complete a Course Drop Form (available online http://www.uta.edu/nursing/g-downloads.htm or PhD Office Room 512; (2) obtain faculty signature and current course grade; and (3) Submit the form to PhD Office Room 512.
- 3. A PhD student who desires to drop all courses for which he or she is enrolled is reminded that such action constitutes a withdrawal from the University. The student should indicate intention to withdraw from all courses by: (1) Completing a Registration Form (available online http://www.uta.edu/nursing/g-downloads.htm or

- 4. PhD Office Room 512; (2) Obtaining faculty signature for each course enrolled and current course grade; (3) Filing the registration form in the School of Nursing Office Room 512; and (4) Filing the Registration Form in the Office of the Registrar in Davis Hall Room 333.
- 5. PhD students may drop a course up to 12 weeks in the fall or spring semester and up to 8 weeks in a 10-week summer session. Under extreme circumstances, the Dean or Associate Dean of the PhD in Nursing Program may consider a petition to withdraw after the designated drop date, but in no case may a PhD student selectively drop a course after the drop date and remain enrolled in any other course.

Last Date Drop or Withdraw: - April 1, 2011

<u>In Classroom (bolded):</u>

TENTATIVE LECTURE/TOPIC
SCHEDULE (COURSE
CONTENT):

Class 1:	Introduction to Course Overview of Epidemiology Gordis Chapters 1 and 2	January 21
Class 2:	Occurrence of Disease: Morbidity Gordis Chapter 3 + <u>Handout 1</u>	January 28
Class 3:	Occurrence of Disease: Mortality Gordis Chapter 4	February 4 online HW 1 Due
Class 4:	Screening Gordis Chapter 5	February 11 online HW 2 Due
Class 5:	Survival Gordis Chapter 6 + <u>Handout 2</u>	February 18 HW 3 Due
Class 6:	Randomized Clinical Trials Gordis Chapter 7 and 8	February 25 online HW 4 Due
Class 7:	Cohorts Gordis Chapter 9	March 4 online HW 5 Due

Gordis Chapter 10 + Article 1

March 11 HW 6 Due

Spring Break March 18; no class

Class 9:	Risk Estimation	March 25 online
	Gordis Chapter 11	HW 7 Due

Class 10: **Risk Estimation** April 1 HW 8 Due Gordis Chapters 12-13

Handout 3 + Article 2

Class 11: Genetics and Environmental Factors April 8 online HW 9 Due

Gordis Chapter 16

Class 12: Health Services/Evaluation Research April 15 online

Gordis Chapter 17

Class 13: Public Policy and Ethics April 22 online

Gordis Chapters 19 and 20

Class 14: Association and Causation April 29

Gordis Chapters 14 – 15 Article 3 and Handout 4

May 6 Class 15: No class, Homework 10 due HW 10 Due

SPECIFIC COURSE REQUIREMENTS:

Weekly homework + online participation

Homework

The list of homework assignments is posted on Blackboard. There are 10 required homework assignments for this course.

Homework is due at 10:00 pm CST on the date shown in the Schedule (see above). Homework received after this time and within the next 24 hours will lose 5 points. Homework received after this period will be graded and returned but no points will be given.

Each answer should be stated in just a few sentences. Cogency is highly admired, but enough information should be given to make it clear that you understand the concept.

When calculations are required, they must be shown in full, with every step shown. Partial or no credit will be given for calculations that do not meet this requirement.

Homework should be submitted as an MS Word document attached to an email to the instructor. Be careful to follow these instructions or you will not receive a grade for your homework. In the subject line of the email, put the homework number, as in "Homework7" but it is critical that it start with the full word "homework" so that it will go to the right place on the instructor's computer and not get lost. You will get an automated reply that your email was received. Therefore, do not send any other email to the instructor with "homework" in the subject line because it will trigger this automated reply. Instead, use other words or abbreviations like "hmk" if you have a question about homework.

For the Word file that you use, follow this format for naming your file, assuming your last name is Jones: homework7_jones

Note that what you put in the subject line of your email is different from what you name your Word file. Students will lose points for not making this distinction after the second week of class.

For calculations using tables and for 2x2 tables, use the Table function in Word. For all text and numbers in the homework, use at least 12 point font. Do not use the paragraph Numbering function within Word; it causes problems when your homework problem numbers are not continuous.

Use your UTA mailing address. Email from other email providers will not be accepted or returned.

Also be sure to use a bona fide email program such as Outlook Express so that your sent mail will go into your Sent Mail folder. This is important because sometimes "hiccups" occur in the Internet and your email may not get to its intended destination but neither will you find that out. If the instructor does not receive the homework but the student sent it in by the deadline, the student will need to send the instructor a copy of the email that shows it sent it to the instructor with the homework attached. From that, the instructor will be able to see the

date and time and give the student full credit. If the student cannot document that the work was sent in on time, the student will not receive any credit. In other words, the student must be sure to send herself a copy of her homework email at the same time that it is sent to the instructor.

Online Class Participation

A post or message that demonstrates substance contributes to the understanding and application of ideas by doing one or more of the following: Reflection about meaning: Describe thoughtfully what something means or new insights it provides, or raise a question as a seed for clarification or further discussion. Analysis: Discuss relevant themes, concepts, main ideas, components, or relationships among ideas. Or, identify hidden assumptions or fallacies in reasoning. Elaboration: Build on ideas of others or ideas found in the readings by adding details, examples, a different viewpoint,. or other relevant information. Application: Provide examples of how principles or concepts can be applied to actual situations, or discuss the implications of theory for practice. Synthesis: Integrate multiple views to provide a

synthesis: integrate multiple views to provide a summary, a new perspective, or a creative refashioning of ideas.

Evaluation: Assess the accuracy, reasonableness, or quality of ideas.

Note: A substantive message does not have to be long. Not all long posts are substantive, and not all short posts are nonsubstantive.

Students who do not participate during Monday to Friday will receive a zero for that week. To receive full credit, the student must be an active participant. Participation is defined as "making substantive comments or asking good questions." It does not include comments such as "way to go!" or "yeah, that's what I was thinking too" although these comments are perfectly acceptable and contribute to the esprit de corps. "Substantive comments," as described in the previous paragraph, can be addressed to fellow students or to the faculty. These would include helping other students when they have questions. "Good questions" means a question that is not readily obvious when reading the chapter. Questions that would not be considered for points are those that could be answered by anyone who read the chapter, such as "what's the formula for the Odds Ratio?" "Good questions" show that the student has done the readings, gone through the practice quiz, and either still cannot quite grasp the

concept (which is very common) or is now thinking about how it could be applied in practice.

If you explain how to work a problem but your explanation is wrong, you will not receive points for class participation, or in other words, comments must be constructive and accurate. You will not be graded down for saying the wrong thing, but you do not receive any points either.

Students who meet the minimum requirements for participation in any given week will earn a grade of 70. If students go beyond the minimum and do a good job of discussion, the grade will be 80-89. To get grades in the A range requires an outstanding level of participation.

The reason this section gets such a high percentage of the grade is because in online learning, interaction is critical. Also, working together is the best way to really learn the concepts. Students who do not wish to participate or do not participate fully will not be getting the full educational experience they need in order to successfully understand these concepts and thus to successfully complete the course.

The timeline for these weekly discussions is as follows. Students should have read the text and begun working on the homework by Monday of each week. Postings of comments and questions should begin on Monday and no later than Tuesday so that all discussion can be completed by Friday. Students who post their first question/comment on Friday afternoon will probably not get a response in time to help with understanding the concepts. Essentially, then, the main discussion points should be made in the early to middle part of the week so that everything can be wrapped up by Friday afternoon. Students are welcome to continue discussions on the weekend but having your concerns addressed on the weekend should be considered "iffy" at best.

Your grade for online participation will be based on postings made between Saturday morning and Friday at noon, although postings are not required until Monday or Tuesday. Students who begin their postings after Tuesday can receive no more than 7 points for the week.

There will be 10 weeks of online posting requirements, for a maximum of 10 points per week.

TEACHING METHODS/STRATEGIES:

Online discussion, homework, narrated lectures, website content

GRADE CALCULATION (COURSE EVALUATION & FINAL GRADING):

Online Class Participation: 10 points per week X 10 graded weeks = 100 possible points (40% of grade)

Homework: 10 points per week X 10 graded weeks = 100 possible points ((60% of grade)

Course Grading Scale

A = 92-100

B = 83-91

C = 74-82

D = 68-73

Rounding will be done only on the final course grade, with scores of .5 rounded up and scores of less than .5 rounded down.

STATUS OF RN LICENSURE:

All graduate nursing students must have an unencumbered license as designated by the Board of Nursing (BON). It is imperative that any student whose license becomes encumbered by the BON must immediately notify the Associate Dean for the PhD Program, Dr. Jennifer Gray. Failure to do so will result in dismissal from the PhD Program. The complete policy about encumbered RN license is available online at: http://www.uta.edu/nursing/grad/unencumbered

CONFIDENTIALITY AGREEMENT:

You signed a Confidentiality Form in orientation and were provided a copy of the form. Please take your copy of this Confidentiality Form with you to your clinical sites. <u>Please do not sign</u> other agency confidentiality forms. Contact your faculty if the agency requires you to sign their confidentiality form.

AMERICANS WITH DISABILITIES ACT:

The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 93112 -- The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans With Disabilities Act - (ADA), pursuant to section 504 of The Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with

disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

STUDENT SUPPORT SERVICES

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

STUDENT CODE OF ETHICS

The University of Texas at Arlington School of Nursing supports the Student Code of Ethics Policy. Students are responsible for knowing and complying with the Code. The Code can be found in the Student Handbook online: http://www.uta.edu/nursing/hbk/toc.htm

ACADEMIC DISHONESTY:

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

PLAGIARISM:

Copying another student's paper or any portion of it is plagiarism. Additionally, copying a portion of published material (e.g., books or journals) without adequately documenting the source is plagiarism. If <u>five</u> or more words in sequence are taken from a source, those words must be placed in quotes and the source

referenced with author's name, date of publication, and page number of publication. If the author's <u>ideas</u> are rephrased, by transposing words or expressing the same idea using different words, the idea must be attributed to the author by proper referencing, giving the author's name and date of publication. If a single author's ideas are discussed in more than one paragraph, the author must be referenced at the end of each paragraph. Authors whose words or ideas have been used in the preparation of a paper must be listed in the references cited at the end of the paper. Students are encouraged to review the plagiarism module from the UT Arlington Central Library via

http://library.uta.edu/tutorials/Plagiarism

BOMB THREATS:

If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

E-CULTURE POLICY:

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning department requirements, registration, financial aid and scholarships, payment of bills, and graduation may be sent to students through email. All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. Students are responsible for checking their email regularly.

NO GIFT POLICY:

In accordance with Regent Rules and Regulations and the UTA Standards of Conduct, the School of Nursing has a "no gift" policy. A donation to one of the UTA School of Nursing Scholarship Funds, found at the following link: Nursing Scholarship List would be an appropriate way to recognize a faculty member's contribution to your learning. For information regarding Scholarship Funds, please contact the Dean's office.

PhD COURSE SUPPORT STAFF:

Vivian Lail-Davis, Admin. Assistant, Room 512; Phone: (817) 272-1038; Fax: (817) 272-2950;

Email: vivian@uta.edu

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LIBRARY INFORMATION: Helen Hough, Nursing Librarian

(817) 272-7429 hough@uta.edu

Research Information on Nursing:

http://www.uta.edu/library/research/rt-nursing.html

MISCELLANEOUS Inclement Weather (School Closing) Inquiries:

INFORMATION: Metro (972) 601-2049

Fax Number - UTA School of Nursing: (817) 272-2950

Attn: PhD in Nursing Office

UTA Police (Emergency Only): (817) 272-3003

Mailing Address for Packages:

UTA School of Nursing C/O (insert faculty name)

411 S. Nedderman Drive, Pickard Hall

Arlington, Texas 76019-0407

The University of Texas at Arlington School of Nursing PhD in Nursing Program

PHD IN NURSING WEBSITES

Description	Website
University of Texas Home Page	http://www.uta.edu
Graduate Catalog & Faculty	http://www.uta.edu/gradcatalog/nursing
PhD in Nursing Programs	http://www.uta.edu/nursing/PhD/program.php
PhD Nursing Courses & Syllabi	http://www.uta.edu/nursing/grad/phd-crsdescriptions
Faculty and Staff Email Contacts and Biosketches	http://www.uta.edu/nursing/directory
Graduate Forms	http://www.uta.edu/nursing/g-downloads.htm
Student Confidentiality Statement	
Liability Policy Value	
Health Insurance Verification Form	
◆ Traineeship Statement Forms	
Criminal Background Check (Group One)	http://www.dfwhc.org/GroupOne/
Instructions for E-Reserves	http://www.uta.edu/library/
	Select under Library Catalogs
	(<u>UTA Library Catalogs</u>)
	Select Course Reserves
	Look for Instructor's Name
	Click Search
	Select Article
	Password is course abbreviation and course
	number.
	ALL CAPS no spaces (ex. NURS5340).