Epidemiology 2200B: Introduction to Epidemiology

Course Outline (Revised)

Winter 2014

1 instructors

Course coordinator: Prof. John Koval jkoval@biostats.uwo.ca

Lecturer: Prof. Neil Klar

T.A.: Lynn Zhu

Kyla Naylor knaylor2@uwo.ca

2 Times and locations

Tuesday: 3:30-4:20Room 103 Kresge BuildingLectureTuesday: 4:30-5:20Room 103 Kresge BuildingTutorialThursday: 4:30-5:20Room 203 Kresge BuildingLecture

3 Required Textbooks:

- Gordis, Leon (2013), *Epidemiology, 5th Edition*, Philadelphia: Elsevier Saunders
- Custom Course Material (available at the U.W.O. Bookstore)

Date	Topics and Readings(Gordis)	Tutorials
		and Assignments
Jan 9	Introduction to Epidemiology;	
Jan 14	Causation; Disease Transmission	Tutorial 1
	$(Chapters \ 1 \ \& \ 2)$	
	Assignment 1 posted on OWL	
Jan 16	Measuring Occurrence of Disease;	
Jan 21	Natural History of Disease	Tutorial time
	(Chapters 3, 4 & part 6)	used for lecture
Jan 23	Cohort, Case-Control, Cross-Sectional Studies	Assignment 1 DUE
Jan 28	Assignment 2 posted on OWL	Tutorial 2
	(Chapters 9, 10 &13)	
Jan 30	Estimating Risk (Chapter 11)	
Feb 4	Estimating the Potential for Prevention	Assignment 2 DUE
	$(Chapter\ 12)$	
Feb 6	Review	
Feb 11	Mid-Term Exam (In Class)	
Feb 17	CONFERENCE WEEK	
Feb 25	Bias, Confounding and Interaction	Tutorial 3
	Assignment 3 posted on OWL	
Feb 27	(Chapter 15)	
Mar 4	From Association to Causation	Assignment 3 DUE
Mar 6	(Chapter 14)	
Mar 11	Assessing the Validity and Reliability of	Tutorial 4
	Assignment 4 posted on OWL	
Mar 13	Diagnostic and Screening Tests	
	(Chapters $5 \& 18$)	
Mar 18	Randomized Trials (Chapters 7 & 8)	Assignment 4 DUE
Mar 20		
Mar 25	Meta analyses and systematic reviews	Tutorial 5
	Assignment 5 posted on OWL	
Mar 27		
Apr 1	to be announced	Assignment 5 DUE
Apr 3		
Apr 8	Course Review/Snow Day Makeup	

Notes will be posted on OWL before each lecture.

4 Evaluation:

- 5 Assignments (each worth 5%) 25%
 - -4% for submitted assignment
 - -1% for lab attendance
- Mid-term exam* (multiple choice/short answer) 35%
- Final exam* (multiple choice/short answer) 40%

Bring a non-programmable calculator. You are allowed one sheet of formulae (not definitions) which must be handed in with your exam.

5 Tutorials:

Please bring your course text & custom course material to each tutorial.

Tutorial	Date	Relevant Readings (Textbook,	Topics
		Custom Course Material)	
0	Jan 7		Introduction
1	Jan 14	Chapter 3 & White et al. (1999)	Prevalence, 95% CIs,
		Bring assignment 1	Sample Size, Precision
2	Jan 28	Chapter 11 & Tinetti et al. (1988)	Odds Ratios, Risk Ratios,
		Bring assignment 2	95% CIs
3	Feb 25	Yun & Choi (1990)	Stratified Analysis,
		and Yun & Choi (1998)	Test for Trend
		Bring assignment 3	
4	Mar 11	Chapter 15 & Bell et al. (2001)	Confounding, Interaction
		Bring assignment 4	
5	Mar 25	Chapter 5	Sensitivity, Specificity,
		Bring assignment 5	Likelihood Ratios

^{*}Final is cumulative, weighted slightly more towards $2^{\rm nd}$ half of course

6 Assignments:

- All assignments will be posted on OWL: https://owl.uwo.ca/portal
- Assignments are due at the **BEGINNING** of class on the date specified
- 10% penalty if handed in by **4:00pm on the day after the specified date** to a staff member in the main office, Department of Epidemiology & Biostatistics, Room K201, Kresge Building.
- 20% penalty if handed in by **4:00pm on the second day after the specified date** (follow the above procedure).
- Assignments will receive a mark of zero after 4:00 pm on the second day after the due date

PLEASE READ THE FOLLOWING IMPORTANT POLICIES:

ACADEMIC DISHONESTY: The submission of a fraudulent assignment is a Scholastic Offence as outlined in Senate Regulations in the Western Academic Calendar. The submitted assignment must be the student's independent work (you must complete the assignment by yourself in your own words). This does not preclude discussions for clarification of problems with the professor, teaching assistant, or fellow classmates. If in doubt, please ask. MISSED EXAMINATIONS: Senate policies must be followed before arrangements for make-up examinations will be considered. APPEALED GRADES: All assignments and tests are evaluated against model answers. Students should approach their TA for better understanding of a concept or if they note arithmetic errors. Students 'fishing' for more marks will have the entire assignment or test re-graded.

DISTRESS: Studentswhoinemotional/mentalarereferHealth@Western distressshouldtoMentalhttp://www.uwo.ca/uwocom/mentalhealth/for completelist \boldsymbol{a} of options about how to obtain help.