VHM-811 CLINICAL EPIDEMIOLOGY
Fall 2007

Instructors:

Jette Christensen (JC) Carol McClure (CM) Abou Mounchili (AM) Henrik Stryhn (HS)
John VanLeeuwen (JVL)

Lectures:

Two 3-hour lectures/seminars per week to be held on Tuesdays and Fridays starting at 9:00. The general format will be as follows (although there will be some week to week variation).

- Tuesday
  - cover basic material in notes provided
- Friday
  - take up some exercises and/or review assigned readings
  - laboratory session working on exercises

Text required:

Veterinary Epidemiological Research (VER) – Dohoo, Martin, Stryhn

Computer software:

The main program used will be Stata. Spreadsheets and Freecalc will be used in some exercises.

Grading:

Assignments (3) = 30%
Midterm exam = 25%
Final exam = 45% (The exams will be in-class exams)

Location:

Classes will be held in 225N and AVC Faculty Lounge (FL - center block of AVC). Lab sessions will be held in the small computer lab or 225N (as indicated by the instructor).

It is recommended that you read the material from the relevant chapters in VER prior to the lecture/lab sessions so that you more fully comprehend the material covered.

VHM811 Schedule (tentative as of Aug 22/07):

Week	*Date*	*Locn.*	*Subjects*	*Readings in VER*	*Instr.*
1	Sept. 4th	FL	Introduction to epidemiology Concepts of causation	1	AM/CM/JC HS/JV
1	Sept. 7th	225N	Readings/Review Lab – Introduction to Stata	-	AM
2	Sept. 11th	225N	Sampling (simple random, stratified, cluster, multistage)	2	AM
2	Sept. 14th	225N	Sample size calculation exercises (sampsi)	-	AM
3	Sept. 18th	225N	Lab – sampling exercises based on Freecalc Analysis of survey data	-	AM
3	Sept. 21st	225N	Analysis of survey data Lab – survey data analysis	-	AM
4	Sept. 25th	FL	Questionnaire Design	3	CM
4	Sept. 28th	225N	Measuring disease (incidence rate, incidence risk, prevalence)	4	CM
5	Oct. 2nd	225N	Disease frequency exercises Lab – Intro to Stata cont. (tab, ci)	-	CM
5	Oct. 5th	225N	Screening tests (sensitivity, specificity, predictive values, apparent prevalence)	5	AM
6	Oct. 9th	FL	Screening test exercises #1 Lab – Screening tests (diagtest)	-	AM
6	Oct. 12th	FL	Screening tests (agreement, multiple tests, likelihood ratios, ROC)	5	AM
7	Oct. 16th	FL	Screening test exercises #2 Lab – Screening tests (kappa, concord, roc)	-	AM
7	Oct. 19th	FL	Measuring associations (incidence rate ratio, incidence rate difference, relative risk, odds ratio, attributable risk, population attributable risk).	6	JC
8	Oct. 23th	FL	Measures of association exercises Lab – Measures of association (tab, cs)	-	JC
8	Oct. 26th	FL	Mid-term exam	-	AM/JC/CM
9	Oct. 30th	FL	Take-up mid-term exam	-	AM/JC/CM
9	Nov. 2nd	FL	Study types – cross sectional, cohort	7,8	CM
10	Nov. 6th	FL	Study types – case-control	9	CM
10	Nov. 9th	FL	Study types – clinical trials	11	CM
11	Nov. 13th	FL	Precision and validity in observational studies (including selection and information bias)	12	JV

Week	*Date*	*Locn.*	*Subjects*	*Readings in VER*	*Instr.*
11	Nov. 16th	FL	Precision and validity exercises Lab – Information bias (spreadsheet)	-	JV
12	Nov. 20th	FL	Confounding Stratified analysis	13	HS
12	Nov. 23rd	FL	Confounding / stratified analysis exercises Lab – stratified analysis (cs, cc)	-	HS
13	Nov. 27th	FL	Interaction, matching	13	HS
13	Nov. 30th	225N	Interaction, matching exercises Lab – interaction (cs, cc)	-	HS
14	Dec. 4th	225N	Review	-	AM/CM/JC HS/JV
14	Dec. 7th	225N	Final exam	-	AM/CM/JC HS/JV