FPM259A
Applied Epidemiology: Data Analysis
Fall 2013

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DESCRIPTION
This course is the first in a series of three courses in applied epidemiology. At the end of this series, you will have selected a research question, analyzed data to address that question (259A), written a paper suitable for journal submission (259B), and given two presentations based on your results (259C). Data from the Rancho Bernardo Study and/or one of the affiliated minority cohorts will be utilized for this project. Each student will have an assigned faculty advisor to assist in the project.

REQUIREMENTS

1. Turn in proposal (1-2 pages including background literature review, hypothesis, and analysis plan).

2. Complete Human Subjects review process for secondary data analysis for the IRB at UCSD and SDSU.

3. Analyze your own dataset. You can analyze the data using either SAS or SPSS. If you do not have SAS PC, please contact Kristin Deveraux, kdeveraux@ucsd.edu 858-534-0517, and she will give you details about student pricing.

4. Meet routinely with your faculty advisor. See suggested schedule attached. IT IS VERY IMPORTANT TO ADHERE CLOSELY TO THIS SCHEDULE AS COMPLETION OF ALL ANALYSES AND TABLES IS A REQUIREMENT OF PROGRESSING TO 259B.

5. Meet with Dr. Barrett-Connor to discuss your analysis <u>at least once</u> during the quarter. Dr. Barrett-Connor has limited availability. Please make your appointment(s) as soon as possible.

6. Turn in all tables and graphs relevant to your topic <u>in manuscript form</u>, and an outline of your methods and results.

FINAL GRADE
The final letter grade will be based on a combination of class presentation and discussion, timely progress, and final written assignments, including human subjects applications, analyses, tables, graphs (if relevant) and an outline of the methods and results. Dr. Kritz-Silverstein and your mentor jointly assign grades. A grade of B or better in 259A is required to enroll in 259B.

FPM259A SCHEDULE

Room MTF 211, Thursday 10:00--12:00

(Unless noted otherwise)

Date	Faculty/topic	Work Due
August 13 (3:00-5:00) **Room 344 Stein**	Kritz-Silverstein & Wingard Intro to RB Study	
TBD by Mentor:	Meet with advisor Review hypothesis and analysis plans	Hypothesis & Analysis plan outline
September 6		**Proposal Due – Electronic** dsilverstein@ucsd.edu & your mentor
Sept. 10 (Tues)	Kritz-Silverstein & Wingard IRB & Data Introduction	**Receive Data**
Sept. 12	Ricki Bettencourt/Nikki Bergstrom Laurel Building, Conference Room	Review RB Database Specific data questions
Sept. 19	Meet with advisor Plan Table 1 (sample characteristics & exclusions)	IRB Applications DUE at UCSD
Sept. 26	Meet with advisor Review Table 1 Plan Table 2 (dependent variable)	Table 1 - first draft Exclusion flow chart
Oct. 3	Meet with advisor Review Table 2 Plan Table 3 (adjustment)	Table 1 - second draft Table 2 - first draft
Oct. 10	EBC, Kritz-Silverstein, et al. **STUDENT PROGRESS REPORTS:**	Draft all tables **Bring 8 copies of Everything**
Oct. 17	Meet with advisor Review Table 3 Plan Table 4 (multivariate analysis)	Table 2 - second draft Table 3 - first draft
Oct. 24	Meet with advisor Review Table 4	Table 3 - second draft Table 4 - first draft
Oct. 31	Meet with advisor Review changes and discuss potential biases	Table 4 – second draft

Nov. 7	Meet with advisor Review all tables & outline of Methods and results	All tables revised
Nov. 14	Meet with advisor & discuss "What does this all mean"	
Nov. 21	EBC, Kritz-Silverstein, et al. **STUDENT PROGRESS REPORTS:**	Draft all tables **Bring 8 copies of everything**
Nov. 28	**THANKSGIVING BREAK**	
Dec. 5	Meet with advisor Review final tables & outline of methods & results	Final tables and draft outline of methods and results
Dec. 12		**PROJECTS DUE**
Dec. 16 – Jan. 5	**WINTER BREAK (UCSD)**	

Additional Resources

Study Design		
Elizabeth Barrett-Connor, Stein 349 (Assistant)	ebarrettconnor@ucsd.edu 858-534-0511	
SAS Program		
Nikki Bergstrom, CRF	jbergstrom@ucsd.edu	858-822-2252
Rancho Bernardo Data Set		
Ricki Bettencourt, CRF	rbettencourt@ucsd.edu	858-534-1808
Copies of Publications		
Susan Orlofsky, Stein 349	sorlofsky@ucsd.edu	858-534-3720

2013-14 FPM259 Assigned Topics and Advisors

Student	**Ericha Anthony**	ericha_anthony@yahoo.com	Phone
Faculty	**Donna Kritz-Silverstein**	dsilverstein@ucsd.edu	858-534-1818

How is optimism associated with behaviors, body size and mortality? *Cross-sectional & Prospective*

Optimism and positive attitudes have been associated with reduced risk of mortality in older ages. One possible mechanism is through associations of optimism with obesity and lifestyle behaviors such as alcohol use, smoking and exercise, which may also affect mortality. (Chida Y, Steptoe A. Psychosom Med 2008;70:741-756; Tindle HA et al. Circulation 2009; 120: 656-662. Vahia et al., Psychiatr Clin North Am. 2011;34:231-48; Roy B et al. Psychosom Med. 2010; 72:134-40; Rasmussen HN, et al. Ann Behav Med. 2009; 37:239-56.)

Student	**Anthony Davis**	anthonydavis0125@gmail.com	phone?
Faculty	**Deborah Kado**	Dkado@ucsd.edu	310-825-4527

What are the sex differences in kyphosis (thoracic spine curvature)? *Cross-sectional*

The dowager's hump by definition refers to a woman; however, recent studies suggest that older men are also affected by accentuated thoracic spine curvature. This project will investigate 3-4 different measures of thoracic curvature in older men and women to better understand sex differences in postural changes with aging. (Kado, et al. Ann Intern Med 2007; 147(5):330-338. Kado, et al. J Am Geriatr Soc 2004; 52:1662-1667.)

Student	**Aladdin Shadyab**	aladdinhs@yahoo.com	Phone?
Faculty	**Happy Araneta**	haraneta@ucsd.edu	858-822-3559

Are there ethnic differences in the association between sleep duration and type 2 diabetes? *Cross-sectional* (uses Visit 7 data for RB, Filipinas and HASAAW)

Both long (≥9 hours) and short (<6 hours) sleep duration have been reported to be associated with obesity, type 2 diabetes, and pre-diabetes, but the effect of race/ethnicity on the risk of diabetes associated with sleep duration has not been systematically investigated. Compared with white participants, greater diabetes risk was associated with being short or long sleepers of black race. Asian Indians and Filipinos have higher prevalence of type 2 diabetes compared to Caucasians and African-Americans, but the role of sleep duration (adjusting for other covariates) has not been evaluated. (http://www.ncbi.nlm.nih.gov/pubmed/22269619; http://www.ncbi.nlm.nih.gov/pubmed/23849514; http://www.ncbi.nlm.nih.gov/pubmed/23835691; http://www.ncbi.nlm.nih.gov/pubmed/23069837)