Welcome to KIN 304W Inquiry and Measurement in Kinesiology

> Summer 2013 Simon Fraser University Dr. Dawn Mackey dmackey@sfu.ca Office: K8629

Today's Agenda

- Introductions
- Course description
- Course goals
- Course logistics
- Begin week 1 lecture: Scientific Method

My Background



SFU BSc Hon Kin MSc Kin



UC Berkeley PhD Epidemiology



UC San Francisco Post Doc Epidemiology

SFU Aging and Population Health Laboratory

Context: By 2031, ~25% of Canadians will be 65+ years

Challenge: Help older adults live active and independent lives and avoid debilitating injuries

Approach: Etiology, prevention, & management of age-related diseases



Flooring for Injury Prevention (FLIP) Trial



HealthySteps: RCT of Exercise to Improve Walking Energetics, Fatigue, and Activity



Immunizing Canadian Seniors Against Inactivity: A Planning Grant







Life-Space: It Matters How Far Away From Home You Go



Course Description

In Kin 304W, we strive to become informed research consumers and good decision makers.

The course emphasizes:

- 1. Application of statistical methods to data analysis
 - Hands on experience with SPSS & Excel
- 2. Scientific writing
- 3. Methods of data acquisition

Course Goals

Students will build competence and skills in

- Research design
- Data analysis
- Scientific writing

As your instructor, I strive to be

- Organized
- Accessible
- Responsive
- Fair

I hope this course is fun!

Course Logistics

- Lectures:
 - Tuesdays, 8:30 am 10:20 am, AQ 3159
 - Thursdays, 8:30 am 9:20 am, AQ 3003
- Tutorials/Lab:
 - Thursdays: 9:30-10:20 am; 10:30-11:20 am; 11:30-12:20 pm
 - Start Thursday, May 16, AQ 3148.B
- Office Hours:
 - Dr. Mackey: Tuesdays, 10:30-11:30 am, K8629

Tuesday office hours begin May 7. Thursday labs begin May 16. We have <u>lecture</u> this Thursday, May 9.

Course Logistics

- Course Website:
 - www.sfu.ca/~dmackey
- Text:
 - Inquiry & Measurement in Kinesiology, Ward 2005
 - Custom text written specifically to cover the diverse topics in this course
 - Chapters are posted as .pdf files on the course website at **no charge**
- Software:
 - We will use EXCEL and SPSS for data analysis
 - You do NOT need to buy SPSS to do well in this course. However, if interested, students can purchase SPSS <u>http://www.sfu.ca/its-</u> <u>dav/software/spss/21/windows/</u> (click on the link for OnTheHub)
 - Standard GradPack 21 for Windows (12-Mo Rental) \$109.99 + \$4.99
 - Standard GradPack 21 for Windows (6-Mo Rental) \$62.92 + 4.99

Course Logistics

- I will post lecture slides (.pdf) on the course website before lecture begins
 - These will be password protected. The password is "easy".
- I think you will find the amount and pace of course material quite manageable
 - Note: The 2nd half of the course is busier than the 1st half

Your Teaching Team

- I will give the lectures
 - You can access me before lecture, during break time, after lecture, during office hours, and by email (I aim to respond in 48 hrs)
 - I will compile & send student email questions and responses pertinent to course content anonymously to the course email list throughout the semester (kin304w-d100@sfu.ca)
- TA (John Manning) will instruct all computer tutorials/labs
- Writer Marker (Perveen Biln) will mark your projects

Tutorials/Labs

- These will be held in a computer teaching lab
- You will gain hands-on experience with data analysis in SPSS and EXCEL
- Each week you will get a data set and instructions on what to do with the data
- Make sure you understand what you are doing in each lab and that you aren't just following the instructions
- I will "preview" the labs in Thursday lecture

Project

- How many of you have read a journal article before?
- The term project consists of writing a scientific journal article based on results you obtain from a data analysis that we will all do in lab in Week 5.
- You'll write the journal article in stages:
 - Project Part I = Results section, Tables, Figures
 - Project Part II = Abstract, Introduction, Methods, Discussion, References
 - Both parts of the project will be graded and returned to you during the semester. You will hand in a final revised version of your journal article at the Final Exam.
- The topic for everyone's journal article will be the same.
- I will introduce the project more completely in Week 5.

Evaluation

•	Lab results sheets (weekly)	4%
•	Lab midterm 1 (week 7)	6%
•	Lab midterm 2 (week 12)	5%
•	Project Part I (Results section)	
	 – 1st submission (week 7) 	10%
	 2nd submission (at final exam) 	5%
٠	Project Part II (Complete journal article)	
	 – 1st submission (week 11) 	30%
	 2nd submission (at final exam) 	5%
•	Final Exam	35%

Attendance

- Strongly recommended
- I will not record lectures
- On or before May 14, please notify me of planned absences for religious holidays or university functions (e.g., travel for athletic competitions)
- See the course website for attendance policy and what to do if you miss a marked component of the course due to illness

Late Policies

- Lab Results Sheets: No credit for handing in late.
- <u>Project Parts I and II</u>: These are to be handed in at the beginning of lecture. Handing in after lecture is counted as late. Lose 10% per day, up to 50%, then will not be accepted.
- <u>Final Project (at final exam</u>): I will not accept it late. You must hand in marked Parts I and II along with the final revised project at the beginning of the final exam. If you are missing any of the 3 required components, you will receive 0 for the final project.

How Can You Enhance Your Learning?

- Attend lectures
- Attend labs
- Practice the labs each week
- Read textbook chapters <u>before</u> lecture
- Form small study groups with other students
- Ask questions

How Should You Study?

- Lab midterms
 - Re-do the lab assignments
 - Think about types of questions I may ask
- Final Exam
 - Majority of material will be drawn from lectures
 - PowerPoint slides
 - Course text

Course Website

www.sfu.ca/~dmackey

Wait List

- Maximum enrollment is 54; limited by the size of the computer labs
- Students will be automatically entered from the wait list if a spot opens up in the first week
- If you don't get into Kin 304W this semester, it will be offered in Fall 2013.