Graduate School Of Public Health
Educational Policies and Curriculum Committee
Agenda for April 21, 2016

1:30-3:30 p.m.
110 Parran Hall

A. New Business:

1. Course termination: Public Health Overview MPH core course (PUBHLT 2014), Eleanor Feingold for Martha Terry
2. BIOST Core Course Revisions Proposal, Rob Krafty
3. Approval of March Meeting Minutes, Patricia Documet
4. Schedule Fall Meetings, Patricia Documet

Next meeting: May 19, 2016 | 1:30-3:30pm, Parran 110

MEMORANDUM

TO: EPCC

FROM: MPH Committee

DATE: March 23, 2016

RE: Public Health 2014 Overview

The MPH Committee, comprised of MPH program directors and MPH core course instructors, recommends the following:

that PUBLIC HEALTH 2014 Overview, currently a one-credit course required for the School curriculum, be eliminated and that the course content be integrated into existing Pitt Public Health core courses. The plan for where each piece of the course content is as yet unspecified. Related discussion at the March MPH Committee meeting is reflected in the table below.

Topics covered in PUBHLT 2014 and the courses in which those topics will be covered under the new policy are as follows:

TOPIC	COURSE(S) to cover this topic
ASPPH MPH competency self-assessment	Eliminate
Finding evidence for evidence-based public health	BCHS 2509*
History of Public Health	On-line course?
Public Health Practice	
Governmental Public Health	On-line course?; HPM 2001
Global Public Health	BCHS 2509*
Public Health Preparedness/Response	
Public Health Law and Ethics	HMP 2001
Health Equity	BCHS 2509*

*Thistle Elias and Martha Terry, instructors for BCHS 2509, agreed that the * topics are already addressed in their core course.

Pre-Proposal to Update Biostatistics Core Courses
BIOS 2011, 2041 & 2042

Current Offerings: Students currently have two options for fulfilling introductory biostatistics requirements:

- BIOS 2011: Principles of Statistical Reasoning (offered in the fall)
- BIOS 2041 (fall) & BIOS 2042 (spring): Introduction to Statistical Methods I & II.

BIOS 2011 is intended to provide a broad survey of statistical methods used in public health, aimed at students whose mathematical background is limited.

BIOS 2041 & 2042 is intended for students needing more mathematical depth than BIOS 2011 provides.

Challenges with Current Offerings: Several related limitations of the current offerings have been noted by both students and faculty:

1. Most of the masters programs within the school are requirement heavy. Consequently, even though the objectives of BIOS 2041 & 2042 are more in-line with some students' educational objectives, they take BIOS 2011 to avoid taking 6 credits of biostatistics.
2. Student interest and skill levels are highly heterogeneous within a given class, making it difficult for the class to be taught in a manner in which all students can achieve their education objectives.
3. Some students possess a low quantitative comfort level makes it difficult for them to achieve the objectives of BIOS 2011.

Proposed Changes: To address these challenges and provide a more effective biostatistics core course offerings, we will are considering to propose a set of changes starting in **fall 2016**:

1. **Change the material covered in BIOS 2041 to make it a standalone course** that can satisfy the biostatics core requirement in a single semester. This will involve introducing modeling concepts such as one-way ANOVA and simple linear regression in detail, discussing multiway ANOVA, multiple regression and logistic regression, and spending less time on some out-of-date and theoretical topics.
2. Move **BIOS 2011 to the spring and insure the effective delivery of topics to its intended audience**. With more quantitatively prepared students able to take BIOS 2041 as a stand-alone course, the material in BIOS 2011 will be more explicitly geared towards its intended audience, with an emphasis on understanding statistical concepts and obtaining the skills required to effectively read and understand statistical procedures in public health literature. The course will be moved to the spring to allow for remediation for underprepared students, in order to ensure that they are able to achieve the course objectives.
3. **Add additional modern topics to BIOS 2042**. With BIOS 2041 covering some topics that were previously covered in BIOS 2042, it is possible to add a couple of additional modern topics to the BIOS 2042 curriculum. BIOS 2042 will no longer be considered a core course.

April 14, 2016

Future Actions: The effectiveness of the proposed changes will be evaluated at the end of the 2016-2017 academic year and appropriate modifications will be proposed if deficiencies are observed within the new curriculum. It should be noted that these proposed changes can be viewed as the first part of a larger modernization of biostatistics education. In addition to updating and modernizing the biostatistics core offerings, the Department of Biostatistics is in the process of evaluating the curriculum for its MS and PhD programs. It plans on presenting a proposed change to its curriculum in the fall that will streamline and update the program and put it in-line with modern biostatistics programs.

BIOST 2011 Principles of Statistical Reasoning
Fall 2016 (or Spring 2017)

Course Instructor: To be announced

Instructor Office Hours: by appointment and to be announced

Teaching Assistants: To be announced

TA Office Hours: by appointment and to be announced

Class Time: Monday 4:00-5:25 pm, Thaw Hall 11
Wednesday 4:00-5:25 pm, Thaw Hall 11

Recitation: **Only one required, either:**
Monday 5:30-6:25pm, 117 Victoria Hall
or
Tuesday 1-2 pm, A522 Crabtree

Prerequisites: College Algebra with grade of C or better
Working knowledge of PC or Mac computer

Scientific calculator: If you do not already own a scientific calculator, you may need to purchase one for this course. Consider a calculator with at least one memory and a variety of mathematical functions.

Computer Software: The software for BIOST 2011 is STATA and is available on all university supported computers in the Recitations and libraries. Personal copies of STATA can be downloaded for free (or $5 if you want it on CD) through the University of Pittsburgh Software Licensing Services.

Required text: Introductory Applied Biostatistics by Ralph D'Agostino, Sr., Lisa Sullivan and Alexa Beiser; ISBN # 978-0-534-42399-5

Recommended Text: Using Stata for Quantitative Analysis by Kyle C. (Clayton) Longest;
ISBN # 978-1483356631

Catalogue Description

This course acquaints students with the concepts of statistical reasoning as applied to the study of Public Health problems. Students learn the general principles of statistical analysis and acquire the ability to utilize a statistical software package (STATA) as a tool to facilitate the processing, editing, storing, displaying, analysis and interpretation of health research related data.

Course rationale

This is the Biostatistics core course for Graduate School of Public Health for non-Biostatistics majors and provides a basic introduction to the concepts of statistical reasoning as applied to the study of public health problems. This course is designed for public health students that expect to primarily to be able to read and understand statistical procedures in the form of books, journal articles, reports, grants, etc. The course will also give students the ability to perform some basic analyses. Students who intend to be professional research workers in public health areas requiring the daily application of quantitative procedures and statistics should consider taking BIOST 2041 and 2042 (Introduction to Statistical Methods I and II).

Course Objectives

By the end of this course, each student will be able to:

- Design and interpret descriptive tables, plots and exploratory data analyses
- Identify the appropriate statistical procedures to be applied in different public health situations.
- Carry out quantitative hypothesis testing procedures using statistical software, including t-tests, ANOVAs, linear regression, analyses of proportions as well as the non-parametric versions of these tests.
- Perform (using statistical software) and interpret analyses such as computing confidence intervals, sensitivity and specificity analyses, simple linear regression models and basic survival analyses

MPH Competencies

This course will help students to meet the Biostatistics competencies developed by the Association of Schools of Public Health (ASPH):

- Define commonly used statistical terminology
- Demonstrate the ability to correctly select the most appropriate statistical procedures for given research hypotheses and types of data
- Demonstrate the ability to interpret the results of statistical analysis given the results of a statistical analysis

Ground Rules for Class

- While students are encouraged to discuss course content with each other, students must do their own assignments. Copying assignments from other students will NOT be tolerated.
- Please be on time and mute cell phones during class.

How to Succeed in this Class

BIOST 2011 can be a challenging course. Here are some important things to remember to keep on track:

- One of the most important things to do for success is to not get behind on readings and HWs. The course content is cumulative so if you get behind, it is very difficult to catch up.

- Come to class and attend your recitation! Just reviewing the course handouts via Courseweb will not be sufficient.

- Utilize the instructor and TA office hours.

- Do all of the HWs (even the optional ones!)

- Communicate!

Course Website

All readings and course material will be found on the Blackboard site for this class. The website for Blackboard is http://courseweb.pitt.edu. Your login ID and password are the same as for your Pitt account.

Course Requirements

- Lecture and recitation attendance.

- Satisfactory completion and submission of all required homework assignments.

- Satisfactory performance on three exams.

Student Performance Evaluation

Course grades are based on performance on:

- Three exams (25% each for a total of 75%).
- Seven to eight homework assignments (25%, lowest score will be dropped).

Exams are closed book and closed notes, however a cheat sheet will be allowed. This should be one sheet of 8.5 x11 paper (you may utilize both sides).

The use of computers, cell phones or other internet-attached devices will **NOT** be permitted during exams. Make-up exams will ONLY be given in extreme circumstances. RecitationExams consist of true/false, multiple choice, short answer and calculation questions. Exams are NOT cumulative.

Homework assignments will be graded. Assignments must be submitted on or before their due date. Late assignments will not be given credit. Assignments will be discussed during recitations by the TAs and an answer key will be posted to Courseweb.

Grade scale

98-100:	A+
90-97:	A
89:	A-
85-88:	B+
80-84:	B
79:	B-
70-78:	C
<70	F

Academic Integrity

All students are expected to adhere to the school's standards of academic honesty. Any work submitted by a student for evaluation must represent his/her own intellectual contribution and efforts. The GSPH policy on academic integrity, approved by EPCC on 10/14/08, which is based on the University policy, is available online at
http://www.publichealth.pitt.edu/Portals/0/Main/Prospective%20Students/Academics/Pitt%20Public%20Health%20Academic%20Handbook-Part%20IV%20G_AcademicIntegrity_AY2014-15.pdf

These guidelines are based on the University policy found here:
http://www.provost.pitt.edu/info/acguidelinespdf.pdf

The policy includes obligations for faculty and students, procedures for adjudicating violations, and other critical information. Please take the time to read this policy.

Students committing acts of academic dishonesty, including plagiarism, unauthorized collaboration on assignments, cheating on exams, misrepresentation of data, and facilitating dishonesty by others, will receive sanctions appropriate to the violation(s) committed. Sanctions include, but are not limited to, reduction of a grade for an assignment or a course, failure of a course, and dismissal from GSPH.

All student violations of academic integrity must be documented by the appropriate faculty member; this documentation will be kept in a confidential student file maintained by the GSPH Office of Student Affairs. If a sanction for a violation is agreed upon by the student and instructor, the record of this agreement will be expunged from the student file upon the student's graduation. If the case is referred to the GSPH Academic Integrity Hearing Board, a record will remain in the student's permanent file.

Accommodation for Students with Disabilities

If you have any disability for which you may require accommodation, you are encouraged to notify both your instructor and the Office of Disability Resources and Services, 140 William Pitt Union (412-648-7890) during the first two weeks of the term (http://www.studentaffairs.pitt.edu/drswelcome).

Video / Audio recording of class lectures

Audio recording of the class is permissible provided you first receive approval from the course instructor. You also agree that the recording is for your own personal use and will not be redistributed in any form.
Video recording of the class, in full or in part, is NOT permitted.

Copyright of course material

Unless otherwise stated all course material is protected by copyright. United States copyright law, 17 USC section 101, et seq., in addition to University policy and procedures, prohibit unauthorized duplication or retransmission of course materials. See Library of Congress Copyright Office and the University Copyright Policy. As such the material is to be used for academic purposes only. Redistribution of this material to web sites and repositories (e.g., Course Hero) is strictly prohibited.

Course Outline

Lectures 1 & 2 - Course Overview, Summarizing Data

By the end of these classes, each student will be able to:

- Understand the purpose and goals of this course
- Learn to distinguish between continuous and discrete variables
- Be able to compute numerical summaries of data by hand and with Stata
- Be able to generate graphical displays to summarize data using appropriate Stata commands

Class Activities:

- Review of the syllabus, course expectations and course organization

Readings:

- D'Agostino, Chapters 1 & 2

Algebra assignment (not graded, but extra credit for submitting)

- Due during class

Assignment 1 (covers lectures 1 - 4)

- Due at the beginning of class

Recitation 1 - Stata Boot Camp
and (attend the session you registered for)

No class on due to Labor Day Holiday

Recitation 2 – review, problem session, Stata and HW help

Lectures 3 & 4 - Probability
By the end of these classes, each student will be able to:

- Understand the concept of probability
- Be able to compute simple probabilities
- Understand the Rules of Probability
- Understand the difference between combinations and permutations
- Be able to identify important distributions

Readings:

- D'Agostino, Chapter 3

Assignment 1 (covers lectures 1-4)

- Due at the beginning of class

Recitation 3 – review, problem session, Stata and HW help

Lectures 5&6 – Sampling Distributions

By the end of these classes, each student will be able to:

- Know the definition of a sampling distribution
- Understand the Central Limit Theorem
- Be able to compute statistics for certain sampling distributions

Readings:
- D'Agostino, Chapter 4

Assignment 2 (covers lectures 5-8)
- Due 10/5 at the beginning of class

Recitation 4 – review, problem session, Stata and HW help

Lectures 7 & 8 – Statistical Inference for μ

By the end of this class, each student will be able to:
- Learn how to estimate a population mean μ
- Learn how to compute and interpret a confidence interval for μ
- Understand the concept of precision
- Be able to perform hypothesis tests for μ

Readings:
- D'Agostino, Chapter 5

Assignment 2 (covers lectures 5-8)
- Due at the beginning of class

Recitation 5 – review, problem session, Stata, HW help, exam review

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Lectures 9 & 10 – Statistical Inference for μ_1-μ_2

By the end of this class, each student will be able to:
- Learn how to compare means from two different populations under different scenarios

Readings:
- D'Agostino, Chapter 6

Assignment 3 (covers lectures 9-12)
- Due at the beginning of class

EXAM 1 – covers lectures 1-8 and HWs 1 & 2

Lecture 11 & 12 – Statistical Inference for p

By the end of this class, each student will be able to:
- Learn how to estimate a population proportion and the difference in two population proportions
- Learn how to compute and interpret a confidence interval for p and for p_1-p_2

- Learn how to perform hypothesis testing for the comparison of two populations proportions
- Be able to create cross-tabulation tables for discrete variables
- Be able to compute and understand sensitivity and specificity measures

Readings:
- D'Agostino, Chapter 7.1-7.3, 7.7

Assignment 3 (covers lectures 9-12)
- Due at the beginning of class

Recitation 6 – review, problem session, Stata, and HW help

Lectures 13 & 14 – Chi-Square Distribution and Tests - I
Tuesday – NOTE THIS IS TUESDAY, due to Fall break Monday classes are held on Tuesday this week
By the end of this class, each student will be able to:
- Learn when to use a chi-square test
- Be able to distinguish between goodness of fit tests and tests of independence

Readings:
- D'Agostino, Chapter 7.5

Assignment 4 (covers lectures13-18)
- Due at the beginning of class

Recitation 7 – review, problem session, Stata, and HW help

Lectures 15 & 16 – Chi-Square Distribution and Tests - 2

By the end of this class, each student will be able to:
- Be able to define and interpret an effect measure
- Be able to compute and interpret a confidence interval for an effect measure
- Learn how to use Chi-square tests of homogeneity and Fisher's exact tests

Readings:
- D'Agostino, Chapter 8

Assignment 4 (covers lectures 13-18)
- Due at the beginning of class

Recitation 8 – review, problem session, Stata, and HW help

Lecture 17 & 18 – Analysis of Variance (ANOVA)

By the end of this class, each student will be able to:
- Learn how to compare more than two means using ANOVA
- Be able to distinguish between a fixed and random effect

- Understand the concept of multiple comparisons and when they apply

Readings:
- D'Agostino, Chapter 9

Assignment 4 (covers lectures 13-18)
- Due at the beginning of class

Recitation 9 – review, problem session, Stata, HW help and exam review

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Lecture 19 – Correlation

By the end of this class, each student will be able to:
- Learn how to estimate a population correlation coefficient ρ
- Be able to compute and interpret a sample correlation coefficient r
- Be able to perform hypothesis tests for ρ

Readings:
- D'Agostino, Chapter 10.1

Assignment 5 (covers lecture 19 only)
- Due at the beginning of class

EXAM 2 – covers lectures11-18 and HWs 3 & 4

Lecture 20 & 21 – Regression

By the end of this class, each student will be able to:
- Learn the assumptions that must be met for linear regression
- Learn how to test these assumptions
- Be able to fit a simple linear regression model and interpret the coefficients

Readings:
- D'Agostino, Chapter 10.2

Assignment 6 (covers lectures 20-22)
- Due at the beginning of class

Recitation 10 – review, problem session, Stata, and homework help

Lecture 22 – Logistic Regression

By the end of this class, each student will be able to:
- Know when it is appropriate to use logistic regression
- Be able to fit a simple logistic regression model and interpret the coefficients
- Be able to generate and interpret an ROC curve

Readings:

- D'Agostino, Chapter 10.4, 11.1, 11.2, 11.4

Assignment 6 (covers lectures 20-22)

- Due at the beginning of class

No Recitation this week – Happy Thanksgiving!

Lecture 23 –Simple Survival Analysis

By the end of this class, each student will be able to:

- Be able to generate and interpret a Kaplan-Meier curve and compute median survival time

Readings:

- D'Agostino, Chapters 13

Assignment 7 (covers lecture 23)

- Due at the beginning of class

Recitation 11 – review, problem session, Stata, and HW help

Lecture 24 – Nonparametric Tests

By the end of this class, each student will be able to:

- Learn to use the nonparametric counterpart tests of the tests we've discussed in earlier lectures

Readings:

- D'Agostino, Chapter 12

Optional Assignment 8 (covers lecture 24) – this is extra credit

- Due at the beginning of class

Recitation 12 – review, problem session, Stata, HW help and exam review

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EXAM 3 – covers lectures 19-24, HWs 5-8 –

MONDAY

SYLLABUS: BIOST 2041 Introduction to Statistical Methods I
Fall, 2016 DRAFT

Instructor: To be named

Office hours: xx from xx to xx and xx from xx to xx, and by appointment. Please check Courseweb frequently for office hour changes.

Teaching Assistants (TAs):
To be named, Parran 304, office hours TBA on Courseweb.

Text: *Fundamentals of Biostatistics*; **8**th edition, 2015 by Bernard Rosner. This text will be used for BIOST 2042. You are strongly encouraged to obtain this book.

Software: Stata Version 14, version SE. Please procure from the University Software Download Service on my.pitt.edu prior to class beginning.

Class Meetings:
Mondays and Wednesdays, 4:00 – 5:25 PM
Graduate School of Public Health G23

The first meeting of the class will be August 29, and the last meeting will be the third exam on December 14.
Please note the University has a holiday on Monday, October 17, and requires that Monday classes meet on Tuesday, October 18 (Tuesday classes do not meet that week). Thus we will **not** have class on October 17, and we **will** have class on October 18.

Recitations: Class recitations will be held after lecture (5:30 PM to 6:25 PM) on Mondays. We will occasionally cancel recitation depending on the class progression. The first recitation will be Wednesday, September 9.

Course website:
All class material will be placed on Courseweb. Please check regularly.

There will be a "Postings" Page on Courseweb which will state whenever something new is posted on Courseweb. I encourage you to check this Page whenever you log on to find out what has changed since your last visit.

The Courseweb announcement mechanism will be used to send messages about class. Only in the event of a time-dependent event (e.g., class canceled due to weather), will an email be sent out to the class. Course-related email will be sent to your "pitt.edu" address ***only***.

Course Prerequisites, Description and Goals:

BIOST 2041 is an introductory applied biostatistics course for public health students and health career professionals who will make use of statistical methods in research projects or in interpreting literature. This class is for students needing a more research-oriented approach than that provided in BIOST 2011 (Principles of Statistical Reasoning). The prerequisites are secondary school (high school) algebra. The tools and concepts presented in BIOST 2041 will serve as a prerequisite to BIOST 2042, which is taught in the spring term. Together, BIOST 2041 and BIOST 2042 introduce students to the statistical methods most widely used in medical and public health research. However, BIOST 2041 is structured in such a way as it can be a standalone course as well.

The overall purpose of this course is to introduce students to basic probability and one and two sample procedures (point and interval estimation and hypothesis testing) for the Normal and Binomial distributions. Basic one and two sample nonparametric tests are also presented. An introduction to simple linear regression, multiple regression, logistic regression, and one and two-way ANOVA is also included. This broad goal includes use of statistical software to analyze data sets and answer research questions; recognition of situations when these procedures are *and are not* appropriate; and intuitive understanding of the rationale used in creating the statistical procedures presented.

Specific Course Objectives:

The following objectives are phrased in terms of the Association of Schools and Programs of Public Health (ASPPH) competencies for biostatistics. Applied to BIOST 2041, they should be understood to refer to one and two sample procedures pertaining to the Normal and Binomial populations.

At the conclusion of this course, a student should be able to

1. Describe basic concepts of probability, random variation, and commonly used statistical probability distributions.
2. Describe preferred methodological alternatives to commonly used statistical procedures when assumptions are not met.
3. Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.
4. Apply descriptive techniques commonly used to summarize public health data.
5. Apply common statistical methods for inference.
6. Apply basic regression methodology.
7. Utilize the statistical package Stata for description and basic inference.
8. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.

9. Interpret results of statistical analyses found in public health studies.

Course Policies:

1. All work submitted on homework and exams must be your own. For homework, we encourage you to work together to solve the problems. When you write up the assignment, however, do any necessary computer work and write the answers yourself. This policy exists for two reasons. First, we want your grade to represent your own work. Second, it is important to know how to write up the major features of an analysis and doing so on your own for homework is a good way to get more comfortable with this process. Violation of this policy will make you subject to disciplinary action (including dismissal) by the GSPH.

2. All students are expected to adhere to the school's standards of academic honesty. Any work submitted by a student for evaluation must represent his/her own intellectual contribution and efforts. The academic integrity policy is given on Courseweb. The policy includes obligations for faculty and students, procedures for adjudicating violations, and other critical information. Please take the time to read this policy.

3. If you have a disability for which you are requesting an accommodation, please notify the instructor and Disability Resources and Services no later than the second week of term. DRS will verify your disability and determine reasonable accommodations for this course.

4. Specific guidelines for the exams will be discussed in class, and will be written on all exams. In short: All exams are closed book; you will be permitted to bring in notes of prespecified length. No cell phone use (including the calculator function). Please use a regular (not cell phone) calculator if you wish. No computer use allowed. No texting or use of internet while taking exams. Exams are in our regular classroom at our regular time.

5. Homework will be due in class on the announced due date. Bring a hard copy (paper) of your homework to class and hand it in at the beginning of class. Make a copy of your homework if the due date is close to an exam date. Homework solutions will be posted after class and homework submitted after posting will not be accepted. If you cannot attend class on the day the homework is due, email your homework to the instructor prior to the start of class.

6. Please set cell phones to a silent mode during class. If you need to work on a non-class-related activity, please leave the lecture hall.

7. To ensure the open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the

student's own private use. If you would like to record class, please email the instructor to obtain permission.

Course Requirements and Grading:

There will be 3 in-class exams and 6 homework assignments. The contribution of each of these assessments toward the final grade will be as follows:

1/4 Homework
1/4 Exam 1 on 10/3/16
1/4 Exam 2 on 11/7/16
1/4 Exam 3 on 12/14/16

The exams will be during the regular class time in the regular classroom.

All "for credit" grades will be letter grades only. The grading scheme will be: A if greater than or equal to 90; B if greater than or equal to 80 and less than 90; C if greater than or equal to 70 and less than 80; F if less than 70. Both "+" and "-" grades may be given within a grade range.

Rescheduling an exam will not be permitted except in rare circumstances. Please notify the instructor as soon as possible if you wish to discuss possibly rescheduling.

Two problems will be chosen on each homework to be graded. We will not identify those problems prior to your handing in the homework. We will provide feedback on all your work but will not grade all problems. We have found we will be more helpful to you if we provide detailed feedback and work with you in office hours as appropriate.

Homework solutions will be posted immediately after the class session in which they are due. We encourage you to make a copy of your homework prior to handing it in if you will need it for an exam. We will do our best to return homeworks promptly but may not be able to return them prior to an exam.

One homework assignment will be dropped from your homework grade. In other words, your best 5 homeworks will contribute toward your homework grade. This gives you an opportunity not to turn in an assignment. We encourage you to do all assignments, even if you do not hand them all in.

You are responsible for the material presented in class, recitation, and the assigned textbook readings, and on homework assignments.

Suggestions for Succeeding in the Class:

1. Review the lecture and recitation notes, read the text, and attend class. Although the lecture and recitation notes will be posted on Courseweb prior to class, there may be blank areas that are filled in during class. Annotated lecture and recitation notes will be posted on Courseweb after class as appropriate.

2. Keep updated on the class on Courseweb.

3. Obtain Stata and practice using it. If you run into problems with Stata, give it your best try but do not get frustrated – ask for help via email, in office hours, or during class.

4. Read the textbook, especially if you are confused about a concept as it provides an alternative perspective to that presented in class.

5. You are only required to do the homework problems. We will provide supplementary problems if you want extra practice. If you are unsure of a concept, please do the supplementary problems. Also we advise doing all homeworks, even if you do not turn them all in.

6. Ask questions. You will help others in the class if you speak up.

7. Ask for help in office hours and for individual help if you need it. Ask early. Monitor your grade on Courseweb and if you are concerned about your performance, discuss your situation with the instructor.

Course Schedule:

The dates in the following schedule are targets only. Please also review the draft calendar. The course may actually proceed faster or slower depending on the needs of the class.

Approximate Number of Lectures	**Topic(s) and Readings.** **(Chapter and section (§) numbers refer to textbook by Rosner.)**
2 lectures	Unit 1. Course Introduction. (all of Chapter 1) Unit 2. Descriptive Statistics (all of Chapter 2) a) Measures of central tendency and variability b) Presentations of distributional shape c) Exploration of relationships d) Exploring Data Quality
2 lectures	Unit 3. Introduction to Probability (§ 3.1 through 3.7) a) Independent outcomes and conditional probability b) Mutually exclusive outcomes c) Complementary outcomes d) Applications, including screening
2 lectures	Unit 4. Populations, sampling distributions, and the Normal distribution (§ 5.1 – 5.5, 6.1 – 6.2)
3 lectures	Unit 5. One-sample inference for normal populations. a) Inference about the mean of a normal population (§ 6.5 – 6.6, 7.1 – 7.4, 7.7)
1 lecture slot	**Exam 1** **Covers Homeworks 1 and 2; Units 1, 2, 3, 4, 5a.**

Course Schedule (continued):

Approximate Number of lectures	**Topic(s) and Readings.** **(Chapter and section (§) numbers refer to the textbook.)**
3 lectures	Unit 5. One-sample inference for normal populations. b) Inference about the variance of a normal population (§ 6.7, 7.9) c) Assessing assumptions d) Study planning and sample size calculations (§ 7.5 – 7.6)
3 lectures	Unit 6. Two-sample inference for normal populations. a) Inference about the means of two populations, paired samples (§ 8.1 – 8.3) b) Inference about the means of two populations, independent samples, equal variances (§ 8.4 – 8.5) c) Inference about the variances of two populations (§ 8.6) d) Inference about the means of two populations, unequal variances (§ 8.7) e) Study planning and sample size calculations (§ 8.10, 8.12)
2 lectures	Unit 7. Analysis of Variance a) One way ANOVA (§ 12.1 – 12.5) b) Introduction to multi-way ANOVA (§ 12.6)
1 lecture slot	**Exam 2** **Covers Homeworks 3 and 4; Units 5-7.**

Course Schedule (continued):

Approximate Dates	**Topic(s) and Readings.** **(Chapter and section (§) numbers refer to the textbook.)**
3 lectures	Unit 8. Analysis of binomial data a) Binomial random variables (§ 4.8 – 4.9) b) Inference about a binomial proportion (§ 6.8, 7.10) c) Inference about two or more binomial proportions (§ 10.1 – 10.4)
2 lectures	Unit 9. Analysis of binomial data d) Two-way contingency tables in general (§ 10.6 – 10.7) e) Study planning and sample size calculations (§ 10.5)
2 lectures	Unit 10. Nonparametric one and two sample procedures. a) Sign test (§ 9.1 – 9.2) b) Signed-rank test (§ 9.3) c) Median test d) Rank sum test (§ 9.4) e) Kruskal-Wallis (§ 12.7)
3 lectures	Unit 11. Regression and Correlation a) Correlation definition b) Simple linear regression c) Multiple regression d) Partial, multiple and rank correlation e) Introduction to logistic regression and simple survival analysis (§ 13.8, 14.8-14.10)
1 lecture slot	**Exam 3** **Covers Homeworks 5 and 6; Units 8-11.**

Graduate School of Public Health
Educational Policies and Curriculum Committee
Meeting Minutes | March 17, 2016

Present: Quinten Brown, Melanie Callahan, Yue Chen, Jane Clougherty, Mary Derkach, Ying Ding, Patricia Documet, Julia Driessen, David Finegold, Nancy Glynn, Robin Leaf, John Shaffer

Absent: Cindy Bryce, Hristina Denic, Eleanor Feingold

Guest: Elizabeth Van Nostrand, Wes Rohrer

The meeting was called to order at 1:30pm by Dr. Patricia Documet, Chair.

HPM 2005: Current Issues in Health Law, Elizabeth Van Nostrand

Elizabeth Van Nostrand presented a new course - HPM 2005: Current Issues in Health Law. Elizabeth had met with the leadership from the Law School, and they determined due to growth in the law school, and demand from Pitt Public Health students, this course should be cross-listed.

In prior years, the course was comprised strictly of lectures. Now she would like to integrate discussions, and formal presentations into the course. This proposal called for HPM 2005 to be a yearlong course. The proposal called for students to receive an "I" grade after the first semester, and once the course was completed, that grade would be changed to a letter grade.

The committee had several questions regarding how feasible this course proposal was due to the two part nature of it.

Action – EPCC provided conditional approval to the course. EPCC also recommended changes to the learning objectives verbiage. EPCC will also await a response from Elizabeth regarding the course structure clarification question.

However, EPCC will reach back out to Elizabeth with regard to clarifying how the proposed structure of the class will work. Once this issue has been clarified, EPCC would also like it stated in the course syllabus.

HPM XXXX: *Introduction to the US Healthcare Delivery System*, Wes Rohrer

Wes Rohrer presented a course modification, *Introduction to the US Healthcare Delivery System*, HPM XXXX. This is officially a credit change/course modification. HPM is taking a 2-credit course, and splitting it into two 1-credit courses. The idea was to better serve their student population. MPH students, and MHA students have different academic needs and goals. The modifications presented to EPCC will help the department meet the different goals of each group.

Wes will return to EPCC to share the new course proposal at a later date.

EPCC would like to see some minor modifications to the course. The course objectives need to better highlight the materials being covered, and the goals of the course.

Action – EPCC conditionally approved the course, with minor edits/updates (course title, description, credits, etc.) to be made to the course syllabus.

Mapping Course Leaning Objectives to Course Activities/Lectures, All

This has been an on-going internal discussion regarding syllabus structure. This conversation centered on the question of whether new syllabi should be required to link their learning objectives to assignments/lectures. While the committee agrees that syllabi need to have adequate learning objectives, the results will vary from department to department. HPM requires their syllabi to link learning objectives (due to their CAHME accreditation), but other departments do not. Human Genetics was also discussed during this discussion. In some instances, linking would work, but for other classes, it would not.

The Provost office requires this at the program level, so the committee felt that there was no need to require it at the school, or departmental level at this time.

EPCC Submission Deadlines, Patricia Documet

Action – The administrative arm of EPCC needs to hold firm regarding submission deadlines to the committee. As much as we want to accommodate the faculty, proper review time needs to be given to the committee.

BIOST Course Update, Robin Leaf

BIOST 2011, 2041, and 2042 are all being updated to better serve our student population. BIOST 2011 will be moved from the fall to the spring semester. Eleanor has been working with the departments and Joanne Pegher, in the Student Affairs office, to make this viable.

Action – Rob Krafty will be attending the April EPCC meeting to give further details regarding the BIOST course reshuffling.

EPCC Standard Operating Procedures (SOP), Patricia Documet and Robin Leaf

Action – Any cross-listing proposals need to come past EPCC. Also, if the content/subject of a course is being modified, it needs to come past EPCC.

Departmental Review of Syllabi, Robin Leaf

Council approved the measures in which department's will review their syllabi. The deadline for submission from the departments is June 15. This will be for courses from Fall 2015, Spring 2016, and Summer 2016.

The February meeting **minutes were** approved.

The meeting was adjourned at 3:03pm by Dr. Documet.

The next meeting is Thursday, March 21, 2016, 1:30-3:30 p.m. in room 110 Parran Hall.