

Graduate School Of Public Health
Educational Policies and Curriculum Committee
Agenda for April 9, 2015

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

A. New Business:

1. Course modification: EPIDEM 2152, Emma Barinas-Mitchell
2. Course modification: BCHS 3015, Christina Mair
3. Review of longitudinal core course evaluation overall effectiveness scores
4. Approval of March meeting minutes

B. Old Business:

1. Review of core course evaluations – next steps for BIOST 2011
[document will be distributed in hard copy at the meeting]

To: Candace M Kammerer, EPCC Chair
From: Emma Barinas-Mitchell, Assistant Professor, Department of Epidemiology
CC: Robin Leaf
Date: 3/12/2015
Re: Course title and description modification

I am submitting this request to change the title and description for the existing course EPIDEM 2152 for the fall 2015 term. These modifications are minor and do not reflect a change of course content. This modification is being requested so that the title and course description listed online and available to students accurately reflect course content. This course is open to all students but specifically tailored for those interested in CVD epidemiology. Details of modifications being requested are listed below. The requested modifications are highlighted in yellow.

Original Title/Description:

EPIDEM 2152 STUDENT WORKSHOP IN EPIDEMIOLOGY Credit(s): 01.0

THIS COURSE IS DESIGNED TO BE A SUPPLEMENT TO THE STANDARD EPIDEMIOLOGY COURSEWORK. IT IS A "HANDS ON" WORKSHOP THAT WILL PROVIDE THE OPPORTUNITY FOR STUDENTS TO PRACTICE MANY OF THE CONCEPTS THAT THEY LEARN IN CLASS. IT WILL ALSO COVER SOME AREAS WHICH ARE NOT COVERED BY THE CURRENT CURRICULUM INCLUDING ABSTRACT WRITING AND FORMAL PRESENTATIONS OF ANALYSIS RESULTS. (Instructor Permission required.)

New Title/Description:

EPIDEM 2152 STUDENT WORKSHOP IN **CARDIOVASCULAR DISEASE
EPIDEMIOLOGY Credit(s): 01.0**

THIS COURSE IS DESIGNED TO BE A SUPPLEMENT TO THE STANDARD EPIDEMIOLOGY COURSEWORK. IT IS A "HANDS ON" WORKSHOP THAT WILL PROVIDE THE OPPORTUNITY FOR STUDENTS TO PRACTICE MANY OF THE CONCEPTS THAT THEY LEARN IN CLASS **IN THE CONTEXT OF CVD EPIDEMIOLOGY**. IT WILL ALSO COVER SOME AREAS WHICH ARE NOT COVERED BY THE CURRENT CURRICULUM INCLUDING **AN INTRODUCTION TO SUBCLINICAL CVD, PROFESSIONAL DEVELOPMENT, RELIABILITY ANALYSES** AND FORMAL PRESENTATIONS OF ANALYSIS RESULTS. (Instructor Permission required.)

Syllabus

Epidemiology 2152: Workshop in Cardiovascular Epidemiology

Fall 2014

(August 25 – December 13)

Subclinical Disease Overview

Graduate School of Public Health

Department of Epidemiology

Mondays, 1:00-2:20 PM A622 Crabtree

Primary Instructor: Emma Barinas-Mitchell, PhD
412-624-3478
barinas@edc.pitt.edu
Office hours by appt.

Associate Instructor: Akira Sekikawa, MD, PhD, PhD
412-624-3225
akira@pitt.edu
Office hours by appt.

Teaching Assistants: Mindy L. Columbus, MS, MPH
412-383-1452
mlc34@pitt.edu
Office hours by appt.

Jessica White, MS, MLS(ASCP)^{CM}
814-207-1214
jrw99@pitt.edu
Office hours by appt.

For the Fall 2014 semester, the focus of the workshop will be an overview of methodology of measures of subclinical cardiovascular disease (SCD). At the end of the class, trainees will have a general understanding of various subclinical disease measures and how they are used in the evaluation of early vascular disease.

Our goals for the term are as follows:

1. to provide general information on several measures of subclinical cardiovascular disease to both trainees and non-trainees who elect to take the course
2. to research and learn methodology for a single subclinical cardiovascular disease measure that you may or may not have experience working with
3. to gain practice with presenting oral presentations on technical material
4. to update our URL annotated bibliographies with key articles since 2012 that can be used as general resource materials for URL investigators and students
5. to visit the URL or other lab for general demonstration of SCD measures or hands-on practice with assigned SCD measure

Subclinical Cardiovascular Disease (SCD) Measures

The specific measures we will be covering this semester include carotid artery intima-media thickness (IMT) and adventitial diameter (AD), pulse-wave velocity (PWV) including both peripheral and central measures of PWV, a measure of endothelial function (brachial artery flow-mediated dilatation; FMD), coronary artery calcification (CAC), femoral artery intima-media thickness (FIMT), ankle brachial index (ABI), and computed tomography (CT) measures.

Class Schedule: Mondays 1:00 – 2:20 pm

Dates	Topic	Presenter
08/25	Overview of 2152 and current module	Emma Barinas-Mitchell, PhD Mindy Columbus, MS, MPH
09/1	Labor Day – No Class	
09/8	“Brief Overview of SCD Measures”	Emma Barinas-Mitchell, PhD
9/15	URL Visit (Carotid, Endo)	Belinda McQuaide, BS
9/18* Thursday	URL Visit (Carotid, Endo) 10:00 – 11:30 a.m.	Belinda McQuaide, BS
9/22	URL Visit (PWV)	Belinda McQuaide, BS
9/25* Thursday	URL Visit (PWV) 10:00 – 11:30 a.m.	Belinda McQuaide, BS
9/29	“The Ankle-Brachial Index: Applications in PAD and Type 2 Diabetes”	Andrew Althouse, PhD, MS
10/6	Presentation on URL PVAT, carotid, FEMA, and endo reading	Belinda McQuaide, BS
10/14* Tuesday	No Class	
10/20	“Vascular disease from the neck up”	Timothy M. Hughes, PhD
10/22* Wednesday	Heart Institute Lab Visit 10:00 – 11:30 a.m.	120 Lytton Ave, Suite 302
10/27	No Class - Cancelled	
11/3	“Preterm birth as a precursor of maternal cardiovascular disease”	Janet Catov, PhD
11/10	Student Presentations	William Fisher (Endo)
11/17	Student Presentations	Carrie Hanley (CT CAC) & Vivien Huang (PWV)
11/24	Student Presentations	Mindy Columbus (Carotid IMT) & Natalie Suder (Carotid Plaque)

12/1	“Sex hormones and ectopic cardiovascular fat and subclinical CVD in women at midlife”	Samar R. El-Khoudary, PhD, MPH
12/8	“Evolution of ERA-JUMP” Course Review and Evaluation	Akira Sekikawa, MD, PhD, PhD

*Class being held other than regular Monday class time/location.

Required Assignment/Project Descriptions:

1. Class Presentations

Each trainee will be involved in presenting one of the classes on a SCD measure. The format of the sessions will be a 40-minute (minimum) oral presentation that covers the methodology of the specific SCD measure assigned. The 40-minute minimum includes discussion. Thus, 15 minutes of methodology followed by 15 minutes of epidemiology and 10 minutes of discussion would be reasonable. We do have the classroom for an hour and a half, so there is some flexibility. Each trainee will also provide constructive feedback anonymously to each presenter on a presentation feedback form. Please email Mindy Columbus with your final presentation slides to be posted on Courseweb.

Specifically, the outline of your presentations MAY look something like this:

Example:

Methodology

1. Brief description of machine(s)
2. Lab protocol
3. Reproducibility
4. Description of types of data generated
5. Images from test if available

Brief background literature on specific measure in different populations

Summary of associations with CVD risk factors

2. Annotated Bibliography

In addition to the class presentation, an update of the URL annotated bibliography for the given SCD measure will be assigned to each trainee. These bibliographies are lists of key articles that would help a new investigator or trainee to understand the given SCD measure. Each article on the list is annotated with information that helps the new person know why that particular article is useful. As you are doing the annotation, PLEASE keep it BRIEF. The essential information is how that particular article might be useful to the trainee or investigator. These lists were last updated in 2011, so we will be aiming to update them with relevant articles published between 2012 and 2014. The TA will email the existing lists to students assigned to that specific SCD measure.

One week before your presentation please identify two articles on your subclinical measure to be posted on Courseweb for students to read prior to class. For the day of

your class presentation, in addition to your oral presentation, please prepare **8 ARTICLES** that you deem to be key articles that have added to the literature of your SCD measure since 2012. Please have your annotated bibliography (1-2 sentences of the main findings) and the pdf's of the articles collected and sent to Mindy by the Friday before your class presentation so that they can be added to courseweb. In addition to your review of these articles, **the other students in the class will review 2 articles you selected**, at your discretion. Within your presentation and/or bibliography documentation, please designate the specific articles you would like other students to review off of your list of 8 and give them a DEADLINE to give you their own BRIEF review of the relevance of the articles and a rating from 1-5 in importance (5 being excellent or of high importance). With all of this completed, we ask that you take the class' input into consideration and then update the complete URL annotated bibliography with the most relevant and useful articles for your SCD measure, differentiating the original articles from the new ones you added. This final annotated bibliography will be due within two weeks of your presentation. Please keep track of the individuals who sent you feedback on the annotated bibliographies and send the list, along with your final bibliography, to Mindy.

3. Visit to the Ultrasound Research Lab for Demonstration and Hands-On Practice

The TA will coordinate with students and lab manager the student visits to the URL to view a demonstration of the available measures in the lab. Students are also encouraged to get more detailed or hands-on experience with their specific measure as needed. Students will need to coordinate this with the lab manager, Mindy Columbus.

The TA will also coordinate a visit with the UPMC Heart and Vascular Institute at University Center to observe CT imaging. For this visit students will need to complete the following mandatory modules on the UPMC Infonet at <http://infonet2.upmc.com/OurOrganization/Enterprise/HR/Training/Pages/Mandatory-Training-Modules.aspx>. Or, they're available from outside the firewall here: <http://www.upmc.com/healthcare-professionals/education/Pages/mandatory-training.aspx>. These modules need completed as soon as possible but no later than 9/29/14.

4. May review one article of choice for SCD journal club

Trainee will review one of the more highly rated SCD articles for the SCD journal club. Journal club meetings are held twice per month, Mondays, 3:00 – 4:30 PM. Please coordinate your presentation with Will Fisher (coordinator for journal club). Please provide articles to review at least one week before journal club meeting for dissemination to other members. Attendance to journal club is mandatory for trainees.

Module Grading Scale:

The student's grade for the Fall 2014 module will be based on the following:

For T32 Trainees: class participation including end of term course evaluation (25%), presentation of one of the lectures (40%), and contribution to drafting and improving the annotated bibliography for the subclinical measure for which they are assigned (35%).

For Non-trainees: class participation including end of term course evaluation (25%), completed article review (75%).

Reading Requirements- available on Blackboard:

Each class will have a list of recommended articles pertaining to the subclinical measure to be covered. Students will be asked to give feedback on 2 articles from the annotated bibliography to the student(s) that is responsible for the subclinical measure.

Note to Non-Trainee Students:

We are aware that this is only a 1-credit course, but it is quite a bit of coursework. While it makes sense for the CVD training grant students (trainees) to spend extra time and work on these assignments that are critical to their research and career development, we DO NOT expect you to complete all of these assignments. However, there is a lot to learn within this course including learning background, methodology and getting hands-on experience with subclinical cardiovascular disease measures, so we encourage you to continue your enrollment in this course. If you are not a trainee you will only be required to review and provide feedback on 2 articles chosen by the presenters (refer to Annotated Bibliography assignment on page 4).

General EPIDEM 2152 Course Information

Summary of Course: This course is designed to be a supplement to the standard epidemiology coursework. It is a “hands-on” workshop that will provide the opportunity for students to practice many of the concepts that they learn in class. It will also cover some areas that are not covered by the current curriculum including professional development topics and formal presentations of analysis results.

Teaching/Learning Objectives: The course will be taught as a series of “stand-alone” modules. The length of the modules will vary with 1 to 2 modules taught in a given term. The modules will rotate so that over a 2-3 year period, all areas will be covered. It will be possible and desirable for students to take a given module more than once. When this occurs, the students who have already covered the material will be involved in passing the information on to the newer students. The course will essentially follow a “see one, do one, teach one” paradigm. **See above** for specifics for current semester.

Student Performance Evaluation (Factors and Weights):

Assignment/Project Description: The course will be structured in a participatory manner so that the students will learn from each other as well as the instructors. Following an introductory session for the module, the students will each take an assignment where they will carry out the activity being covered. Subsequent classes will involve the students presenting to each other how they proceeded, what the results were and any unique challenges they faced with executing the assignment for their particular SCD measure. At the end of a module, the group as a whole will be charged with taking the documentation for each module and adding to it so that it is improved for the next time that it is taught. **See above** for specifics for current semester.

General Grading Scale: This is a graded course, and in general the grade will be based on class participation (25%), completion of the module assignments (50%), and contribution to improving the module materials (25%). However, because of the rotating modules, please refer to the Module Grading Scale for the current module grading.

Texts/Supplemental Readings/Bibliography - see above

Accommodation for Students with Disabilities: If you have any disability for which you are or may be requiring accommodation, you are encouraged to notify both your instructor and the Office of Disability Resources and Services, 216 William Pitt Union at 412-648-7890 or TTY 412-383-7355 as early as possible in the academic term. This office will verify your disability and help you to arrange for reasonable accommodations for your full participation in this course.

Academic Integrity: All students are expected to adhere to the standards of academic honesty. Any work submitted by a student must represent his/her own intellectual contribution and efforts. Any student found to be engaged in cheating, plagiarism, or any other acts of academic dishonesty will be subject to a failing grade in the assignment and/or the course and to further disciplinary action.

Assignment Due Dates

Date	Assignment
9/29	<ul style="list-style-type: none"> • UPMC mandatory training modules due
10/20	<ul style="list-style-type: none"> • 2 articles due from presenters on 10/27 to be posted on Courseweb for students to read prior to 10/27 class.
10/24	<ul style="list-style-type: none"> • 8 articles for annotated bibliography due from the presenters on 10/27 to be posted on Courseweb. Please note which articles that you have assigned to students and the deadline that you would like back from them.
10/27	<ul style="list-style-type: none"> • Final presentation due to post on Courseweb from 10/27 presenters.
11/3	<ul style="list-style-type: none"> • 2 articles due by presenters on 11/10 to be posted on Courseweb for students to read prior to 11/10 class.
11/7	<ul style="list-style-type: none"> • 8 articles for annotated bibliography due from the presenters on 11/10 to be posted on Courseweb. Please note which articles that you have assigned to students and the deadline that you would like back from them.
11/10	<ul style="list-style-type: none"> • Final annotated bibliography due from the 10/27 presenters. • 2 articles due from presenters on 11/17 to be posted on Courseweb for students to read prior to 10/27 class. • Final presentation due to post on Courseweb from 11/10 presenters.
11/14	<ul style="list-style-type: none"> • 8 articles for annotated bibliography due from the presenters on 11/17 to be posted on Courseweb. Please note which articles that you have assigned to students and the deadline that you would like back from them.
11/17	<ul style="list-style-type: none"> • Final presentation due to post on Courseweb from 11/17 presenters.
11/24	<ul style="list-style-type: none"> • Final annotated bibliography due from the 11/10 presenters.
12/1	<ul style="list-style-type: none"> • Final annotated bibliography due from the 11/17 presenters.

Educational Policies and Curriculum Committee
Graduate School of Public Health
University of Pittsburgh (Revised:
11/19/2013)

REQUEST FOR APPROVAL OF NEW COURSES AND COURSE CHANGES

1. General Instructions:

- a. Faculty should submit this form and the associated syllabus following the Pitt Public Health Syllabus Guidelines and the Syllabus Checklist (on pages 4 and 5) **by e-mail** to Candace Kammerer, Chair (cmk3@pitt.edu) and Robin Leaf, EPCC Staff Liaison (ral9@pitt.edu). If you choose not to include all the information detailed on the Syllabus Guidelines in your course syllabus for distribution to students, please attach this information to the proposal.
- b. The initiating Department is asked to submit one hard copy of this completed form with the proper signatures, syllabus and other materials (if any) to Robin Leaf in Student Affairs **at least one week prior** to the EPCC meeting. If this target date is not met, the proposal will be deferred for consideration at the next meeting scheduled.
- c. You will be contacted by the EPCC Chair or the EPCC Staff Liaison to schedule a presentation and discussion of your program/course proposal with the Committee, if possible at the next scheduled EPCC meeting.

2. Review based on the following (check all which apply):

- | | |
|--|---|
| <input type="checkbox"/> New course, not previously approved | <input type="checkbox"/> Course modification (major) |
| <input checked="" type="checkbox"/> Course title change | <input type="checkbox"/> Special topics course content |
| <input type="checkbox"/> Cross-listing only | <input type="checkbox"/> Pitt Public Health Core Course |
| (Specify academic unit & course number): _____ | <input type="checkbox"/> Practicum, internship, field placement |

3. Course designation:

Course Number 3015 Title Community Mapping and Introductory Spatial Analysis Credits 3

4. Cross-listing:

n/a (Formerly cross-listed with Biostatistics)

5. Course Instructors:

(Indicate type of Pitt Public Health faculty appointment,* and percentage of total course time/effort anticipated. For any instructor who does not hold a Pitt Public Health faculty appointment, indicate her/his title and affiliation.)

- a. Principal instructor: Christina Mair, Assistant Professor in BCHS. Anticipated 30% effort, Fall 2015.

* The principal instructor for any Pitt Public Health course must have a primary, secondary or adjunct appointment in the school.

b. Co-instructors (if any):
n/a

6. **Statement of the course for *Course Inventory*.** Include purpose of course; summary of prerequisites, if any; general course content; and method of conducting course (e.g., lecture, laboratory, field work, etc.).

This course provides an introduction to the use of spatial data in public health. The two main goals are (1) To familiarize students with the use of geographic data in public health research and practice; and (2) To introduce basic spatial analytic skills applied to geographic and spatial data. Students will be taught how to use Geographic Information Systems (GIS) to inform both community practice and research. They will learn how to create, manage, and analyze geographic data and gain hands-on experience applying these techniques to research questions. No previous knowledge of mapping or GIS is assumed. One lecture and one lab per week.

7. **Student enrollment criteria/restrictions:**

- a. Indicate any maximum or minimum number of students and provide justification for this limitation.

Maximum 20 students (computer lab space).

- b. If admission is by permission of instructor, state criteria to be applied.

- c. Provide a brief description of any prerequisite skills or knowledge areas that are necessary for students entering this course, including any specific course prerequisites or equivalents.

None.

8. **Course schedule and allocation of hours:**

- a. Number of course hours per session 1/2 Sessions per week 2 Weeks per academic term 14

- b. Approximate allocation of class time (hours or %) among instructional activities:

Lectures 2 Seminars _____ Recitations _____ Field work _____ Laboratory 1
Other (specify): _____

- c. Term(s) course will be offered: Fall x Spring _____ Summer Term _____ Summer Session _____

9. **Grading of student performance:**

Indicate the grading system to be used (A, B, C, etc.; H, S, U); provide statement justifying use of system other than letter grade.

A, B, C system.

10. **On-line course delivery:**

Indicate the extent to which you will be using on-line instructional methods in teaching this course by checking all of the options below which apply:

I plan to use the course management aspects of CourseWeb/ Blackboard (or equivalent), e.g., grade book, announcements.

I plan to use the interactive features of CourseWeb/Blackboard (or equivalent), e.g., discussion board, etc.

I have designed the course for remote (off-site) learning with little/no classroom attendance required.

I do not plan to use on-line instruction methods for this course (briefly explain)

11. **Relevance of course to academic programs and curricula:**

- a. Describe how this course contributes to learning objectives specified for the curriculum of one or more Pitt Public Health degree or certificate programs. Indicate whether course is required for any specified degree or certificate.

This course is not required for any degree or certificate, but is part of the health equity certificate and is an elective in BCHS. The MPH competencies it contributes to include:

- Demonstrate ability to apply principles of community-based participatory research and practice to community health assessment
- Specify multiple targets and levels of intervention for social and behavioral science programs and/or policies.
- Communicate in writing information to the public, to stakeholders, and to policymakers
- Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research, and practice.

- b. Describe how this course addresses public health issues involving diversity (gender, race, ethnicity, culture, disability, or family status).

This course addresses geographic health disparities, potentially of all of the above, by teaching students how to use maps and spatial analysis in their research and practice to highlight disparities.

12. **Signature and date of principal faculty member (include department/program) making request:**

Name/Title: Wen Min, BCHS
Christina Mair

Date: 3/2/15

13. **Signature and date of endorsement of department chairperson:**

Name/Title: Steven M. Oltz, Professor + Chair

Date: 3/2/15

14. (For cross-listing only)

Signature and date of endorsement of department chairperson:

Name/Title: _____

Date: _____

Educational Policies and Curriculum Committee

Graduate School of Public Health

University of Pittsburgh

(11/19/2013)

SYLLABUS CHECKLIST FOR NEW AND REVISED COURSES

Addendum to REQUEST FOR APPROVAL OF NEW COURSES AND COURSE CHANGES FORM

Objective to assist faculty to ensure syllabus contains the required and necessary elements to provide students with clear expectations of the course.

NOTE: * indicates a required element of the syllabus. If N/A is checked or this element is not included complete the information detailed on page two for all instances.

Syllabus Area	Recommended Detail * Required	Included in Your Syllabus?					
<i>Heading</i>	Course Number*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Course Title*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Course Meeting Time/Day of Week*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Classroom Location*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
<i>Faculty Information</i>	Office Location*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Office Hours*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Phone Number*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Email Address*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Teaching Philosophy	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
	Teaching Assistant Contact	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
<i>Student Expectations in Classroom</i>	Behavior/ Ground Rules (cell phones off, laptops off, etc.)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Recording of Lectures	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
<i>Course Summary</i>	Course Description*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>

	Learning Objectives*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Materials	Required Textbooks/ Articles/Readings	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Required Software	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Required Equipment (including use of CourseWeb/Blackboard)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Recommended Material	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
	Availability of Software for Purchase and/or Use	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Evaluation	Grading Scale*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Grading Criteria/Rubric	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Late Assignment Policy	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Accommodation of Students with Disabilities	Pitt Public Health Statement*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Academic Integrity Policy	Pitt Public Health Statement*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Schedule	Topics by Session*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Reading and Written Assignments by Session*	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Learning Objectives by Session	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>

Graduate School of Public Health
Department of Behavioral and Community Health Sciences
BCHS 3015: Community Mapping and Introductory Spatial Analysis
Fall Term 2015
Mondays 10-12 (A622 Crabtree Hall) & Wednesdays 11-12 (Posvar Hall Computing Classroom 1201)
3 Credit Hours

Instructor: Christina Mair
Office: 219 Parran Hall
cmair@pitt.edu
(412)624-3613
Office Hours: Thursdays 1-2 & by appointment

Course Description

This course provides an introduction to the use of spatial data in public health. The two main goals are (1) To familiarize students with the use of geographic data in public health research and practice; and (2) To introduce basic spatial analytic skills applied to geographic and spatial data. Students will be taught how to use Geographic Information Systems (GIS) to inform both community practice and research. They will learn how to create, manage, and analyze geographic data and gain hands-on experience applying these techniques to research questions. No previous knowledge of mapping or GIS is assumed. One lecture and one lab per week.

Learning Objectives

At the end of this course, each student will:

1. Understand the basic principles and operation of geographic information systems, focusing on QGIS;
2. Be able to create and interpret maps;
3. Understand how a spatial perspective might contribute to their own work in both practice and research arenas;
4. Manipulate spatial data for analysis;
5. Use basic spatial econometric analysis techniques;
6. Apply mapping and spatial analysis to a public health project.

Required Texts

Thiede, R., Sutton, T., Düster, H., & Sutton, M. (2013). The Quantum GIS Training Manual: A Comprehensive Introduction to Quantum GIS. Chugiak, AK: Locate Press LLC.

Additional readings and information on labs and other classroom activities will be posted on [CourseWeb](#) (Blackboard).

Required Software

We will use QGIS, a free and open source geographic information system. QGIS can be downloaded here: <http://www2.qgis.org/en/site/>

Class Expectations

This course is a hands-on mixture of labs and lectures. Preparation for, and attendance in, every class is essential for success in the class. Some expectations I have for students include:

- **Regular attendance.** You are expected to attend every class *on time* unless discussed in advance.
- **Completion of required readings and tutorials.** Come to class prepared having completed the tutorials and be ready to apply those skills to the next week's lab.
- **Completion of assignments.** Assignments are due at the beginning of class on the day noted in the syllabus.
- **Class participation.** Your input is critical to understanding the readings in context and determining which skills are being learned and which are proving to be difficult. I depend on your input to underscore the readings, lecture, and labs.
- **Cell phones.** Interruptions by cell phones during class affect the teaching and learning environment. Please be respectful of your classmates and turn your cell phone to off or vibrate before class begins. If you must answer your cell phone, please leave the computer lab before doing so.
- **Checking e-mail, surfing the internet, etc.** Although much of the class takes place in the computer lab, it is not okay to check e-mail, surf the internet, or work on other classroom assignments during class time unless all of your work is finished. It is expected that when the instructor or your classmates are speaking that you will not be using the computer at all. The computers are to be used to complete lab assignments.

Course Assignments

GIS & Spatial Analysis Portfolio

GIS can only be learned by doing. For that reason is essential that students have significant practice for each of the concepts introduced and taught. To facilitate this, your book has a series of tutorials that can be found at the end of each chapter. Students will be required to complete these tutorials before class. During the lab portion of the class, students will complete one or more self-guided lab assignments, which focus on specific aspects of GIS data analysis, manipulation and presentation. The assignments are accompanied by detailed instructions. In your portfolio you will be expected to include copies of the six lab assignments and answers to the questions asked at the beginning of each lab assignment. In Section 2, there will be four short labs focused on spatial analysis methods. These assignments are also expected to be included in the final portfolio.

Map Design, Interpretation and Presentation (Weekly Presentations by Students)

This assignment allows you to apply the skills you've learned in the tutorials and labs to understand and critique maps that you find in everyday life. Once during the semester, each student will be required to gather and share at least two examples of maps you've seen either on the web, in newspapers, or in books. This will be in the form of a 5 minute presentation. You must then provide a critique of the design of the maps pointing out how the design of the map aids in or detracts from interpretation, provide a reading of the findings from the map and provide various explanations as to why the map might be interpreted in that way, and give recommendations on how to improve the map to ease analysis by the reader. The purpose of this assignment is to help facilitate your understanding in how to interpret and describe maps and critically assess the design of maps.

Midterm Project (Section 1)

Each student will pick a topic for their Midterm and Final Project. For the midterm project, students are required to choose a public health issue for which they will use maps to show health disparities using at least one source of original data. Students will be required to turn this original data into map layers through processes such as geocoding, drawing new shapefiles, rendering x,y data, etc. The midterm project should include at least four different maps, with a brief (1-2 page) description of the maps and data.

Final Project (Section 2)

Students will be expected to use spatial data to conduct a basic spatial autocorrelation analysis of a public health disparity, preferably the same topic as in the midterm project. Students will be expected to write a paper 5-7 pages in length that discusses the methods used, the results, and the implications of the findings.

Project Presentation

The project presentation should no more than 10 minutes in length. You should tell the class about the midterm and final projects.

Student Performance Evaluation

Grades will be based on points accumulated for class attendance and participation, lab exercises, class project and final project. Total points earned will be based on the following:

<u>Component</u>	<u>Percent</u>
Class participation & map presentation	10%
GIS & Spatial Analysis Portfolio	30%
Mid-term project	20%
Final project	20%
Final presentation	20%

Total

100%

Points acquired will be cumulative and will translate into a letter grade. Please Note: All requirements must be met by the last day of the class. After that date no student will be eligible for a grade higher than a B.

Grading Scale

90-100% A
80-89% B
70-79% C
< 60% F

Please note: The instructor reserves the right to assign + and – grades.

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 (Voice or TTD 412-648-7890) as early as possible in the term.

Pitt Public Health Academic Integrity Statement

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 Graduate School of Public Health's policy on academic integrity, approved by EPCC on 10/14/08, which is based on the University policy, is available online in the Pitt Public Health Academic Handbook (mypublichealth.pitt.edu) > Students> Academics and Student Services> Academic Handbook. 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 the school.

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 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 Pitt Public

Health Academic Integrity Hearing Board, a record will remain in the student's permanent file.

Copyright Notice

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COURSE OUTLINE

DATE	TOPIC	READINGS
<u>SECTION 1: COMMUNITY MAPPING (8 weeks)</u>		
<u>Week 1</u>		
Aug 31 (M)	Introduction to QGIS Introduction to Community Mapping <u>Assignment</u> : Download QGIS to your home computer/laptop	
Sept 2 (W)	Learning basic functions of QGIS Setting up QMap Adding data and geography layers <u>Lab Assignment 1</u> : Creating your first map	Modules 2 & 3
<u>Week 2</u>		
Sept 7	NO CLASS	
Sept 9	Using Administrative Data Working with layouts Creating inset maps <u>Lab Assignment 2</u> : Defining "Neighborhoods"	Modules 4 & 5
<u>Week 3</u>		
Sept 13	Geocoding <i>Due: Place-based research topic/questions</i>	
Sept 15	<u>Lab Assignment 3</u> : Mapping off-premise alcohol outlets	
<u>Week 4</u>		
Sept 21	Joining data and geography files How to do spatial queries	
Sept 23	<u>Lab Assignment 4</u> : Mapping hospitalization rates <i>Due: GIS Portfolio draft with Labs 1-3</i>	
<u>Week 5</u>		
Sept 28	Introduction to American Factfinder Downloading data to map	

Downloading free geography files
Preparing Census tract data in Excel to import into QGIS

Sept 30 Creating indices
 Creating features
 Editing Features and attributes
 Lab Assignment 5: Poverty, Drugs, and Crime
 Due: Identification of Research Question and Data Sources

Week 6

Oct 5 Review Geocoding
 Buffering

Oct 7 Lab Assignment 5 (cont.)

Week 7

Oct 13—TUESDAY Preparing maps for presentation
 Creating thematic maps to display data
 Working with legends and interval breaks
 Elements of a good map

Oct 14 Lab Assignment 6
 Due: Midterm Project Map #1

Week 8

Oct 19 (overflow from earlier weeks...)

Oct 21 OPEN LAB: Use this time to work on your midterm project
 Due: GIS Portfolio draft with Labs 1-6

SECTION 2: SPATIAL ANALYSIS (6 weeks)

Week 9

Oct 26 Introduction to spatial data analysis techniques
 What's special about spatial?
 Relationship between GIS and spatial data analysis
 Problems with spatial data
 Visualizing spatial data
 Due: Midterm Project

Oct 28 Exploratory Spatial Data Analysis

Spatial Weights Matrices
Lab Assignment 7: Analyzing Crime at Differing Levels of Geography
Due: Final Project outline

Week 10

Nov 2 Modifiable Areal Unit Problem
 Spatial Autocorrelation

Nov 4 Lab Assignment 8: Exploratory Spatial Data Analysis (ESDA) and Spatial Autocorrelation

Week 11

Nov 9 Regression Models and Spatial Autocorrelation
 Statistical Diagnostics

Nov 11 Lab Assignment 9: Running a Regression with Spatial and Other Diagnostics in GeoDA

Week 12

Nov 16 Spatial Error Models
 Spatial Lag Models

Nov 18 Lab Assignment 10: Conducting Spatial Error and Spatial Lag Regressions in GeoDA

Week 13

Nov 23 Geographically Weighted Regressions
 Choosing the Appropriate Regression Model for your Study

Nov 25 NO CLASS

Week 14

Nov 30 Edge Effects
 Spatially Lagged Variables
 Misaligned Models
 Advanced Topics in Spatial Analysis
Due: Final GIS Portfolio with Labs 1-10

Dec 2 OPEN LAB: Use this time to work on your FINAL project

Week 15

Dec 7 Class Presentations
Due: Final project

Dec 9 Class Presentations

Semesters Offered | Overall teaching effectiveness OMET score

Core Course & Instructor	Semesters Offered			Overall teaching effectiveness OMET score						
	Fall 2011	Spring 2012	Summer 2012	Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014	Summer 2014	Fall 2014
BCHS 2509		4.3 Martha Terry	4.6 Martha Terry		4.45 Martha Terry	4.67 Martha Terry		4.13 Martha Terry	4.17 Martha Terry	4.13 Thistle Elias
BIOST 2011	3.61 Richard Day			2.89 Vinnie Arena			2.96 Vinnie Arena			2.72 Vinnie Arena
BIOST 2041	4.51 Sally Morton			4.59 Sally Morton			4.45 Sally Morton			4.31 Sally Morton
BIOST 2042					3.9 John Wilson			4.15 John Wilson		
EOH 2013		4.38 Aaron Barchowsky			----- Aaron Barchowsky			3.71 Aaron Barchowsky		
EPIDEM 2110	3.5 Tom Songer		3.61 Tom Songer	3.42 Tom Songer		4.15 Tom Songer	3.99 Tom Songer		3.85 Tom Songer	3.87 Tom Songer
HPM 2001		2.47 Beauford Longest	3.31 Beauford Longest		4.48 Everett James			4.6 Everett James		4.54 Everett James
PUBHLT 2011		4.33 Jeremy Martinson			4.25 Jeremy Martinson			4.06 Jeremy Martinson		
PUBHLT 2014	3.51 Gerry Barron			3.38 Gerry Barron			3.82 Gerry Barron			3.49 Gerry Barron
PUBHLT 2015	4.66 Jeremy Martinson		4.6 Jeremy Martinson	4.7 Jeremy Martinson		4.53 Jeremy Martinson	4.46 Jeremy Martinson		4.25 Ryan Minster	4.69 Jeremy Martinson
PUBHLT 2016	3.97 Candy Kamerer	3.74 Candy Kammerer	4.2 Candy Kammerer	4 Candy Kammerer	3.69 Candy Kammerer	4.33 Candy Kammerer	3.06 Candy Kammerer	3.6 Candy Kammerer	4 Candy Kammerer	4.1 Candy Kammerer

**Graduate School of Public Health
Educational Policies and Curriculum Committee
Meeting Minutes | March 5, 2015**

Present: Yue Chen, Robert Coulter, David Finegold, Andriy Bandos, Mary Derkach, Jane Clougherty, Cindy Bryce, Robin Leaf, Varun Sharma, Candy Kammerer, Joyce Bromberger, Eleanor Feingold, Patricia Documet, Gerry Barron, Marissa Kaplan

Absent: Wes Rohrer, Ying Ding

Guests: Martha Terry

Meeting called to order at 1:30 p.m. by Candace Kammerer, Chair.

MPH Committee Quarterly Update, Martha Terry

Dr. Martha Terry presented an overview of what has been taking place during MPH Committee meetings. The MPH Committee meets on the last Friday of every month. Dr. Terry informed the EPCC that a list of faculty who are willing to review dissertation and thesis essays for students outside of their departments is now available for reference. A Prezi presentation on logic models (created by Dr. Mary Hawk) is also available to anyone who is interested in learning more about them. The MPH Committee has been looking for ways to increase the number of student OMET evaluation responses. Suggestions include allowing students to complete the evaluations during class; building the evaluation into the course as an assignment (students are required to email the professor their evaluations upon completion); and awarding participation points only if every student completes an evaluation. The MPH Committee is also reviewing the value of the WritePlacer exam and whether or not it is a good tool to measure a student's writing ability. For now, the MPH Committee has decided against using the Symplicity Experiential Learning module as a central location for storing practicum information for the School. Dr. Terry informed the EPCC that Joanne Russell will be presenting on the role of Global Health in this School during the next MPH Committee meeting. Guests are encouraged to attend. The next MPH Committee meeting will take place on March 27 at 10 a.m. in 109 Parran Hall.

Action: All who are interested in being added to the dissertation/thesis review list are encouraged to inform Dr. Terry of their interest to participate.

Action: EPCC members are encouraged to send suggestions on how to increase OMET evaluation responses to Martha Terry via email.

Action: EPCC members were encouraged to send Martha Terry a description of the role that global health plays in their department and/or the School and to attend the next MPH Committee meeting.

Approval of February minutes

Dr. Candace Kammerer presented the EPCC's February meeting minutes for approval. Robert Coulter motioned to approve the minutes. Dr. Patricia Documet seconded the motion. Dr. Andriy Bandos abstained from voting. All others were in favor. There were no objections.

Action: Robin Leaf will post the approved minutes to the EPCC's Web page.

EPIDEM course description updates, Candace Kammerer

Dr. Kammerer presented an overview of the minor changes that are being made to a number of Epidemiology courses.

Action: Dr. Kammerer or Dr. Joyce Bromberger will notify the instructor of EPIDEM 2295 that the new course description should include full sentences (e.g. "This course reviews...").

BCHS 3105 minor course modification, Candace Kammerer

Dr. Kammerer presented an overview of the minor changes that are being made to BCHS 3105. Dr. Jane Clougherty would like clarification as to how these changes will interface with the second level GIS course that is associated with BCHS 3105. Dr. Joyce Bromberger motioned to approve these minor changes with the understanding that any substantial changes that will need to be made to this course in the future will first be reviewed and approved by the EPCC. Dr. Documet seconded this motion. All were in favor. There were no objections.

Action: Robin Leaf will notify the instructor that changes to the course title and description have been approved. In the letter, she will mention that the instructor will need to present further changes to this course to the EPCC.

Program Termination: Preparedness Certificate, Eleanor Feingold

Dr. Eleanor Feingold notified the EPCC that after speaking with experts in the field and searching for potential candidates to teach this certificate, all involved parties agreed that it would be best to terminate the Emergency Preparedness Certificate for now. If need be, it can be reintroduced in the future, reflecting the significant changes that have taken place in the field since this certificate was first introduced. Robert Coulter motioned to approve the termination of this certificate. Dr. Gerry Barron seconded this motion. Dr. Andriy Bandos abstained from voting. All others were in favor of terminating the certificate.

Action: Dr. Feingold will send official notification to the Provost's office and to Mary Derkach.

Evaluation of Academic Programs, Eleanor Feingold

Dr. Feingold updated the EPCC about the School's current academic programs external review policy. She said that for now, the accreditation process covers the requirement for external review according to the Provost, but that in the future, the School may invite other outside reviewers to evaluate academic programs. The School will be able to set its own timeline as to when this review should take place. No action is required on the part of the School or its departments at the moment.

Course evaluations, Eleanor Feingold

Dr. Feingold notified the EPCC that the deadline to submit OMET course evaluations has been extended to the end of the term. Solutions for multi-instructor course evaluations are in the works. In the future, instructors may be able to designate the courses for which they want to be evaluated.

Action: Dr. Feingold will try to get more concrete details about what will be taking place for multi-instructor course evaluations in the future.

Courses based on outside MOOCs or other resources, Eleanor Feingold

Dr. Feingold notified the EPCC that plans are underway to introduce a course based on Stanford's MOOC (Massive Online Open Course) on Scientific Writing. She noted that a few instructors have voiced concerns about teaching courses based on MOOC's. She wanted to get the EPCC's opinion on how to proceed. Ideally, the professor would use the MOOC as a tool to teach the content of the MOOC in a facilitated environment. Members of the EPCC suggested doing a pilot run of this

course, perhaps as an independent study. This will keep students from having to pay to get credit and will allow the instructor to add to the course as they please. It will also give the School time to have a larger discussion about how MOOC's fit in with our educational programs. Explanations of the faculty's role during independent studies are not standard, but in this case, this policy may be up for discussion.

Action: Dr. Feingold will present these suggestions to the instructor of this proposed course. Planning for this course will continue until it is ready to be formally presented to the EPCC.

Summer and fall meeting schedule

The summer and fall EPCC meetings will take place at 1:30 p.m. in Parran 110 on the following dates:

- June 18
- July 9
- August 13
- September 10

Review of fall core course evaluations

The EPCC reviewed fall core course evaluation results. Courses of note/concern were BIOST 2011 and the Public Health Overview course. Members agreed that all other courses seemed to be on track. Drs. Kammerer and Barron were excused while the evaluations for their courses were reviewed. Dr. Bromberger acted as temporary Chair during Dr. Kammerer's absence. It was decided that no action needs to be taken on the Public Health Overview course at the moment. The EPCC will discuss removing it from the Core at a later meeting as it was added ad hoc during the last accreditation period and does not seem to be particularly popular with the students. More information is also needed before the Committee can make a decision about what to do regarding BIOST 2011 as scores for the lab section of the course and the course itself differ considerably.

Action: Dr. Feingold will create a 3 year longitudinal study of scores for BIOST 2011 and all other core courses. This will give EPCC members some perspective on how the courses have progressed.

Action: Department representatives will send a memo to Dr. Kammerer if there are any courses that are of particular concern to them.

Action: Robin Leaf will draft a template for the memo mentioned above.

The meeting was adjourned at 2:58 p.m. by Dr. Bromberger, temporary Chair.

The next meeting is April 9, 1:30-3:30p.m., 110 Parran Hall.

Future items for discussion/ action at upcoming meetings: Further actions for the Public Health Overview course.