

Graduate School of Public Health
Educational Policies and Curriculum Committee
October 3, 2019
1:30-3:30pm
1155 Public Health (former 1149)

1. Welcome new student members, Patricia Documet
2. Accelerated bachelor's/ master's degree program credit limit, Cindy Bryce
3. GRE discussion and next steps, All
4. Modified Course- IDM 2040: *Scientific Communication*, Josh Mattila (at 2:30pm)
5. Preview Epidemiology Course Restructuring, Samar El Khoundary (at 3pm)
6. Modified Course- EPIDEM 2220: Introduction to Environmental Epidemiology, Evelyn Tablott (at 3:15pm)
7. Approval of September Meeting Minutes, All

Upcoming Meeting(s):

November 7, 2019 – 1:30-3:30 p.m. (1149 Public Health) | *Set spring term meeting schedule*

December 5, 2019 – 1:30-3:30 p.m. (1149 Public Health)

TO: EPCC

FROM: Cindy L. Bryce, Associate Dean for Student Affairs

DATE: 10/03/2019 (meeting date)

SUBJECT: Request to formalize credit limits for accelerated students

Background: In August 2019, I discussed details with Joseph McCarthy (Vice Provost for Undergraduate Studies) for implementing an important change to our Accelerated Bachelor's/Master's degree program. Approved originally as a "3+2" program, Dr. McCarthy (on behalf of the University) asked that Pitt Public Health convert its accelerated program immediately to a "4+1" model.

Students accepted into this program will now remain with their undergraduate (UG) department in Year 4 (Pitt refers to this as the "crossover year"). For students, there are two important implications of this change during the crossover year: (1) they pay undergraduate tuition rates and remain eligible for undergraduate forms of financial aid (e.g., student loans, PELL grants); and (2) they can register for up to 18 credits per term.

The tuition differential is substantial – this year, it's an **additional savings** of \$9,000 for PA residents, \$14,000 for non-PA residents. We expect and hope this creates even greater interest in the program among Pitt undergraduates.

On the other hand, the higher credit limit poses a concern. Students can compress their Public Health coursework and potentially complete 36 credits in the crossover year. This enables them to finish their MPH or MS degree with only one additional semester of coursework. Obviously, this further reduces their tuition expenses and, in turn, the tuition that the School receives. But there is also a larger concern that students will be overextended. If they effectively spend only one semester as Pitt Public Health students, they miss out on the graduate school experience that comes from interacting with the rest of our school.

Only Year 4 is affected by this change; in Year 5, accelerated students register as Pitt Public Health students. Currently, we have one example of a new accelerated student who is registered for 18 credits this term. The student plans to complete the program in December 2020 (i.e., only one additional semester beyond the undergraduate period).

Request: The Associate Dean for Student Affairs and Associate Dean for Education would like to modify the accelerated program and restrict the number of credits allowed through the accelerated program. There are several possible options:

1. Allow the current policy to remain in place.
2. Restrict the TOTAL number of credits allowed in the crossover year (Year 4) to 15 credits per term, with a 16th credit permitted if approved by the program director of the student's graduate

degree program. *Note: this language mimics the current policy for other full-time students at Pitt Public Health.*

3. Restrict the number of GRADUATE credits allowed in the crossover year to 15 credits per term but allow accelerated students to register for additional UNDERGRADUATE courses, not to exceed 18 total credits per term. *Note: the concern expressed here is that any extra coursework (even undergraduate coursework) is too much if the students are taking 15 graduate credits.*
4. Restrict the number of GRADUATE credits allowed in the crossover year to “X” credits per term (where “X” is something less than 15, as determined by EPCC), but allow accelerated students to register for additional UNDERGRADUATE courses, not to exceed 18 total credits per term. *Note: this language is intended to address the concern raised in Option 3. Students would be restricted to fewer than 15 credits of graduate coursework if they need to also take undergraduate courses.*

Perhaps there are other possible responses as well.

I would like to discuss this issue at the October EPCC meeting and hope that a policy can be approved in time for Spring 2020 registration. Thank you.

EPCC SUMMARY REPORT | DRAFT

GRE Requirement and Applicant Diversity

Appendix A | Public Health Schools and Programs – No GRE Requirement [updated 9/24/2019]

A.T. Still University College of Graduate Health Studies
American University of Beirut - Faculty of Health Sciences, Graduate Public Health Program
Baylor University Program of Public Health (online MPH program)*
Boston University School of Public Health [starting 2019-20 admissions | 3 year pilot program]*
Central New York Master of Public Health Program (SUNY Upstate Medical University)
Charles R. Drew University of Medicine and Science MPH Program in Urban Public Health
Drexel University Dornsife School of Public Health*
Eastern Virginia Medical School - Old Dominion University MPH Program
National Institute of Public Health of Mexico (Instituto Nacional de Salud Publica)
National Taiwan University College of Public Health
New York Medical College, School of Health Sciences and Practice, and Institute of Public Health
St. George's University Department of Public Health and Preventive Medicine
Touro University - California MPH Program
Université de Montréal School of Public Health
University of San Francisco MPH Program
Walden University Master of Public Health Program

** schools/ programs added to the list as of August 2019*

Appendix B | Table Prepared by Cindy Bryce, Associate Dean for Student Affairs (2018)

Demographic information	Admitted (n=539)	Matriculated (n=153)	Declined or Withdrew (n=386)	Percentage Declined or Withdrew
Underrepresented race/ethnicity	85	26	59	69.41
Military service (or eligible dependents)	7	4	3	42.86
Economically disadvantaged	55	13	42	76.36
First generation college graduate	84	24	60	71.43
Geographic region (isolated rural or small town)	97	38	59	60.82
TOTAL	328	105	223	

Appendix C | Articles Reviewed

Alon, S. and Tienda, M. (2007). Diversity, Opportunity, and the Shifting Meritocracy in Higher Education. *American Sociological Review*, 72(4), 487-511.

Bowman, J. S. (1988). Admission Practices in Master of Public Administration Programs: A nationwide Study. *Public Administration Review*, 48(5), 867-875. Retrieved September 17, 2009, from <http://www.jstor.org/stable/976902>

Dawes, R. M. (1975). Graduation Admission Variable and Future Student Success. *Science*, 187(4178), 721-723. Retrieved September 17, 2009, from <http://www.jstor.org/stable/1739800>

Educational Testing Service (2009). *Graduate Record Examinations Guide to the Use of Scores: 2009-10*. Retrieved October 19, 2009, from http://www.ets.org/Media/Tests/GRE/pdf/gre_0910_guide.pdf

Educational Testing Service (2007). *The GRE Analytical Writing Measure: An Asset in Admissions Decisions*. Retrieved October 19, 2009, from http://www.ets.org/Media/Tests/GRE/pdf/gre_aw_an_asset.pdf

Fedynich, L. (2017). The Grand Question: Do Entrance Examinations Determine Graduate Student Academic Success? *Research in Higher Education Journal*, 33, 1-8, from <https://eric.ed.gov/?id=EJ1178436>.

Hall J.D., O'Connell A.B., Cook J.G. (2017). Predictors of Student Productivity in Biomedical Graduate School Applications. *PLoS ONE* 12(1):e0169121. doi:10.1371/journal.pone.0169121

Hansen, W. L. (1971). Prediction of Graduate Performance in Economics. *The Journal of Economic Education*, 3(1), 49-53. Retrieved September 17, 2009, from <http://www.jstor.org/stable/1182084>

Houston, S. R. (1968). Generating a Projected Criterion of Graduate School Success via Normative Judgment Analysis, *The Journal of Experimental Education*, 37(2), 53-58. Retrieved September 17, 2009, from <http://www.jstor.org/stable/20157013>

Klieger, D. M., Belur, V., and Kotloff, L. J. (2017). Perceptions and Uses of GRE Scores After the Launch of GRE Revised General Test in August 2011, *GRE Board Research Report Series and ETS Research Report Series*, 1-49, doi:10.1002/ets2.12130

Kuncel, N. and Hezlett, S. A. (2007). Standardized Tests Predict Graduate Students' Success. *Science*, 315(5815), 1080-1081. Retrieved September 17, 2009, from <http://www.jstor.org/stable/20039045>

Moneta-Koehler L., Brown A.M., Petrie K.A., Evans B.J., Chalkley R. (2017) The Limitations of the GRE in Predicting Success in Biomedical Graduate School. *PLoS ONE* 12(1): e0166742. doi:10.1371/journal.pone.0166742

National Center for Fair and Open Testing (2007). *Examining the GRE: Myths, Misuses, and Alternatives*. Retrieved November 24, 2009, from <http://www.fairtest.org/examining-gre-myths-misuses-and-alternatives>

National Center for Fair and Open Testing (n.d.). *Optional List: Test Score Optional List*. Retrieved November 24, 2009, from <http://www.fairtest.org/university/optional>

- Oldfield, K. and Ritter, K. (1996). Do we practice what we preach? The prevalence of Graduate Record Examination Predictive Validity Studies at Leading Master of Public Administration/ Master of Public Policy Programs, *Journal of Public Administration Education*, 2 (1). Retrieved January 9, 2017, from <http://www.jstor.org/stable/4015121>
- Rooney, C. (1998). *Test Scores Do Not Equal Merit: Enhancing Equity & Excellence in College Admissions by Deemphasizing SAT and ACT Results*. Retrieved October 6, 2009, from <http://www.fairtest.org/files/optrept.pdf>
- Scott, R. R. and Shaw, M. E. (1985). Black and White Performance in Graduate School and Policy Implications of the Use of Graduate Record Examination Scores in Admissions. *The Journal of Negro Education*, 54(1), 14-23. Retrieved September 17, 2009, from <http://www.jstor.org/stable/2294896>
- Sealy, L. Saunders, C., Blume, J., and Chalkley, R. (2019). The GRE Over the Entire Range of Scores Lacks Predictive Ability for PhD Outcomes In the Biomedical Sciences. *PLoS One*, 14(3). <https://doi.org/10.1371/journal.pone.0201634>
- Stricker, G. and Huber, J. T. (1967). The Graduate Record Examination and Undergraduate Grades as Predictors of Success in Graduate School. *The Journal of Educational Research*, 30(10), 466-468. Retrieved September 17, 2009, from <http://www.jstor.org/stable/27531930>
- Stricker, L. J. (2002). The Performance of Native Speakers of English and ESL Speakers on the Computer-Based TOEFL and GRE General Test. Educational Testing Service Report No. RR-02-16. Retrieved November 18, 2009, from <http://www.ets.org/Media/Research/pdf/RR-02-16.pdf>
- Totonchi, D. A. and Glass, C. R. (2017). [Review of the book *Inside Graduate Admissions: Merit, Diversity, and Faculty Gatekeeping*]. Project Must, 627-630. Retrieved September 6, 2018 from <https://doi.org/10.1353/rhe.2017.0026>
- Vecchio, R. and Costin, F. (1977). Predicting Teacher Effectiveness from Graduate Admissions Predictors. *American Educational Research Journal*, 14(2), 169-176. Retrieved September 19, 2009, from <http://www.jstor.org/stable/1162709>
- Williams, J. E. and Johnston, R. A. (1963). The Area Tests of the Graduate Record Examination as a Partial Criterion of Academic Success. *The Journal of Experimental Education*, 32(1), 95-100. Retrieved September 17, 2009, from <http://www.jstor.org/stable/20156687>
- Zwick, R. (1993). The Validity of the GMAT for the Prediction of Grades in Doctoral Study in Business and Management: An Empirical Bayes Approach. *Journal of Educational Statistics*, 18(1), 91-107. Retrieved September 17, 2009, from <http://www.jstor.org/stable/1165184>

Educational Policies and Curriculum Committee
Graduate School of Public Health
University of Pittsburgh
(Revised: 6/7/2018)

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 Patricia Documet, Chair (pdocumet@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 checked="" type="checkbox"/> Course modification (major) [†] |
| <input type="checkbox"/> Course title change | <input type="checkbox"/> Special topics course content |
| <input type="checkbox"/> Cross-listing | <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 IDM 2040 Title Research Ethics and Scientific Communication Credits 1

4. **Cross-listing:**

If you want to cross-list this course in any other Pitt Public Health department or any other school of the University, specify which department(s) and School(s) and provide brief justification.

None.

5. **Reason for request:**

In a few sentences, describe the motivation behind this application.

Adding a research ethics section and rescheduling the already-listed Sci Comm class.

[†] Changes to credits will require a new course number and significant title changes may require a new course number

6. **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: Joshua Mattila

b. Co-instructors (if any):

7. **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.).

The objective of the course is to give the students a background in the framework that guides ethical conduct in research and give them skills that enhance their abilities to communicate their research findings to diverse audiences. There are no course prerequisites but this class is restricted to IDM students.

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

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

20 students - maximum number for constructive small groups and full-group presentations

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

IDM students

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.

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

a. Number of course hours per session 60 Sessions per week 1 Weeks per academic term 15

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

Lectures 60 Seminars _____ Recitations _____ Field work _____ Laboratory _____

Other (specify): 40% small group

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

10. **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+ through F

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

11. **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)

12. **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 class would satisfy the student's requirement for research ethics training.

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

Many students participate in work involving sensitive populations and this is addressed here, it also will help them to better communicate their work to diverse populations.

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

Name/Title: Joshua T. Matto

Date: 9-23-19

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

Name/Title: [Signature]

Date: 23SEP19

15. (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?					
		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Heading	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"/>
Faculty Information	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 checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Student Expectations in Classroom	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"/>
Course Summary	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 checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
	Required Software	Yes	<input type="checkbox"/>	No	<input checked="" 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 checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Availability of Software for Purchase and/or Use	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>

IDM 2040: Research Ethics and Scientific Communication (1 credit)
Tuesdays, XX:XX – XX:XX (1 hr 50 minutes)
Spring Semester, January 6 – April 22, 2020
[Room TBD]

Course Director:

Joshua T. Mattila, Ph.D.
Assistant Professor, Department of Infectious Diseases and Microbiology
Office: 2137 Public Health Building
Phone: 412-648-2341
Email: jmattila@pitt.edu
Office hours by appointment

Prerequisites: None, restricted to IDM students

Maximum class size: 20 students

Course Description: This course will introduce students to ethical considerations associated with public health research. Topics will include research on human and animal subjects, conflicts of interest, data management and transparency in reporting, authorship and peer review, and mentorship. Students will also learn how to improve their communication skills by identifying their target audience, refining their technical writing and graphics preparation skills, and developing their oral presentation skills. Classes will include lectures and small group discussions on assigned readings. Class attendance and participation are required. Satisfactory letter grades will be contingent upon the student's in-class contributions, completion of out-of-class homework assignments and projects, and performance on quizzes based on the course topics.

Learning Objectives: *Upon completion of this course, the student should be able to:*

- Identify ethical issues in Public Health research, including in their own work
- Identify the institutional and organizational systems designed to ensure work performed in humans and animals has an ethical foundation
- Describe and explain the ethical underpinnings of major controversies in public health
- Describe how good data management and transparency contributes to successful research
- Describe how mentorship contributes to scientific success and high-quality research
- Identify conflicts of interest that can occur in public health research
- Recognize how research misconduct and plagiarism inhibit scientific progress
- Identify how the elements of a scientific presentation can be used in paper, poster, and oral presentation formats to improve scientific communication
- Use software tools including references managers, graphic illustration packages, and word processor features to improve their ability to produce scientific presentations
- Identify similarities and differences in manuscripts, essays/theses, and grant applications

Texts/assigned materials: Participants will need to read the assigned materials that are posted on CourseWeb (Blackboard) and be able to discuss them. Handouts and discussion topics will be produced from topics included in "Scientific Integrity, 4TH edition", Francis L. Macrina, ISBN-13: 978-1555816612.

Students will be responsible for familiarizing themselves with information on websites including:

- The University of Pittsburgh's Clinical and Translational Science Research (CTSI) Center for Guidelines for Responsible Conduct of Research: <https://ctsi.pitt.edu/education-training/responsible-conduct-of-research-training/>
- The University of Pittsburgh Office of Research Protections: <https://www.orp.pitt.edu/rcco-offices/research-integrity>

Student expectations in the classroom and performance evaluation: Students are expected to be prepared for class, engage in frank and respectful discussions, and offer honest and professional critiques of the discussion topics. All course requirements must be completed to receive credit for the course. Attendance is

required and makeup assignments will be required for students missing class. Missing classes without completing the makeup assignments within one week will result in loss of points for that class period.

Participation credit requirement (40% of final grade) – Students are expected to come to class prepared and be ready to actively participate in full-class and small group discussions.

Analytic essay (20% of final grade) – Students will be required to synthesize the course material and thoroughly examine a historic or current ethical challenge facing public health research. Students will be responsible for identifying their topic and submitting a proposal to the Instructor for approval by 14 January, 2020 and their final paper will be due on 11 February 2020 and will be presented to the class on 18 February 2020.

Paper titles and good/bad abstract exercise (10% of final grade) – Students will be required to identify three ‘good’ titles and three ‘bad’ titles, and one ‘good’ abstract and one ‘bad’ abstract from the literature and be able to justify their choices to the class.

Student project abstract (10% of final grade) – Students will prepare an abstract of their work or a literature review they intend to perform and this will form basis of their poster project.

Poster presentation (20% of the final grade) – Students will be prepare a poster based on their research projects and present it to the class for their peers to critique.

Grading policy:

A+	97 - 100.0%	C+	77 - 79.9%	F	<60%
A	93 - 96.9%	C	73 - 76.9%		
A-	90 - 92.9%	C-	70 - 72.9%		
B+	87 - 89.9%	D+	67 - 69.9%		
B	83 - 86.9%	D	63 - 66.9%		
B-	80 - 82.9%	D-	60 - 62.9%		

Cell phone and computer policy: Cell phones are allowed in class but should be silenced and not be used during class. Laptop computers and tablets are allowed in class but their use should be reserved for the topics being discussed in class.

CourseWeb/BlackBoard: The University of Pittsburgh CourseWeb/Blackboard site will be used for announcements, assignments, and to disseminate reading assignments.

Accommodation for Students with Disabilities

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services, 140 William Pitt Union, 412-648-7890 as early as possible in the term.

Academic Integrity Statement: All students are expected to adhere to the school's standards of academic honesty. Cheating/plagiarism will not be tolerated. The Graduate School of Public Health's policy on academic integrity, which is based on the University policy, is available online in the Pitt Public Health Academic Handbook www.publichealth.pitt.edu/home/academics/academic-requirements. The policy includes obligations for faculty and students, procedures for adjudicating violations, and other critical information. Please take the time to read this policy.

Sexual Misconduct, Required Reporting and Title IX Statement: The University is committed to combatting sexual misconduct. As a result, you should know that University faculty and staff members are required to report any instances of sexual misconduct, including harassment and sexual violence, to the University's Title IX office so that the victim may be provided appropriate resources and support options. What this means is that as your professor, I am required to report any incidents of sexual misconduct that are directly reported to me, or of which I am somehow made aware.

There are two important exceptions to this requirement about which you should be aware:

A list of the designated University employees who, as counselors and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here:

www.titleix.pitt.edu/report/confidentiality

An important exception to the reporting requirement exists for academic work. Disclosures about sexual misconduct that are shared as part of an academic project, classroom discussion, or course assignment, are not required to be disclosed to the University's Title IX office.

If you are the victim of sexual misconduct, Pitt encourages you to reach out to these resources:

- Title IX Office: 412-648-7860
- SHARE @ the University Counseling Center: 412-648-7930 (8:30 A.M. TO 5 P.M. M-F) and 412-648-7856 (AFTER BUSINESS HOURS)

If you have a safety concern, please contact the University of Pittsburgh Police, 412-624-2121.

Other reporting information is available here: www.titleix.pitt.edu/report

Statement from the Department of Gender, Sexuality, and Women's Studies

[This statement was developed by Katie Pope, Title IX Coordinator, in conjunction with GSWS instructors.]

Diversity Statement: The University of Pittsburgh Graduate School of Public Health considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. Pitt Public Health is committed to creating and fostering inclusive learning environments that value human dignity and equity. Every member of our community is expected to be respectful of the individual perspectives, experiences, behaviors, worldviews, and backgrounds of others. While intellectual disagreement may be constructive, no derogatory statements, or demeaning or discriminatory behavior will be permitted.

If you feel uncomfortable or would like to discuss a situation, please contact any of the following:

- the course instructor;
- the Pitt Public Health Associate Dean for Diversity at 412-624-3506 or nam137@pitt.edu;
- the University's Office of Diversity and Inclusion at 412-648-7860 or <https://www.diversity.pitt.edu/make-report/report-form> (anonymous reporting form).

Copyright Notice: Course material may be protected by copyright. United States copyright law, 14 USC section 101, et sec., 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](#).

Class	Date	Topic	Overview and assignments
1	1-7-2020	Introduction and overview <i>Josh Mattila, PhD</i>	An introduction and discussion of ethical foundations in public health research and the importance of scientific communication. Students will be introduced to the tools needed in the class including Endnote, graphics illustration packages, and useful tools in MS Word and PowerPoint. Homework assignment: identify a topic for your analytic essay
2	1-14-2020	Human participation in public health research <i>University of Pittsburgh IRB staff</i>	Lecture on ethical issues surrounding studies involving human volunteers and information on University policies designed protect human participants in research studies. Small group discussions Homework Due: Analytic essay topic
3	1-21-2020	Public health research involving animals <i>Frank Jenkins, PhD</i>	Lecture describing the importance of animals in research and the policies designed to ensure ethical treatment of animals in public health and biomedical research Small group discussions
4	1-28-2020	Controversies in public health research and research involving at-risk populations <i>Moses Bility, PhD</i>	This lecture will discuss the ethical implications and safeguards in place for vaccine trials, studies performed in areas with ongoing epidemics, work involving terminally-ill patients, and research strategies using fetal tissue. Small group discussions on the: -- Tuskegee syphilis study -- HIV research at the height of the HIV epidemic -- Stem cell research and changing regulations on fetal tissue research
5	2-4-2020	Data management in public health research HSLs staff	This lecture will address how proper storage and curation of data derived from research has implications on the quality of studies, as well as privacy concerns for studies involving human subjects. Small group discussions and demonstration of LabArchive Electronic Lab Notebook

6	2-11-2020	<p>Mentor:mentee relationships, conflicts of interest, and research misconduct</p> <p><i>Josh Mattila, PhD</i></p>	<p>This lecture addresses the importance and mentorship in science, and how conflicts of interest and research misconduct endanger the quality of public health and biomedical research.</p> <p>Small group discussions</p> <p>Assignment due: Analytic essays on public health controversies (20% of grade)</p>
7	2-18-2020	<p>Controversies in public health research</p> <p>Student presentations</p>	<p>Student-led discussions of the public health controversies they addressed in their essays.</p>
8	2-25-2020	<p>Introduction to Scientific Communication</p> <p><i>Josh Mattila, PhD</i></p>	<p>This lecture emphasizes the importance of understanding your audience</p> <p>Small group discussions</p>
9	3-3-2020	<p>Dissecting the scientific presentation</p> <p><i>Josh Mattila, PhD</i></p>	<p>This lecture identifies how uniformity and organization in scientific presentations and publications facilitate communication</p> <p>Small group discussions</p> <p>Homework assignment: title and abstract</p>
	3-10-2020	(spring break)	(No class)
10	3-17-2020	<p>Making your data presentable – graphics, graphs, and tables</p> <p><i>Josh Mattila, PhD</i></p>	<p>This lecture focuses on how to present and format data to maximize its impact and readability.</p>
11	3-24-2020	<p>Oral and poster presentations</p> <p><i>Josh Mattila, PhD</i></p>	<p>This lecture familiarizes students with approaches for designing successful scientific posters and oral presentations.</p> <p>Small group discussions</p> <p>Homework due: title and abstract assignment (10% of grade)</p> <p>Homework assignment: Abstract for your poster Homework assignment: Research or literature review poster</p>

12	4-1-2020	<p>Publishing your research</p> <p><i>Josh Mattila, PhD</i></p>	<p>This lecture discusses the process of publishing research in scientific journals.</p> <p><i>Homework due: Abstract for your poster (10% of grade)</i></p>
13	4-8-2020	<p>Writing for funding: grant applications</p> <p><i>Josh Mattila, PhD</i></p>	<p>This lecture describes mechanisms used to fund work in science and the process of putting together a grant application with an emphasis on NIH proposals (and PhD comprehensive exams).</p>
14	4-15-2020	<p>Writing your graduate essay or thesis</p> <p><i>Josh Mattila, PhD</i></p>	<p>This lecture describes the overall objective and process for writing and submitting your literature review/essay or thesis.</p> <p><i>Homework due: Research or literature review poster (20% of grade)</i></p>
15	4-22-2020	<p>Student poster presentations</p>	<p>Student presentations of their posters and peer critiques</p>

Department of Epidemiology Curriculum Committee Proposal for Restructuring Sequence and Contents of Epi-method courses

Background:

The Department of Epidemiology is committed to providing comprehensive, up-to-date training in epidemiologic and biostatistical methods that will serve our students in their diverse areas of emphasis. Students will be guided through a coordinated sequence of Epi-method courses that begin with concepts used in study design and descriptive epidemiology and progress to advanced skills in analytical epidemiology and causal modeling.

Current status:

The Department of Epidemiology currently offers 4 main Epi-methods courses to our graduate students, as follows:

Course #	Course title	# of credits	Timing	Instructors
EPIDEM 2110	Principles of Epidemiology	3 credits	Fall and Summer	Thomas Songer
EPIDEM 2180	Epidemiological Methods 1	3 credits	Spring	Maria Brooks Samar El Khoudary
EPIDEM 2187	Epidemiological Methods 2	3 credits	Fall	Ashley Naimi
EPIDEM 2230	Advanced Topics in Epidemiological Methods	2 credits	Spring	Steven Belle Marquis Hawkins

Issue:

Due to changes applied to the contents of EPIDEM 2187 during 2018-2019 academic year:

- Parametric longitudinal analysis and survival data analysis topics are no longer covered in-depth within the Epi-methods sequence.
- EPIDEM 2187 includes focus on causal inference methods, advanced non-parametric/semi-parametric approaches and prediction.
- EPIDEM 2230 has been viewed as a Capstone “Secondary data analysis” course.

Proposal for restructuring sequence and contents of Epi-method courses:

In order to fill in the identified gap and to make our Epi-method courses coherent in the content and sequence, the core subcommittee proposes the following changes *as detailed in the last column in the below table:*

Course #	Course title	Changes
EPIDEM 2110	Principles of Epidemiology	No changes
EPIDEM 2180	Epidemiological Methods 1	<ul style="list-style-type: none"> • New title: Epidemiological Methods 1/Intermediate epidemiological methods • Minor changes in content
EPIDEM 2187	Epidemiological Methods 2	<p>Drop the current EPIDEM 2187 and <u>create 2 new 3-credit courses</u> with new course numbers (2189, 2191):</p> <ul style="list-style-type: none"> • EPIDEM 2189: Epidemiological Methods 2/ Epidemiological Methods of Longitudinal and Time-to-event analysis (Primary instructor: Samar El Khoudary) • EPIDEM 2191: Epidemiological Methods 3/ Advanced Theory and Methods for the Analysis of Epidemiological Data (Primary instructor: Ashley Naimi)
EPIDEM 2230	Advanced Topics in Epidemiological Methods	<ul style="list-style-type: none"> • New title: Secondary data analysis • Minor change in emphasis

Proposed sequence:

Principles of Epidemiology (Fall 1st year) → Epidemiological Methods 1 (Spring 1st year) → Epidemiological Methods 2 (Fall 2nd year) → Epidemiological Methods 3 and Secondary data analysis (Spring 2nd year)

Required vs. elective course:

Principles of Epidemiology → required: all degrees
 Epidemiological Methods 1 → required: all degrees
 Epidemiological Methods 2 → required: PhD, DrPH, MS (one option); elective: MPH
 Epidemiological Methods 3 → required: PhD; elective: masters' programs
 Secondary data analysis → required: PhD; elective: masters' programs

Prerequisites:

Principles of Epidemiology → none
 Epidemiological Methods 1 → Principles of Epidemiology, BIOST 2041
 Epidemiological Methods 2 → Epidemiological Methods 1, BIOST 2049
 Epidemiological Methods 3 → Epidemiological Methods 1, Epidemiological Methods 2, BIOST 2049
 Secondary data analysis → Epidemiological Methods 1, Epidemiological Methods 2, BIOST 2049

Paper work:

- To ensure the ability to apply the above changes by Fall 2020, changes should be submitted to the EPCC **by the end of this year** (i.e. December 2019) so that they can be approved by February 2020.
- Given the significant proposed changes, a cover letter from the core/curriculum committee will be provided to support instructors' applications for the proposed changes.

Educational Policies and Curriculum Committee
Graduate School of Public Health
University of Pittsburgh
(Revised: 6/7/2018)

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 Patricia Documet, Chair (pdocumet@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 checked="" type="checkbox"/> Course modification (major) [†] |
| <input type="checkbox"/> Course title change | <input type="checkbox"/> Special topics course content |
| <input type="checkbox"/> Cross-listing | <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 EPIDEM 2220 Title Introduction to Environmental Epidemiology Credits 2

4. Cross-listing:

If you want to cross-list this course in any other Pitt Public Health department or any other school of the University, specify which department(s) and School(s) and provide brief justification.

5. Reason for request:

In a few sentences, describe the motivation behind this application.

Last year we completed step one of restoring this course to its original form by pulling out the Geospatial analysis component teaching competency in spatial mapping and analysis course (EPIDEM 2221). This application is revamping the original basic designs and methods related to environmental epidemiology which is the study of the association of environmental risk factors affecting disease outcome by revising the curriculum from 3 credits to 2 credits since the geospatial analysis section has been separated into its own course. The only slight change is that

we are including some basic introductory lectures for ArcMap so that students wishing to delve more fully/complexly into geospatial analysis can take EPIDEM 2221, offered every other year.

† Changes to credits will require a new course number and significant title changes may require a new course number

6. **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:

Evelyn O. Talbott, DrPH, MPH, Professor, 70% effort

b. Co-instructors (if any):

Ravi K. Sharma, PhD, Professor, 30% effort

7. **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.).

The purpose of this course is to provide a conceptual understanding of the field of environmental epidemiology. Topics will include: study design and approaches in environmental epidemiology investigations, statistical issues in the analysis and interpretation of such studies, class assignments related to specific environmental exposures linked to health outcomes and methods of data collection and analysis. The course will provide an overview of health effects of environmental exposures. This includes the investigation of cancer and other disease clusters, health effects of water and air pollution, radiation threats and exposures and proximity to toxic waste sites as well as behavioral and socioeconomic elements which often are found to be effect modifiers in disease outbreaks. There will be seven specific exercises linked to WHO outbreaks which were investigated by well-known environmental epidemiologists that will be presented to the class as assignments and discussed. This course is designed to be a companion course for Epidemiology 2221.

This course is meant for all masters or doctoral students in Biostatistics, Epidemiology and BCHS students who have taken Biostatistics 2011/2041 or equivalent and Epidemiology 2110. Examples will include environmental justice, health disparities, Marcellus shale and air pollution exposure issue, the built environment and linkage of these elements to outcomes such as obesity, heart disease, cancer, lifestyle, etc.

Learning Objectives

Upon completion of this course, students should have gained knowledge in the concepts of Environmental Epidemiology and to be able to:

1. **Recognize and be able to explain the differences between the concept of ecologic (grouped data) versus data collected on individuals in various approaches in Environmental Epidemiology studies, and be able to evaluate the strengths and weaknesses of each design as it applies to human health effects.**
2. **Identify and employ publically available databases which are available through local and federal agencies (i.e. USEPA, DEP, DOT) and available health data both at the local level and nationally, and be able to create and use basic mapping skills to visualize community wide and industry wide exposures, as well as to illustrate patterns of disease distribution**

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

3. **Develop a conceptual framework of methods unique to environmental epidemiology investigations to obtain and then link disease outcomes to exposure databases** and the importance of maintaining confidentiality in their application.
4. **Identify valid approaches and designs of environmental epidemiology investigations (time person, place) in order to address a community's questions related to a putative exposure and health outcomes. This includes both in person interviews and testing as well as the ability to consider secondary data sources.**
5. **Competently review the scientific literature related to key environmental exposures and health effects, including low level radiation, air pollution,** lead and water pollution, (arsenic in drinking water) toxic waste site exposures and their health effects.
6. **At the end of the class, the students should be able to choose** an appropriate design to address a suspect agent/exposure in a community and health effects in question and have an understanding of the confounding variables and biases associated with conducting this type of research, and apply measures of risk to determine if associations are meaningful.

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

a. Indicate any maximum or minimum number of students and provide justification for this limitation.
Maximum would be 25-30 dependent on lecture room limits

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

d. 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.
Introduction to Epidemiology 2100, Biostatistics 2011 or 2041 or higher

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

a. Number of course hours per session 2 Sessions per week 1 Weeks per academic term 15

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

Lectures 80% Seminars Recitations 20% Field work Laboratory
 Other (specify): _____

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

10. **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.

Letter grade (A, B, C, D, F)

11. **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:

 x 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)

12. **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 a specific degree or certificate but teaches the basics of disease surveillance and disease cluster investigation, the basics of the application of Doll and Hill's criteria for causation and disease investigation.

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

The field of environmental epidemiology is steeped in environmental justice issues: people with lower SES have traditionally found housing in areas closer to more highly polluted areas and are more likely to be living in housing that has greater levels of lead in paint and older solder and pipes for water intake resulting in great likelihood of environmental exposure. The study of environmental epidemiology helps to disentangle the important co variates related to diseases related to environmental exposures seen across the country and the globe.

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

Name/Title: Freely Talbot, D.P.H., Professor

Date: 9-25-2019

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

Name/Title: Jane A. Cawley

Date: 9-25-2019

15. (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?					
Heading	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*TBD	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Faculty Information	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 checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Teaching Assistant Contact	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Student Expectations in Classroom	Behavior/ Ground Rules (cell phones off, laptops off, etc.)	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Recording of Lectures	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Course Summary	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 Materials	Yes	<input checked="" type="checkbox"/>	No	<input 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"/>

**Graduate School of Public Health
Department of Epidemiology**

EPIDEM 2220

Introduction to Environmental Epidemiology

Time and place to be arranged (Wednesdays 1 – 2:50 PM)

Spring 2020/ or spring session same time

Credit Hours: 2.0

Term/Academic Year Spring 2020

Instructor: Evelyn Talbott, DrPH, MPH, Professor, Graduate School of Public Health, Department of Epidemiology, eot1@pitt.edu

Co-Instructor: Ravi K. Sharma, PhD Professor, Graduate School of Public Health, Epidemiology rks1946@pitt.edu

- Office: A526 Public Health
- Office Hours: Mondays from 11-noon and by appointment
- Telephone: 624-3074
- E-mail: eot1@pitt.edu
- Assistant: Melanie Stangl (A532 Public Health), mvs29@pitt.edu
- Teaching Assistant, Fan Wu, MS, FAW19@pitt.edu

Course Description:

The purpose of this course is to provide a conceptual understanding of the field of environmental epidemiology. Topics will include: study design and approaches in environmental epidemiology investigations, statistical issues in the analysis and interpretation of such studies, class assignments related to specific environmental exposures linked to health outcomes and methods of data collection and analysis. The course will provide an overview of health effects of environmental exposures. This includes the investigation of cancer and other disease clusters, health effects of water and air pollution, radiation threats and exposures and proximity to toxic waste sites as well as behavioral and socioeconomic elements that are often found to be effect modifiers in disease outbreaks

Additional Information:

There will be seven specific exercises linked to WHO outbreaks that were investigated by well-known environmental epidemiologists that will be presented to the class as assignments and discussed. This course is designed to be a companion course for Epidemiology 2221, Geospatial Analysis in Community Health.

This course is meant for all masters or doctoral students in Biostatistics, Epidemiology and BCHS students who have taken Biostatistics 2011 or 2041 or equivalent, and Epidemiology 2110.

Examples will include environmental justice, health disparities, Marcellus shale and air pollution exposure issue, the built environment and linkage of these elements to outcomes such as obesity, heart disease, cancer, lifestyle, etc.

Learning Objectives:

Upon completion of this course, students should have gained knowledge in the concepts of Environmental Epidemiology and be able to:

1. **Recognize and be able to explain the differences between the concept of ecologic (grouped data) versus data collected on individuals in various approaches in Environmental Epidemiology** studies, and be able to evaluate the strengths and weaknesses of each design as it applies to human health effects.
2. **Identify and employ publically available databases which are available through local and federal agencies (i.e. USEPA, DEP, DOT) and available health data both at the local level and nationally, and be able** to create and use basic mapping skills to visualize community wide and industry wide exposures, as well as to illustrate patterns of disease distribution
3. **Develop a conceptual framework of methods unique to environmental epidemiology investigations to obtain and then link disease outcomes to exposure databases** and the importance of maintaining confidentiality in their application.
4. **Identify valid approaches and designs of environmental epidemiology investigations (time person, place) in order to address a community's questions related to a putative exposure and health outcomes. This includes both in person interviews and testing as well as the ability to consider secondary data sources.**
5. **Competently review the scientific literature related to key environmental exposures and health effects, including low level radiation, air pollution,** lead and water pollution, (arsenic in drinking water) toxic waste site exposures and their health effects.
6. **At the end of the class, the students should be able to choose** an appropriate design to address a suspect agent/exposure in a community and health effects in question and have an understanding of the confounding variables and biases associated with conducting this type of research, and apply measures of risk to determine if associations are meaningful.

Required Textbooks/Articles/Readings

Primary textbooks for the course are:

1. *Environmental Epidemiology: Principles and Methods* (Ray Merrill, Jones and Bartlett publishers), 2008 (available as an "e-book" online at the Health Sciences Library System at <http://www.hsls.Pitt.edu/>)

This course uses CourseWeb/BlackBoard.

Required or Recommended Software

SPSS and SAS statistical analysis software will be valuable in this course. We will also strongly recommend downloading ARC Map 10.4 as it will help with visualization and we will provide basic instruction in illustrating exposure-health effects associations. This software can be downloaded for free via Pitt's Software Download Service (accessible under "My Resources" on the MyPitt homepage.)

Grading Scale

Six assignments (exercises) 50%, final project 25%, in class recitation: 25%

Grading scale: 90-100%=A

80-89%=B

70-79%=C

60-69%=D

<60%=F

Assignments and Descriptions

Assignments: There will be six assignments given throughout the semester. They will include 7-10 question short answer questions concerning an environmental epidemiology related outbreak and questions related to analysis of a small data set. These will include well-known examples of disease clusters associated with environmental exposures both in the US and abroad, such as investigations in: chronic arsenic toxicity; pesticide poisoning: an outbreak among antimalarial work; epidemic asthma; atmospheric fog in greater London; a study from severe infection from bacterial water contamination; DDT and breast milk; and lead poisoning among household members.

Project: In addition to assignments, there will be a final individual project. This will consist of a power point presentation in which you take an exposure and outcome related to a population at risk to conduct an analysis. A proposal must be submitted one month before the project is due. The project must consist of statistical analysis of a real dataset and a written report in a form of a publishable scientific paper that summarizes the project. The report must have an abstract, introduction, methods, results and discussion. Data will be made available consisting of both exposure information and health outcome information.

The student can choose a project that is relevant to their own research. The instructors will discuss the topic and its applicability prior to the student commencing the project

Introduction to Environmental Epidemiology (2220) Spring Semester 2020

DATE	LECTURER	TITLE OF LECTURE	
January 8 th	Ravi Sharma, PhD Adjunct Professor, Department of Epidemiology, Pitt Public Health	Introduction to the Course and Use of GIS in the conduct of Environmental Epidemiology Overview of different types of spatial data, Introduction to ARC GIS package	
January 15 th	Evelyn O. Talbott, MPH, DrPH Professor, Department of Epidemiology, Pitt PH	Designs and Approaches in Environmental Epidemiology Studies: Ecologic versus Classic Observation Design Exercise 1 posted	
January 22 nd	Evelyn O. Talbott, MPH, DrPH Professor, Department of Epidemiology, Pitt P.H Ravi Sharma, PhD. Professor, Epidemiology Dept.	Benzene Exposure from Leaking Underground Gasoline storage Tanks: Gasoline Exposure and a Cancer Cluster in Luzerne County, PA How to make quantile maps and import attributes/	1 due
January 29 th	Evelyn O. Talbott, MPH, DrPH Dept. of Epidemiology Ravi K. Sharma, PhD Department of Epidemiology	Epidemiology of Childhood and Adult Asthma Downloading, processing & linking census data to maps quantile maps and use of attribute files for maps Exercise 2 posted	

February 5 th	Evelyn O. Talbott, MPH, DrPH, Professor, Dept of Epidemiology	Health Effects of Water Pollution and Water Quality Considerations Exercise 3 posted	2 due
February 12 th	Gary Marsh, PhD. Professor, Department of Biostatistics	Statistical Issues in the Design, Analysis and Interpretation of Environmental Epidemiologic Studies	3 due
February 19 th	LuAnn Brink, PhD, MPH, Chief Epidemiologist /Deputy Director, Epidemiology, ACHD	Approaches to the Study of Childhood Lead Poisoning in the 21st Century	
	Ravi K .Sharma, PhD Department of Epidemiology	Geoprocessing tools, intersect, clip, dissolve, etc. Exercise 4 posted	
March 4 th	Evelyn O. Talbott, MPH, DrPH Department of Epidemiology	Environmentally Induced Acute Health effects	4 due, Project Proposal due
March 11th	Spring Break Week		
March 18 th	Judy R. Rager, MPH Department of Epidemiology	Case cross-over Studies in Environmental Epidemiology	
	Ravi K Sharma, PhD Professor, Dept of Epidemiology, Pitt PH	The Use of GIS in Environmental Epidemiology: An Example: Geocoding experience Exercise 5 posted	
March 25 th	Yueh-Ying Han, MS, PhD Assistant Professor, Department of Pediatrics	Radiation Exposures and Health Effects Three Mile Island	5 due
April 1 st	Evelyn O. Talbott, MPH, DrPH Department of Epidemiology	Review of Scientific Evidence for Establishing Causation Exercise 6 posted	
April 8 th	Evelyn O. Talbott, DrPH, Ravi Sharma, PhD	Final project presentations + Final Exercise discussions (first of two full sessions)	6 due, Final Projects due
April 15 th	Evelyn O. Talbott, DrPH, Ravi Sharma, PhD	Final project presentations + Final Exercise discussions (second of two full sessions)	

Accommodation for Students with Disabilities

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services, 140 William Pitt Union, 412-648-7890 as early as possible in the term.

Academic Integrity Statement

All students are expected to adhere to the school's standards of academic honesty. Cheating/plagiarism will not be tolerated. The Graduate School of Public Health's policy on academic integrity, which is based on the University policy, is available online in the Pitt Public Health Academic Handbook www.publichealth.Pitt.edu/home/academics/academic-requirements. The policy includes obligations for faculty and students, procedures for adjudicating violations, and other critical information. Please take the time to read this policy.

Sexual Misconduct, Required Reporting and Title IX Statement

The University is committed to combatting sexual misconduct. As a result, you should know that University faculty and staff members are required to report any instances of sexual misconduct, including harassment and sexual violence, to the University's Title IX office so that the victim may be provided appropriate resources and support options. What this means is that as your professor, I am required to report any incidents of sexual misconduct that are directly reported to me, or of which I am somehow made aware.

There are two important exceptions to this requirement about which you should be aware: A list of the designated University employees who, as counselors and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: www.titleix.Pitt.edu/report/confidentiality

An important exception to the reporting requirement exists for academic work. Disclosures about sexual misconduct that are shared as part of an academic project, classroom discussion, or course assignment, are not required to be disclosed to the University's Title IX office.

If you are the victim of sexual misconduct, Pitt encourages you to reach out to these resources:

- Title IX Office: 412-648-7860
- SHARE @ the University Counseling Center: 412-648-7930 (8:30 A.M. TO 5 P.M. M-F) and 412-648-7856 (AFTER BUSINESS HOURS)

If you have a safety concern, please contact the University of Pittsburgh Police, 412-624-2121. Other reporting information is available here: www.titleix.Pitt.edu/report-0

Statement from the Department of Gender, Sexuality, and Women's Studies

[This statement was developed by Katie Pope, Title IX Coordinator, in conjunction with GSWS instructors.]

Diversity Statement

The University of Pittsburgh Graduate School of Public Health considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. Pitt Public Health is committed to creating and fostering inclusive learning environments that value human dignity and equity. Every member of our community is expected to be respectful of the individual perspectives, experiences, behaviors, worldviews, and backgrounds of others. While intellectual disagreement may be constructive, no derogatory statements, or demeaning or discriminatory behavior will be permitted.

If you feel uncomfortable or would like to discuss a situation, please contact any of the following:

- the course instructor;
- the Pitt Public Health Associate Dean for Diversity at 412-624-3506 or nam137@Pitt.edu;
- the University's Office of Diversity and Inclusion at 412-648-7860 or

<https://www.diversity.Pitt.edu/make-report/report-form> (anonymous reporting form).

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Sources: Center for Instructional Design and Distance Education (CIDDE) Syllabus Template and Syllabus Checklist, Office of Disability Resources and Services, EPCC syllabus checklist.

**Graduate School of Public Health
Educational Policies and Curriculum Committee
Meeting Minutes | September 5, 2019**

Present: Jessica Burke, Mary Derkach, Ying Ding, Patricia Documet, Jim Fabisiak, Eleanor Feingold, David Finegold, Nancy Glynn, Robin Leaf, Karrie Lukin, Giovanna Rappocciolo, Kimberly Rehak, and John Shaffer.

The meeting was called to order at 1:33 PM by Dr. Patricia Documet, chair.

Review of member terms of service, Patricia Documet

The committee reviewed the terms of service for members. There are two updates to the EPCC alternate representatives. Mary Hawk cannot be backup for BCHS as she is now the president-elect for FSEC. Thistle Elias will now be the BCHS alternate. Also, Elsa Strotmeyer is the Epidemiology department alternate as opposed to Catherine Haggerty.

ACTION: Educational Programs will update the Web pages and inform Laura Schmid in Human Resources of the updates.

Accreditation Update, Eleanor Feingold, Executive Associate Dean

Eleanor Feingold informed the committee that the school will need to start thinking about reaccreditation. This concerns the EPCC committee with regards to advising data at both the master's and doctoral level. CEPH wants precise data on how many faculty are advising how many students, which has never formally tracked at the school-level before. The committee will need to figure out how to collect this data, whether it be formally through PeopleSoft or collected from departments at accreditation time.

ACTION: The committee will continue this discussion at a later date.

Enrollment Initiatives, Eleanor Feingold, Executive Associate Dean

Eleanor Feingold raised the issue of the enrollment decline for the 2019-20 school year and notified the committee of actions that are being considered to counteract the downswing, including:

- Discussions, currently being held up at the Provost's office, to potentially add an undergraduate program. While this program could be an income generator, there is potential that it could hurt the burgeoning accelerated program that has grown over the past few years;
- Evaluating the effect of current marketing and recruitment initiatives, such as the use of the Student Recruitment System (SRS) and increased presence of Pitt Public Health's social media accounts;
- Hiring a professional recruiter/ marketer;
- Doing away with the GRE requirement for accelerated students; and
- Taking the time to engage with and/or prepare incoming students

Patricia Documet also suggested that the school should advertise the fact that they have a holistic admissions process as a way to attract students to apply to the school.

Ying Ding addressed the fact that there are no international students in Biostatistics this year and asked if other departments were witnessing the same trend. Eleanor said that international student numbers are down across the United States and that the lower number of international students could also be a result of the fact that University of Pittsburgh's ranking has gone down.

ACTION: No action needed. The committee will continue this discussion at a later date.

GRE Updates, Patricia Document and All

Patricia Document summarized the discussions that had occurred in the EPCC meetings over the course of the last academic year regarding the GRE test. The committee had considered dropping the GRE as an admissions requirement in an effort to increase diversity as the test has been shown to be prohibitory to underrepresented groups due to its high cost and bias. After months of discussions, the EPCC committee voted to keep the requirement at the school-level, with the caveat of revisiting the issue should any changes occur. The vote to keep the GRE requirement was justified in large part because all other aspirational schools were keeping the GRE requirement.

Currently with enrollment low, and, therefore, less diversity, and considering the fact that Boston University, a reputable school of public health, has recently established a three-year trial period for dropping the GRE admission requirement, the committee revisited the discussion on whether or not to require the GRE test.

Some committee members, primarily Nancy Glynn from Epidemiology, expressed concern about admitting large numbers of students with low quantitative ability as those students would most likely struggle with EPIDEM 2110 and their Biostatistics requirement. This prompted Ying Ding to ask if the school had a math bootcamp or online course held prior to the start of the fall term and whether that could be a way to help students who needed a mathematical refresher.

Robin Leaf reiterated that BU's dropping of the GRE requirement was for a trial period and if the committee decided to follow suit, it was possible to track student performance in core courses to look for any trends with regard to students' comprehensive quantitative performance.

ACTION: EPCC committee members are to discuss the issue with their departments and report to the committee next month

Report from the MPH (formal EPCC sub-committee), Martha Terry, MPH Committee Chair
Martha Terry, chair of the MPH committee, provided a summary of MPH committee's initiatives from the previous academic year, including:

- Revising the school required core course exemption forms to satisfy CEPH's competency requirements;
- Reaching a consensus for all eight MPH programs on a process for which forms have been created (and a portal is in the process of being built) to track student practica performance and competency attainment;
- Creating five unique advanced competencies per program;
- Administering a soft launch of the practicum e-Portfolio;
- Supporting the annual Practica/Internship Symposium with 55 students and helped to leverage relationships for 12 agencies to participate,
- Meeting with Educational Programs staff to revise syllabi for the CEPH compliance report in January 2019;
- Assisting the Educational Programs staff with information for the Career Outcomes report;
- Reviewed a practicum readiness handout for distribution to potential practicum sites

ACTION: No action required.

Review of summer core course evaluations, Patricia Document

Committee members commented on the improved score for the instructor who took over PUBHLT 2034 for summer 2019 (2197).

ACTION: No action required.

Approval of June 2019 Meeting Minutes, All

ACTION: The committee approved the June 2019 minutes.

Additional issues

Patricia Documet asked for updates on two topics discussed at length at previous EPCC meetings: what the school plans to do regarding inclusivity, specifically with regards to transgender students, and discussions on the review of core course syllabi with a lens on health equity.

Jessica Burke reported that the University of Pittsburgh's Teaching Center is providing a series of resources, including a teaching workshop called "Teaching Inclusively" on September 26, 2019, which will also be promoted around Pitt Public Health and in the Things to Know biweekly e-newsletter.

In a future meeting, Noble Maseru will share process and recommendations about how EPCC can consider health equity issues when reviewing syllabi.

The meeting was adjourned at 2:48 PM.

CLOSED SESSION:

1. Student academic record review for the summer term, Mary Derkach

Upcoming Meeting(s):

October 3, 2019 – 1:30-3:30 p.m. (1149 Public Health) | Deadline for spring 2020 course modification proposals

November 7, 2019 – 1:30-3:30 p.m. (1149 Public Health) | Deadline for spring 2020 new course proposals

December 5, 2019 – 1:30-3:30 p.m. (1149 Public Health)