

Course Change Request

Date Submitted: 01/10/19 4:19 pm

Viewing: **PHEB 622 : Reproductive And Perinatal Epidemiology**

Last edit: 01/24/19 3:10 pm

Changes proposed by: samantha-payton

Catalog Pages referencing this course
[Department of Epidemiology and Biostatistics](#)
[PHEB - Public Hlth Epide Biost](#)

Programs referencing this course
[CERT-MACH: Maternal and Child Health - Certificate](#)

Contact(s)

Name	E-mail	Phone
Samantha Payton	payton@sph.tamhsc.edu	979-436-9386

Rationale for Course

Edit

Other

Explain other rationale

non-traditional, distance education

Course prefix PHEB Course number 622

Department Epidemiology & Biostatistics

College/School Public Health

Academic Level Graduate

Effective term **2018-2019 Summer**

Complete Course Title

Reproductive And Perinatal Epidemiology

Abbreviated Course Title REPRODUCTIVE PERINATAL EPI

Title

Catalog course

description

Reproductive and Perinatal Epidemiology. (3-0).Epidemiology of major reproductive health outcomes, including infertility, fetal loss, birth weight, congenital malformations and infant mortality. Review of current knowledge of determinants of these outcomes.

Prerequisites and

Restrictions

PHEB 600 or PHEB 605.

Should catalog prerequisites /

concurrent enrollment

be enforced?

Yes

Enforced Prerequisites / Concurrent Enrollment

In Workflow

1. PHEB Reviewer
2. PHEB Department Head
3. Curricular Services Review
4. PH Committee Preparer
5. PH Committee Chair
6. PH College Dean
7. GC Preparer
8. GC Chair
9. Faculty Senate Preparer
10. Faculty Senate
11. Provost II
12. President
13. Curricular Services
14. Banner

Approval Path

1. 01/10/19 4:22 pm
Samantha Payton (samantha-payton): Approved for PHEB Reviewer
2. 01/11/19 9:19 am
Xiaohui Xu (xiaohui.xu): Approved for PHEB Department Head
3. 01/14/19 8:47 am
Terra Bissett (t.bissett): Approved for Curricular Services Review
4. 01/14/19 9:29 am
Rick Danko (danko): Approved for PH Committee Preparer
5. 01/24/19 3:12 pm
Szu-hsuan Lin (micheyszu): Approved for PH Committee Chair
6. 01/24/19 3:13 pm
Jay Maddock (maddock): Approved for PH College Dean
7. 01/28/19 9:19 am
LaRhessa Johnson (lrjohnson): Approved for GC Preparer
8. 02/07/19 4:20 pm
Russell Ramirez (rramirez): Approved for GC Chair

And/Or	(Course Prefix/Number	Min Grade/Score	Academic Level)	Concurrency?
	(PHEB 600	C	GR		
Or		PHEB 605	C	GR)	
Crosslistings	No	Crosslisted With				
Stacked	No	Stacked with				

Semester 3 Contact Hour(s) Lecture: 3 Lab: 0 Other: 0 Total 3
 Credit Hour(s) (per week):

Repeatable for credit? No

CIP/Fund Code 2613090002

Default Grade Mode Letter Grade (G)

Method of instruction Lecture

Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education) **Yes**

Learning Outcomes

Does not meet traditional face-to-face learning outcomes.

Describe how learning outcomes are met or provide justification why they are not met.

N/A. There is no current traditionally delivered version of the course for valid comparison.

Hours

Meets traditional face-to-face hours.

Describe how hours are met or provide justification why they are not met.

Documentation described at least 45 hours of formalized instruction and at least 90 hours of homework.

Will this course be taught as a distance education course? **Yes ~~No~~**

I verify that I have reviewed the FAQ for Export Control Basics for Distance Education. **Yes ~~No~~**

Is 100% of this course going to be taught in Texas? **Yes**

Will classroom space be needed for this course? **No**

This will be a required course or an elective course for the following programs:

Required (select program)

Program(s)
(MPH-PHEP) Master of Public Health in Epidemiology

Elective (select program)

Program(s)
(MPH-PHEB) Master of Public Health in Biostatistics

Course Syllabus

Syllabus:	Upload syllabus
Upload syllabus	SPH-syllabus_PHEB622-Fall 2019.doc
Letters of support or other documentation	No
Additional information	
Reviewer Comments	Szu-hsuan Lin (micheyszu) (01/24/19 3:12 pm): SPH CC approved for nontraditional delivery, per University Rule 11.03.99.M1.

Key: 12665



Instructor Information

Course title and number	PHEB 622 Reproductive and Perinatal Epidemiology
Term	Fall 2019
Meeting times and location	Online
Instructor Name(s)	Annette Regan, PhD, MPH
Teaching Assistant(s)	None
Telephone number	979-436-9396 (please email before calling)
Email address	regan@tamhsc.edu
Office hours	Please email Dr. Regan to set up a time
Office location	SPH Administration Building Room 225

Course Description

This course presents the epidemiology of major reproductive and perinatal outcomes and offers an overview of human reproduction. The course will cover current issues for reproductive and perinatal health and the determinants of these health outcomes. Additionally, the course will summarize the unique methodological challenges in perinatal epidemiology and novel study designs used to address such challenges. Students will learn practical skills in the evaluation of the current literature related to reproductive and perinatal health as well as the design of a reproductive or perinatal epidemiologic study.

Prerequisites

Graduate level PHEB 600 and a minimum grade C **OR** graduate level of PHEB 605 and minimum grade C (or concurrent enrollment)

Course Competencies and Objectives

<i>Competencies</i>	<i>Course Objectives</i>
Understand and recognize how epidemiologic methods are tailored to address the unique challenges presented by epidemiologic specialty/content areas (D1.3-1.9, D2.7)	<ol style="list-style-type: none"> 1. Understand and utilize epidemiologic methods, in particular, the methodological considerations unique to studying the reproductive experience 2. Understand novel study designs utilized in reproductive and perinatal epidemiology 3. Comprehend elements of reproductive and developmental biology, thereby providing a context for methodological considerations such as critical periods of development and biologic plausibility.
Describe the extent to which common epidemiologic study designs and biostatistical methods can or cannot provide evidence for causal relationships (D2.1-2.2)	<ol style="list-style-type: none"> 4. Understand causal inference related to reproductive and perinatal outcomes 5. Provide justification for interpretations and causal inferences drawn from published epidemiologic research
Apply descriptive and analytical data analysis methods and data management techniques to epidemiologic data (D2.3-2.4, D2.11)	<ol style="list-style-type: none"> 6. Identify a range of reproductive and pregnancy endpoints and categories of potential reproductive toxicants, including lifestyle factors, genetics, environmental toxins, infections, and metabolic imbalances.

	<ol style="list-style-type: none"> 7. Critically assess the literature and develop new study designs to overcome current studies' methodological limitations. 8. Identify the most appropriate exposure variables for a given study 9. Identify the most appropriate outcome for a given study 10. Identify the most appropriate study design for performing an epidemiological investigation of perinatal exposures and outcomes
Prepare abstracts, presentations, and/or reports in the format used for scientific or public meetings, peer-reviewed journals, or public health agencies. (D2.16, D2.19)	<ol style="list-style-type: none"> 11. Enhance presentation skills by reviewing the current literature and presenting a critique including an interpretation of the results that highlights the strength and weaknesses of the reviewed study. 12. Enhance writing skills by developing a proposal for a new epidemiologic study related to a reproductive or perinatal health outcome.

Textbook and/or Resource Material

Required texts:

None

Additional/recommended resources:

Germaine M. Buck Louis and Robert W. Platt. Reproductive and Perinatal Epidemiology. Oxford University Press, 2011

Wilcox A. Fertility and Pregnancy: An Epidemiologic Perspective. Oxford University Press, 2010

Course Topics, Calendar of Activities, Major Assignment Dates

Week	Topic	Required Reading
1	Introduction to Reproductive & Perinatal Epidemiology	Check Blackboard for required readings
	Tutorial: Critiquing the Reproductive & Perinatal	Check Blackboard for required readings
2	Study Designs & Bias in Reproductive & Perinatal Epidemiology	Check Blackboard for required readings
	Tutorial: Direct-Acyclic Diagrams	Check Blackboard for required readings
3	Fecundity and Fertility	Check Blackboard for required readings
	Tutorial: Sample Size Calculation	Check Blackboard for required readings Homework Assignment #1 Due
4	Fertility Impairments	Check Blackboard for required readings
	Tutorial: Assignment 1	Check Blackboard for required readings
5	Prenatal Care	Check Blackboard for required readings

	Tutorial: Writing a Research Proposal	Check Blackboard for required readings Participate in Peer Review of Article 1
6	Pregnancy Complications	Check Blackboard for required readings Participate in Peer Review of Article 2 Final Paper Topic Due
7	Midterm Exam	
8	Obstetric Interventions	Check Blackboard for required readings Specific Aims Due
9	Summer Break	
10	Preterm Birth and Birthweight	Check Blackboard for required readings
	Tutorial: Critiquing Specific Aims	Check Blackboard for required readings Assignment #2 Due
11	Fetal Growth and Intrauterine Growth Restriction	Check Blackboard for required readings
	Tutorial: Review Assignment 2	Check Blackboard for required readings Participate in Peer Review of Article 3
12	Birth Defects	Check Blackboard for required readings Participate in Peer Review of Article 4
13	Maternal Mortality and Severe Maternal Morbidity	Check Blackboard for required readings Participate in Peer Review of Article 5
14	Fetal and Infant Mortality	Check Blackboard for required readings
	Tutorial: Critiquing Research Plans	Check Blackboard for required readings
15	Special Topics: Fetuses-At-Risk Approach	Check Blackboard for required readings Participate in Peer Review of Article 7

16	No class	Final Paper Due
ALL HOMEWORK AND ASSIGNMENTS MUST BE TURNED INTO THE INSTRUCTOR BY 11:59 p.m. ON THE DUE DATE		

Grading Policies

See Attendance and Make-Up Policies section below for more information on grading.

Grading Scale

90-100 Points	A
80-89 Points	B
70-79 Points	C
60-69 Points	D
<60 Points	F

Class participation (via Blackboard)	5%
Assignments	15%
Journal Club	20%
Exam	20%
Final Paper	40%

Students are expected to:

1. **Turn assigned work into instructor on time.** Late work will NOT be accepted with the exception of excused absences which result in a missed deadline. Rules regarding absence are listed online at <http://student-rules.tamu.edu/rule07>. Please talk to your instructor as soon as you become aware of a situation where you will not be able to complete assignments on time. The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for absence. If a situation arises where the student will miss an assignment, exam, or activity and the absence is excused by the instructor, the student will be provided with an opportunity to make-up the missed assignment, exam, or the activity.
2. Complete: 1) class participation; 2) homework assignments; 3) participation in online journal club; 4) mid-term exam; and 5) project/final paper.
 - a) Participation in class will comprise 5% of your grade. Students will be evaluated by the quantity and quality of their participation on online discussion threads. For example, students who never participate in discussions will receive 0 points for participation while those students who consistently participate every day and display critical thinking skills and ask insightful questions will receive all points for participation.
 - b) Two homework assignments, each worth 7.5% of your total grade, will provide opportunities to review and apply reproductive and perinatal epidemiology methods with practical exercises. Homework assignments will be posted on Blackboard and reviewed in a subsequent tutorial.
 - c) The class journal club presentation will comprise 20% of your grade. As part of the journal club, students are expected to:
 - Read the assigned article prior to deadline
 - Develop and submit a summary of the strengths and weaknesses (including appropriateness of study design) of the article to the discussion board
 - Students must also respond to questions/comments posted by other students
 - Each student in the group is expected to contribute equally to the discussion
 - The quantity and quality of discussions will be evaluated

- Each journal club is worth 3 points:
 - ❖ **3 points:** Post 1 question and responds to 1 question. Contributes to the discussion and questions are well prepared.
 - ❖ **2 points:** Inconsistent participation (e.g., post a question but never responds to others) or consistent participation that does not contribute to the discussion or does not seem well thought-out.
 - ❖ **1 point:** Very little participation. Responses contribute little to the discussion and questions are not well prepared.
 - ❖ **0 points:** No participation.

- d) The Exam will comprise 20% of your grade. It will cover all material up to that point in the course. The exam will be conducted online and is ON YOUR OWN.

- e) The Final Project (40%) is not an exam but is comprised of a written proposal. Students will be required to design an epidemiologic study and write a proposal related to a reproductive or perinatal topic of their choice. Proposals will be limited to 6 pages (1 specific aims page, 5 research strategy) single-spaced, Ariel 11 font, with no wider than 1 inch margins. References must be cited throughout the paper and a bibliography of references cited **MUST** be included but are not part of the page limits. The proposal guidelines and instructions will be discussed and posted on eCampus.

- 3. When appropriate (drafts sections of the final paper, the final paper, and some assignments) students are expected to cite references throughout their work, as well as provide a bibliography of literature cited. Student documents that do not cite references (when appropriate) will be returned to the student and not graded until the student revises the document and includes references. This will result in a loss of 5 points per day until the document is returned with appropriate referencing. Please see the plagiarism section below for more information.

Attendance and Make-up Policies

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. As this is a web-based course, attendance is considered reviewing weekly lecture materials and regular participation in online discussion boards. University rules related to excused and unexcused absences are located on-line at <http://student-rules.tamu.edu/rule07>.

Participation is an important part of this class. Students will be evaluated on the quantity and quality of their participation in online class discussions. If you need to miss class for reasons under excused absences as outlined in the student rules (see link above), please arrange with the instructor to make up any missed assignments.

Other Pertinent Course Information

Every effort will be made to ensure that power point lecture files, notes, articles and assignments are available online in a timely manner. Written assignments will be delivered thru the Blackboard course website. All assignments must be emailed to the instructor by 11:59pm on the due date. Handouts, changes in assignments or the schedule of class modules will be announced on the Bb course webpage. E-mail contact will be initiated with all students the first week of class. If you do not have access to your assigned TAMHSC e-mail account, it is your responsibility to make the instructor aware of that fact so that other arrangements may be made. You are expected to use Blackboard e-mail address for all official correspondence.

eCampus (Blackboard)

If this course uses eCampus: Within the course's eCampus site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take quizzes; email other students and the instructor; participate in online activities; and display your projects.

In order to access the course material you will need to go to login into [Howdy](#) and then click the eCampus button on the top right or look for Quick Links on the bottom of the School's homepage or go to <http://ecampus.tamu.edu> Please do not contact your instructor with technical problems. If you are having a technical problem with the course, review the [Blackboard Learn Tutorials](#) (at the top-right of School's Office of Academic Assessment and Instructional Technology website). For login issues (password not working), please contact TAMU Help Desk at helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300. **Your eCampus login is the same as your Howdy login (NetID).**

Computer Requirements for Online Courses

For this and all online courses we recommend the minimum technical requirements outlined on our "SPH Computer Requirements for Online Courses" web page, located at <http://www.sph.tamhsc.edu/assessment-instructional/com-requirement.html>

All computing problems or other technical issues **not related to eCampus**, please contact:

- TAMHSC related account: helpdesk@tamhsc.edu via E-mail, or phone to (979) 862-8029
- TAMU related account: helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300

Important!!! Save your work as you go along. Nothing is more discouraging than to lose an assignment due to a computer hang ups! You may want to also make hard copies of your work to have "proof" and save yourself time and trouble!

Plagiarism Virtual Course

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents. Please find a tutorial and resources under "Content." In addition, please find Turnitin, a software package that allows you to check whether you may have plagiarized your document. (Please see Phuong Huynh: phuong@SPH.tamhsc.edu for additional information.) Plagiarism software will also be used by the instructor to check student assignments for plagiarism.

End of Course Evaluation

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School's courses as part of your professional responsibility.

SPH Mission

The Texas A&M School of Public Health is committed to transforming health through interdisciplinary inquiry, innovative solutions, and development of leaders through the Aggie tradition of service to engage diverse communities worldwide.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their

disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <http://disability.tamu.edu>.

Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student's responsibility to have a clear understanding of how to reference other individuals' work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: <http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html>. A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at <http://aggiehonor.tamu.edu>.

Remember:

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

FERPA

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy. By enrolling in this course you agree to the following statement:

"I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor."

Equal Opportunity Statement

The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 436-9208, email hr@tamhsc.edu, or by mail at 200 Technology Way, College Station, TX 77845.

DISCLAIMER

This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. the schedule and topics list are subject to change. These changes will be communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss them with the instructor.

Title IX

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or office listed below.

WHERE TO REPORT:

Dr. Blanca Lupiani
Executive Assoc. Dean of Faculties
108 YMCA Building
College Station, TX
77843-1126
Mail Stop 1126
dof@tamu.edu
979-845-4274

The University encourages students to immediately consult with or report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to the TAMHSC Title IX Coordinator. Students may also report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to any School of Public Health administrator, university administrator, official or unit supervisor, who is then responsible for promptly notifying any of the above Title IX coordinators of the reported incident.

APPENDIX A: CEPH COMPETENCIES

D1. MPH & DrPH Foundational Public Health Knowledge

Profession & Science of Public Health

- D1.1. Explain public health history, philosophy and values
- D1.2. Identify the core functions of public health and the 10 Essential Services
- D1.3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
- D1.4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
- D1.5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
- D1.6. Explain the critical importance of evidence in advancing public health knowledge

Factors Related to Human Health

- D1.7. Explain effects of environmental factors on a population's health
- D1.8. Explain biological and genetic factors that affect a population's health
- D1.9. Explain behavioral and psychological factors that affect a population's health
- D1.10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
- D1.11. Explain how globalization affects global burdens of disease
- D1.12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)

D2. MPH Foundational Competencies

Evidence-based Approaches to Public Health

- D2.1. Apply epidemiological methods to the breadth of settings and situations in public health practice
- D2.2. Select quantitative and qualitative data collection methods appropriate for a given public health context
- D2.3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
- D2.4. Interpret results of data analysis for public health research, policy or practice

Public Health & Health Care Systems

- D2.5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
- D2.6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

Planning & Management to Promote Health

- D2.7. Assess population needs, assets and capacities that affect communities' health
- D2.8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
- D2.9. Design a population-based policy, program, project or intervention
- D2.10. Explain basic principles and tools of budget and resource management
- D2.11. Select methods to evaluate public health programs

Policy in Public Health

- D2.12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
- D2.13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
- D2.14. Advocate for political, social or economic policies and programs that will improve health in diverse populations
- D2.15. Evaluate policies for their impact on public health and health equity

Leadership

- D2.16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
- D2.17. Apply negotiation and mediation skills to address organizational or community challenges

Communication

- D2.18. Select communication strategies for different audiences and sectors
- D2.19. Communicate audience-appropriate public health content, both in writing and through oral presentation
- D2.20. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice

- D2.21. Perform effectively on interprofessional teams

Systems Thinking

- D2.22. Apply systems thinking tools to a public health issue