

8/23/2017

University of Florida
College of Public Health & Health Professions Syllabus
Course Number: PHC 6937
Maternal and Child Health Epidemiology (2 credits)
 Semester: Fall 2017
 Delivery Format: On-Campus
 Thursday 12.50-2.45pm
 Room: CTRB 4240C

Instructor Name: Deepthi S. Varma, PhD, MSW

Department of Epidemiology

Room Number: 4238

College of Public Health & Health Professions

College of Medicine

Clinical and Translational Research Building

2004 Mowry Road, PO Box 100231

University of Florida

Phone Number: 352 394 5941

Email Address: dvarma@ufl.edu

Office Hours: By appointment

Teaching Assistants: None

Preferred Course Communications (e.g. email, office phone): e mail

Pre requisites: Principles of Epidemiology and Epidemiologic Methods I (or equivalent research methods coursework). Students with no prior instruction in epidemiology but with methodological coursework from another related discipline may be admitted with permission from the instructor.

PURPOSE AND OUTCOME

Course Overview: This is a 2-credit course offered on campus to introduce Maternal and Child Health Epidemiology concepts to Masters and Doctoral level students.

This course is designed for students who are interested in Maternal and Child Health issues to provide a graduate level understanding of how epidemiology can be applied to maternal and child mortality and morbidity. Upon completion of this course, students will be able to identify social and environmental determinants of maternal and child mortality and morbidity, maternal and child health indicators in the United States and globally, and measures related to maternal and child mortality and morbidity. Additionally, this course covers the impact of culture and societal norms on maternal and child health as well as national and global policies and financing for the improvement of maternal and child health.

Relation to Program Outcomes

1. Articulate the goal of maternal and child health epidemiology and its relationship with other fields of public health
2. Apply and interpret maternal and child mortality and morbidity data and indicators
3. Evaluate the progress made towards achieving Millennium Development Goals (MDG) 4 & 5, and the way forward
4. Analyze the various methodological issues regarding perinatal epidemiology
5. Distinguish the socio-cultural determinants of maternal and child health
6. Examine
7. Compare and analyze the various national and global policies and mandates related to maternal and child health
8. Evaluate current and ongoing national and global MCH issues in the US and around the world

Course Objectives and/or Goals

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1. Apply the various epidemiological concepts on issues related to maternal and child mortality and morbidity in the United States and globally
2. Identify sources of data available to understand maternal and child mortality and morbidity in the United states and globally
3. Examine the major epidemiologic and analytic issues specific to reproductive tract infections (RTIs) and its impact on maternal and child health.
4. Identify the major determinants of maternal and child mortality and morbidity
5. Assess the influence of socio cultural norms and practices on maternal and child health
6. Evaluate the major indicators of maternal and child morbidity/ mortality
7. Assess the various methodological issues specifically related to perinatal epidemiology
8. National level and global policies and financing in the field of maternal and child health

Instructional Methods

- 1) **Lectures:** There will be didactic lectures by the instructor for general orientation to concepts and issues related to Maternal and Child Health in the United States and globally.
- 2) **Readings and Resources:** Readings and resources will be posted in the course by the beginning of each week.
- 3) **Case Studies:** To better illustrate the concepts of Maternal and Child Health epidemiology, the Course instructor and guest speakers will present research studies led by them/ others in the United States or in other countries.
- 4) **Assessments:** Students will be graded on weekly homework, in-class presentation, discussions and participation in class, and attendance.

What is expected of you?

You are expected to actively engage in the course throughout the semester. Your participation fosters a rich course experience for you and your peers that facilitate overall mastery of the course objectives.

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule

| Week | Topic(s) | Readings |
|------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 24 th August | Introduction to Maternal and Child Health Life course development model Dr. Deepthi Varma, PhD | Russ SA, Larson K, Tullis E & Halfon N. (2014). A life course approach to health development: Implications for the MCH Research Agenda. Maternal and Child Health Journal, 18: 497-510. Grason H & Misra D. 2006. Application of a life course and multiple determinants framework to improve maternal health. Baltimore, MD. Women's and Children's Health Policy Center. Johns Hopkins Bloomberg School of Public Health |

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| Week | Topic(s) | Readings |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 31 st August | Epidemiology of maternal mortality & morbidity a) US b) Global trends (Unskilled delivery, sex-selective abortion, female genital mutilation, STIs, violence and sexual abuse, substance use, unsafe abortion, obstetric fistula) Discussions based on the Ted talk. Dr. Deepthi Varma, PhD | Ted Talk: Linda Robinson on Maternal Mortality in America and the crisis for rural women https://www.youtube.com/watch?v=2v5A3BxU4Uc Assignment 1 Due Life Course Model Presentation by students (Depending on the availability of time) |
| 3 7 th September | Epidemiology of neonatal & under-five mortality and morbidity a) US b) Global trends Ten Great Public Health Achievements- Student Presentation & Discussion Dr. Deepthi Varma, PhD | Ten Great Public health Achievements in the US (Vaccination & Maternal Health) Ten Great Public health Achievements around the world (Vaccination & Maternal Health) |
| 4 14 th September | Determinants of maternal and child mortality a) US b) Global MDG 4 & 5: Progress made and Future Presentation and Discussion Dr. Deepthi Varma, PhD | Millennium Development Goals 4 & 5 (MDG) Assignment 2 Due |
| 5 21 st September | Epidemiological evidence on the impact of environment on pregnancy, birth and child health outcomes Dr. Hui Hu, PhD | Nieuwenhuijsen, M., Dadvand P, Grellier J, Martinez D, & Vrijheid M. (2013). Environmental risk factors of pregnancy outcomes: a summary of recent meta-analyses of epidemiological studies. <i>Environmental Health</i> , 12(1), 6. Miranda ML, Maxson P, & Edwards S. (2009). Environmental contributions to disparities in pregnancy outcomes. <i>Epidemiologic Reviews</i> , mxp011. |
| 6 28 th September | Reproductive Tract Infections and maternal mortality and morbidity a) STIs b) Endogenous infections c) Iatrogenic infections d) Socio economic and cultural barriers to accessing treatment for RTIs Dr. Erich Wyckoff, MD | Reading materials will be provided Assignment 3 Due |

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| Week | Topic(s) | Readings |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7 5 th October | <p>Issues in maternal and child nutrition in the US and globally</p> <ul style="list-style-type: none"> a) Key nutritional needs of pregnant women and young children b) Determinants of nutritional status c) Nutrition & health of women and children and its relation to economic development <p>Dr. Sarah McKune, PhD</p> | <p><u>Brief case study presentation & discussions (case studies will be provided ahead of the class)</u></p> <p>Micronutrient Deficiency Intervention in Nepal Food Fortification Project in Kenya Tamil Nadu Nutrition Project in India</p> |
| 8 12 th October | <p>Impact of local norms and culture on maternal and child health</p> <ul style="list-style-type: none"> a) Health beliefs and practices b) Perception of diseases c) Diagnosis and treatment of diseases and use of health care services <p>Dr. Deepthi Varma, PhD</p> | <p><u>Brief case study presentation and discussion (case studies will be provided ahead of the class)</u></p> <p>Birth practices in Peru Polio vaccination in India Conditional Cash Transfers in India to improve Maternal and Child Health</p> |
| 9 19 th October | <p>Disparities in Maternal and Child Health in the United States</p> <ul style="list-style-type: none"> a) Health status of various racial/ethnic groups b) Leading causes of death among children & pregnant women c) Contributors to health disparity in MCH <p>Dr. Deepthi Varma, PhD</p> | <p>Reading Materials will be provided</p> |
| 10 26 th October | <p>Measurement of maternal and child mortality 1</p> <ul style="list-style-type: none"> a) Sources of data: US & Global b) Challenges in collecting accurate data – globally c) Indicators (Maternal Mortality rate, Infant Mortality rate, Maternal Mortality Ratio, Child Mortality rate, Under-five mortality rate etc.) <p>Discussions based on Ted talk. Dr. Deepthi Varma, PhD</p> | <p>https://www.ted.com/talks/hans_ros_ling_the_good_news_of_the_decade Pedersen J, Liu J (2012) Child Mortality Estimation: Appropriate Time Periods for Child Mortality Estimates from Full Birth Histories. PLoS Med 9(8): e1001289. doi:10.1371/journal.pmed.1001289</p> <p>Assignment 4 Due</p> |
| 11 2 nd November | <p>Epidemiology of perinatal depression in the US and other countries</p> <p>Dr. Jacqueline Hobbs, MD</p> | <p>Gelaye B, Rondon M, Araya R, Williams MA. (2016). Epidemiology of maternal depression, risk factors, and child outcomes in low income and middle income countries. Lancet Psychiatry, 3 (10): 973-982. Doi:10.1016/S2215-0366 (16) 30284-X</p> |

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| Week | Topic(s) | Readings |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13 9 th November | Methodological issues specific to perinatal epidemiology Dr. Hui Hu, PhD | Barnett AG. (2011). Time-Dependent Exposures and the Fixed-Cohort Bias. <i>Environmental Health Perspectives</i> , 119(10), a422–a423. http://doi.org/10.1289/ehp.1103885 Hu H, Ha S, & Xu X. (2017). Ozone and hypertensive disorders of pregnancy in Florida: Identifying critical windows of exposure. <i>Environmental Research</i> , 153, 120-125. |
| 14 16 th November | Global and the US policies in Maternal and Child Health a) Title V and the Maternal and Child Health Block Grant - US b) Public-Private partnership in maternal and child health services & research – US & Global Dr. Deepthi Varma, PhD | Shaw D, Guise J, Shah N, Gemzell-Danielsson K, Joseph KS, Levy B. et al. (2016). Drivers of maternity care in high-income countries: can health systems support woman-centered care? <i>Lancet</i> , 388, 2282-2295. Assignment 5 Due |
| 15 30 th November | Local and global challenges in the reduction and maternal and child mortality in low income countries Discussions based on the article and Ted talk. Dr. Deepthi Varma, PhD | Lieberman A. (2016). Challenges for maternal health efforts, <i>Lancet</i> , 388 (17), 1146-1147. Precision Public Health and its application in Maternal and Child Health Ted Talk: Sue Desmond-Hellman https://www.ted.com/talks/sue_desmond_hellmann_a_smarter_more_precise_way_to_think_about_public_health Assignment 6 Due |

Course Materials and Technology

- Readings and resources will be posted on Canvas beginning of each week.

For technical support for this class, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

ACADEMIC REQUIREMENTS AND GRADING

Grading

Grades are assigned based on the following criteria (see below). We will take every effort to grade all submitted assignments within seven days of the due date. A full explanation of content, discussion questions, assignments and other course components are completely described in the appropriate weekly pages of this syllabus.

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All grades will be posted on the course website. If a student notices a discrepancy in any grade as it appears online, s/he must contact the course instructor within one week of the posting date in order to have the problem addressed. Students may not wait until the end of the semester to contest a grade.

Grading

| Requirement | Submission Due date | Points or % of final grade (% must sum to 100%) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------|
| Create a 1-3 PowerPoint presentation on Life Course Model in MCH and submit it. (groups of 2 or 3 depending on class size). Class presentation of the slides will be decided based on time availability. | Week 2 August 31st | 15% |
| MCH Specific Millennium Development Goals (MDG) (could be current or historical) (10mts presentation, in groups, maximum 5 slides, groups of 2 or 3 depending on class size). Slides must be submitted for grading. | Week 4 September 14 | 15% |
| Article Review: Hystad, P., Davies, H. W., Frank, L., Van Loon, J., Gehring, U., Tamburic, L., & Brauer, M. (2014). Residential Greenness and Birth Outcomes: Evaluating the Influence of Spatially Correlated Built-Environment Factors. <i>Environmental Health Perspectives</i> , 122(10), 1095–1102. http://doi.org/10.1289/ehp.1308049 (Submit a 2-3 page critical review in groups) | Week 6 September 28 | 15% |
| Social, economic and cultural determinants of maternal and child health Presentation and Discussion (10mts presentation, in groups, maximum 5 slides, groups of 2 or 3 depending on class size). Slides must be submitted for grading. | Week 8 October 26 | 15% |
| Select any one national or global policy and its impact on maternal and child health 10mts presentation, in groups, maximum 5 slides, groups of 2 or 3 depending on class size). Slides must be submitted for grading. | Week 14 November 16 | 15% |
| Select any LMIC and discuss the key challenges in addressing the maternal mortality and morbidity in that country (10mts presentation, in groups, maximum 5 slides, groups of 2 or 3 depending on class size). Slides must be submitted for grading. | Week 15 November 30 | 15% |
| Class Attendance & Participation | | 10% |

Tentative due dates for all grade components are listed on the course schedule above and additional information and specific instructions will be posted on the course website, under the *Assignments* tool. Please check Canvas regularly for updates to the syllabus that may affect due dates.

Point system used (i.e., how do course points translate into letter grades).

| | | | | | | | | | | | | |
|----------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| Points earned | 93-100 | 90-92 | 87-89 | 83-86 | 80-82 | 77-79 | 73-76 | 70-72 | 67-69 | 63-66 | 65-62 | Below 60 |
| Letter Grade | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E |

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Please be aware that a C- is not an acceptable grade for graduate students. A grade of C counts toward a graduate degree only if an equal number of credits in courses numbered 5000 or higher have been earned with an A. In addition, the Bachelor of Health Science Program does not use C- grades.

You must include the letter grade to grade point conversion table below. Letter grade to grade point conversions are fixed by UF and cannot be changed.

| Letter Grade | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | WF | I | NG | S-U |
|--------------|-----|------|------|-----|------|------|-----|------|------|-----|------|-----|-----|-----|-----|-----|
| Grade Points | 4.0 | 3.67 | 3.33 | 3.0 | 2.67 | 2.33 | 2.0 | 1.67 | 1.33 | 1.0 | 0.67 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at: <http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Exam Policy

There are no exams for this course.

Policy Related to Make up Assignments or Class Presentations

Any requests to make-up assignments or class presentations that were missed due to personal/ family emergencies or technical difficulties must be e-mailed to me within 24 hours.

Policy Related to Required Class Attendance

For greater detail on the meaning of letter grades and university policies related to them, and UF attendance policy see the Registrar's Grade Policy regulations at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

Please be sure to print this syllabus and plan adequate time each week to view your lectures, read, complete your assignments. Please plan your time accordingly and ask questions if you are not clear on a lecture or assignment before they are due, versus after it is due. Please submit all assignments on time. Please verify that you submitted (1) the right assignment paper, and (2) that you submitted ANY attachment to your assignment.

Communication Guidelines

Emailing Instructor: If you have questions, please feel free to email me through the *Mail* function of Canvas. Also, **remember to check the checkbox with the cc option that reads "send a copy of this message to recipients' email address (es);"** this will ensure a timely response to your question. Please contact the UF HelpDesk if you have access questions or technical issues with the course: (352) 392-HELP (4357) or helpdesk@ufl.edu or in the HUB, room 132. Please keep a copy of all assignments and work submitted. Canvas will issue an email receipt when assignments are submitted. Please check your submission to be sure it was properly submitted and that you attached the correct file. Print the syllabus for your reference. It is your responsibility to be aware of all assignments, due dates and guidelines. All assignments must be submitted through Turnitin.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

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You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

<http://gradschool.ufl.edu/students/introduction.html>

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

Inclusive Learning Environment

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: www.multicultural.ufl.edu

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.

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- You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- Crisis intervention is always available 24/7 from:
Alachua County Crisis Center
(352) 264-6789
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.
