

**CHS 432 Perinatal Health: Principles, Programs and Policies  
Course Description and Requirement**

Michael C. Lu, MD, MS, MPH  
Assistant Professor  
Department of Community Health Sciences  
Department of Obstetrics & Gynecology  
UCLA Schools of Medicine & Public Health

The purpose of this course is to provide students with an understanding of what makes healthy mothers and infants. We will take an integrative approach to examine the biological, behavioral, psychological and social determinants of perinatal health. We will also critically re-evaluate current principles, programs, and policies in perinatal health. This course will challenge the students to think “outside the box.”

There will be two class sessions per week, consisting of didactic lectures and discussions. In addition to my lectures, experts from academia, public health, and the community have also been invited to give lectures and facilitate discussions on topics related to perinatal health. Attendance at lectures and participation in discussions are required. There will be approximately 4 hours of assigned reading per week. Required readings are compiled in a reader that can be purchased from Course Reader Material (310) 443-3303. Self-study questions and answers are also included in the reader.

This course will also teach you four skills that are essential for you to work effectively in public health: critical appraisal, program evaluation, grant writing, and oral presentation. Students will develop critical appraisal skills through didactic lectures, class discussion and a journal club. Students will also learn the CDC framework for program evaluation in public health through both didactic lecture and class exercise. Each student is also required to develop, in groups of 4 to 5 individuals, a ten-page written grant proposal, in response to a hypothetical request for proposal (RFP). The proposal will be reviewed by an expert panel. The groups will be required to make a 15-minute oral presentation to the expert panel. The goal of the exercise is to provide an opportunity for you to acquire skills and experience in writing a grant and making an oral presentation, and get feedback from the experts, in a safe and supportive classroom environment.

Grading will be based on class attendance/participation, paper assignment, one midterm (take-home, open-book) and group project, distributed as follows:

Class attendance/participation	25%
Midterm	25%
Grant Proposal – Written	30%
Grant Proposal – Oral Presentation	20%

Students needing assistance are encouraged to attend my office hours on Mondays and Wednesdays, immediately following class from 3 to 5 pm. Additional office hours can be arranged.

1/12

**State of Perinatal Health**

Michael C. Lu, MD, MPH

*Introduction to the course and overview of current vital statistics in perinatal health.*

Cunningham FG, MacDonald PC, Gant NF et al. Obstetrics in broad Perspective. In: Williams Obstetrics. 19<sup>th</sup> ed. East Norwalk, CT: Appleton & Lange. Chapter 1, 1993:1-9.

MacDorman MF, Minino AM, Strobino DM, Guyer B. Annual summary of vital statistics--2001. Pediatrics. 2002;110:1037-52.

1/14

**Overview of Maternal, Child, and Adolescent Health Programs**

Diane Viscencio RN, PHN, MPH and Cynthia Harding, MPH

*Overview of Maternal, Child, and Adolescent Health Programs in the United States, California, and LA County, and introduction to program planning and policymaking in MCAH*

Hill IT. The role of Medicaid and other government programs in providing medical care for children and pregnant women. The Future of Children, Winter 1992:134-153.

Lu M. Bragonier R. Maternal and child health. In: Breslow L. (ed). Encyclopedia of Public Health. *In press.*

1/19

**Martin Luther King, Jr Day Holiday**

1/21

**Racial and Ethnic Disparities in Birth Outcomes**

Michael C. Lu, MD, MPH

*Review racial and ethnic disparity in perinatal outcomes and explore possible causes for the disparity.*

Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. Matern Child Health J. 2003 Mar;7(1):13-30.

Kotelchuck M. Building on a life-course perspective in maternal and child health. Matern Child Health J. 2003 Mar;7(1):5-11.

James SA. Racial and ethnic differences in infant mortality and low birth weight: a psychosocial critique. Ann Epidemiol 1993;3:130-136.

Geronimus AT. Black/white differences in the relationship of maternal age to birthweight: a population-based test of the weathering hypothesis. Soc Sci Med 1996;42:589-97.

1/26

**Preconception and Prenatal Care**

Michael C. Lu, MD, MPH

*Review the history, purpose and content of prenatal care; re-evaluate the effectiveness and cost-effectiveness of prenatal care and perinatal programs.*

Kish K. Lu MC. Normal pregnancy. In: Pregler J, DeCherney AH. (eds). Women's Health: Principles and Clinical Practice. Hamilton: BC Decker. 2002:153-66.

Fiscella K. Does prenatal care improve birth outcomes? A critical review. *Obstet Gynecol* 1995; 85:468-79.

1/28

**Critical Appraisal**

Michael C. Lu, MD, MPH

*Review basic concepts in perinatal epidemiology and biostatistics; instruct basic skills in critical appraisal of perinatal literature.*

Grimes DA. How can we translate good science into good perinatal care? *Birth* 1986;13:83-90.

2/2

**How to Write a Grant and Make an Oral Presentation**

Ellen Silver, RNP, MSN; Michael C. Lu, M,DMPH

*Instructions on how to write a grant proposal and make an effective oral presentation.*

Lauffer A. Writing the proposal: As a blueprint for action. In: *Grants, Etc.* 2<sup>nd</sup> ed. Thousand Oaks, Sage Publications. 258-295.

2/4

**The Human Pregnancy – Part I**

Michael C. Lu MD, MPH

*Review the biology of reproductive cycle, pregnancy, and development of the fetus*

Ganong WF. Physiology of reproduction in women. In: DeCherney AH, Nathan L. eds. *Current Obstetrics & Gynecologic Diagnosis & Treatment*. Ninth edition. Lange Medical Books/McGraw-Hill, New York. 2003:130-153.

Koos BJ, Moore PJ. Maternal physiology during pregnancy. In: DeCherney AH, Nathan L. eds. *Current Obstetrics & Gynecologic Diagnosis & Treatment*. Ninth edition. Lange Medical Books/McGraw-Hill, New York. 2003:154-162.

Laughlin D, Knuppel RA. Maternal-placental-fetal unit; fetal & neonatal physiology. In: DeCherney AH, Nathan L. eds. *Current Obstetrics & Gynecologic Diagnosis & Treatment*. Ninth edition. Lange Medical Books/McGraw-Hill, New York. 2003:163-192.

2/6

**The Human Pregnancy – Part II**

Michael C. Lu, MD, MPH

*Review maternal adaptations to pregnancy and common diseases in pregnancy.*

Same as 2/4.

2/9

**Preventing Maternal Mortality and Morbidities**

Michael C. Lu, MD, MPH

*Review the leading causes of maternal and infant mortality and morbidity.*

Chang J, Elam-Evans LD, Berg CH, Herndon J, Flowers L, Seed K, Syverson CJ. Pregnancy-related mortality surveillance – United States 1991—1999. *MMWR* 2003;52(SS02):1-8.

Grimes DA. The morbidity and mortality of pregnancy: Still risky business. *Am J Obstet Gynecol* 1994; 170:1789-94.

2/11

**Preventing Infant Mortality and Morbidities**

Michael C. Lu, MD, MPH

*Review causes of infant mortality and morbidities, with emphasis on low birth weight and prematurity.*

McCormick MC. The contribution of low birth weight to infant mortality and childhood morbidity. *New Engl J Med* 1985; 312(2):82-90.

Lu MC, Tache V, Alexander GR, Kotelchuck M, Halfon N. Preventing low birth weight: is prenatal care the answer? *J Matern Fetal Neonatal Med.* 2003;13:362-80.

Stoler JM. Prevalence and etiology of birth defects. In: McCormick MC, Siegel JE. *Prenatal Care: Effectiveness and Implementation.* Cambridge, UK: Cambridge University Press. 1999:207-230.

Perlman JM. Intrapartum hypoxic-ischemic cerebral injury and subsequent cerebral palsy: Medicolegal issues. *Pediatrics* 1997;851-9.

2/16

**Presidents' Day Holiday**

2/18

**Cultural Competence in Perinatal Health**

Diane Viscencio RN, PHN, MPH

*Review principles of cultural competence and its application in perinatal health.*

Betancourt J, Green AR, Carrillo JE, Ananeh-Firempong II, O. Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports* 2003;118:293-302.

National Center for Cultural Competence. Policy Briefs 1-4 Checklists.  
<http://www.georgetown.edu/research/qucdc/nccc/products.html>

2/23

**Breastfeeding**

Wendy Slusser, MD

*Review the epidemiology of breastfeeding in the U.S. Discuss programs and policies to increase breastfeeding.*

Ryan AS. The resurgence of breastfeeding in the United States. *Pediatrics* 1997;99(4).

American Academy of Pediatrics Work Group on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics* 1997;100:1035-7.

2/25

**Unintended Pregnancy and Family Planning**

Angela Chen, MD, MPH

*Review the epidemiology of unintended pregnancy and discuss strategies for prevention.*

Henshaw, SK. Unintended pregnancy in the United States. *Family Planning Perspectives* 1998;30(1):24-29, 46.

Piccinino LJ, Mosher WD. Trends in contraceptive use in the United States: 1982-1995. *Family Planning Perspectives* 1998; 30(1):4-10, 46.

Institute of Medicine. Patterns of contraceptive use. In: Brown SS, Eisenberg L, eds. *The best intentions: unintended pregnancy and the well-being of children and families*. Washington, D.C.: National Academy Press, 1995. Chapter 8, p. 218-249 and Appendix F, p.311-337.

3/1 **Community-Based Action Research in Perinatal Health**

Loretta Jones, MA; Michael C. Lu, MD, MPH

*Review the principles of participatory action research and its application in perinatal health.*

Minkler M. Using Participatory Action Research to build Healthy Communities. *Public Health Rep.* 2000;115:191-7.

Sharpe PA, Greaney ML, Lee PR, Royce SW. Assets-oriented community assessment. *Public Health Rep.* 2000;115:205-11.

3/3 **Evaluation of Perinatal Health Programs: A Collaborative Approach**

Michael C. Lu, MD, MPH

*Review CDC framework for collaborative program evaluation in public health and its application in perinatal health.*

Centers for Disease Control and Prevention. Framework for program evaluation in public health. *MMWR* 1999;48:No RR-11.

3/8 **Reproductive Technology**

Alan H DeCherney, MD

**Reproductive Ethics**

Michael C. Lu, MD, MPH

*Review the biology of infertility and the use of assisted reproductive technology. Discuss medical-legal and ethical issues.*

Adamson GD, Baker VL. Subfertility: causes, treatment and outcome. *Best Practice & Research Clinical Obstetrics & Gynecology.* 2003;17:169-85.

Cardwell MS, Kirkhope TG. Reproduction patients. In: American College of Legal Medicine Textbook Committee. *Legal Medicine.* 4<sup>th</sup> ed. St. Louis: Mosby, 1998. Chapter 29, p.380-395.

3/10 **Reproductive Politics and Public Policy**

Vivian Dickerson, MD

*Review current public policy issues regarding perinatal health. Discuss policymaking and politics.*

O'Campo P, Rojas-Smith L. Welfare reform and women's health: Review of the literature and implications for state policy. Baltimore, MD: Women's and Children's Health Policy Center, Johns Hopkins University. 1998.

Grason H, Poole V, Silver G. Public health roles promoting the health and well-being of women. In: Grason HA, Hutchins JE, Silver GB, eds. *Charting a course for the future of*

women's and perinatal health: Volume II – Review of key issues. Baltimore, MD: Women's and Children's Health Policy Center, Johns Hopkins School of Public Health, 1999:41-55.

3/15      **Student Presentations**

3/17      **Student Presentations**