

Basic Obstetric Ultrasound for Interprofessional Maternity Care Providers



Schools of Nursing and Medicine

**Dept. of Family Health Care Nursing,
Nurse-Midwifery Education Program**

Dept. of Obstetrics, Gynecology and Reproductive Sciences

Course Description

This course was developed to provide interprofessional learners with the knowledge and skills needed to perform basic obstetric ultrasound examinations for dating or fetal surveillance purposes. The course includes:

1. Ten asynchronous web-based learning modules with pre and post tests
2. Participation in an interprofessional case-based seminar and evaluation
3. Participation in a skills lab with hands-on orientation to ultrasound equipment and pregnant volunteers

Course topics include indications for limited obstetric ultrasound, research on ultrasound safety and outcomes of antenatal testing, and the use of ultrasound to assess location and viability of early pregnancy, fetal presentation and lie, and the biophysical profile.

This course will provide the foundation of knowledge necessary to build practical skills in obstetric ultrasonography, in keeping with guidelines published for maternity care providers by their respective professional organizations. In particular, this course meets criteria in AWHONN and ACNM guidelines for expanded nursing scope of practice.

Proctored scans after workshop completion will be needed to attain competence and confidence. Workshop attendance should be followed by supervised clinical practicum for the period of time or number of exams necessitated by an individual participant's learning needs and the requirements of his or her education program, profession and practice setting.

This course was developed with assistance from the Department of Health and Human Services, Health Resources Administration, Advanced Nursing Education grant D09HP25023-01-00, for the project entitled Interprofessional Care for Childbearing Families (2012-2015).

Course Objectives

After successfully completing the three components of this course, the participant will be able to:

1. Describe and demonstrate basic principles of ultrasound physics, safety and instrumentation with transvaginal and transabdominal obstetrical ultrasound.
2. Describe and identify the components of a limited obstetric ultrasound examination in early pregnancy for the determination of pregnancy location, number, placentation, viability, and dating.
3. Describe and identify the components of a limited obstetric ultrasound examination in the third trimester to assess placental location and fetal presentation and lie.
4. Describe and identify the components of a biophysical profile, and rationale for its use.
5. Describe and identify abnormal findings that warrant consultation, collaboration and/or referral to a higher level of care.
6. Identify and demonstrate the crucial components of documentation specific to limited transvaginal and transabdominal obstetric ultrasound implementation and evaluation
7. Discuss the medico-legal implications of performing limited obstetric ultrasound examinations.
8. Demonstrate accurate and individualized patient education about ultrasound examinations.

9. Develop interprofessional obstetric ultrasound and antenatal surveillance care plans that are evidence-based and patient-centered.
10. Demonstrate interprofessional communication about obstetric ultrasound examination indications and findings using standard terminology.
11. Describe the scopes of practice and areas of expertise among interprofessional team members in maternity care.
12. Identify the basic competencies for limited obstetric ultrasound by interprofessional maternity care providers.
13. Describe the research literature on obstetric ultrasound education and apply it by creating a personal plan to demonstrate initial and ongoing competencies in accordance with professional guidelines and standards.

Electronic Learning Modules

Ten asynchronous learning modules have been designed to facilitate knowledge and skill acquisition for interprofessional maternity care providers who perform limited obstetric ultrasound in early, second, and third trimester pregnancies:

1. Indications for obstetrical ultrasound
2. Documentation, communication, liability and risk reduction strategies
3. Ultrasound physics, equipment and optimizing image quality
4. Normal first trimester ultrasound
5. Abnormal first trimester ultrasound
6. Limited second and third trimester ultrasound
7. Fetal biophysical profile
8. Second and third trimester fetal biometrics
9. Use of obstetrical ultrasound on the labor and delivery ward
10. Interprofessional obstetric ultrasound training and practice

The required learning modules are available on the UCSF Collaborative Learning Environment website: [Obstetric Ultrasound](#). You will be given access after registration. **To confirm registration and access prerequisite online modules**, contact: Nannette.Nemenzo@ucsf.edu or call (415) 514-3308.

You must complete a pre-test before beginning the modules. Pre-test scores are NOT important so please do not waste your time looking up answers; just respond to the questions based on your current knowledge and skill or lack thereof. Pre-test scores will simply be compared to post-test scores to evaluate how effective the learning modules were.

You must achieve a score of at least 80% on the mandatory post-test. You may not attend one of the seminars and hands-on skills labs without completing the prerequisite online learning modules and successfully completing the post-test beforehand.

For technical assistance related to the UCSF Collaborative Learning Environment call the IT Help Desk at (415) 514-4100 or submit an inquiry on-line at: <https://ucsf.service-now.com/ess/home.do>

Course Completion

Completion of course readings, online modules, seminar and hands-on practicum are required of UCSF CNM/WHNP students 2014-2016. These students will receive credit in N248 Group Independent Study: Interprofessional Care of Childbearing Families.

Community members may receive CA Board of Registered Nursing continuing education units upon request: 10.8 units for completing all course activities or 6.6 units for just the online modules and test.

Limited Obstetrical Ultrasound Case-Based Seminar and Skills Lab

Choose one date, 3:30 – 8:30 PM:
January 27, March 3, April 14th or April 21st 2015
San Francisco General Hospital

Schedule

3:30	Introductions in (Room 7E12)
3:30-5:00	Interprofessional case study discussions
5:00-5:30	Q + A
5:30-6:15	Dinner on your own
6:15-8:30	Hands-on practicum with pregnant volunteers (Ward 6G)
8:30	Evaluation completion and adjourn

To confirm registration and access prerequisite online modules, contact:
Nannette.Nemenzo@ucsf.edu or call (415) 514-3308.

Faculty

Jenna Shaw-Battista, CNM, PhD



Jenna Shaw-Battista is an Associate Health Sciences Clinical Professor in the Department of Family Health Care Nursing at the UCSF School of Nursing and the Program Director for the UCSF/SFGH Interdepartmental Nurse-Midwifery Education Program. She has received numerous awards for scholarship, as well as teaching and mentoring in pre-licensure and graduate nursing education. Her primary research interests are midwifery education and care, pregnancy physiology, perinatal optimality, and hydrotherapy during labor and birth. She cares for families at Sutter Davis Hospital in Davis, CA. Professor Shaw-Battista earned a Master's of Science degree and Doctorate of Philosophy in Nursing from UCSF, after studying medical sociology and midwifery at the Evergreen State College in Olympia, WA. She was trained in limited obstetric ultrasound at Wake Forest University School of Medicine in Winston-Salem, North Carolina, in 2003.

Juan Vargas, MD



Juan E. Vargas is an Associate Professor in the Dept of Obstetrics, Gynecology & Reproductive Sciences at the UCSF School of Medicine with a joint appointment in the Dept. of Radiology. Dr. Vargas is the Medical Director of Obstetrics and medical student clerkship director at San Francisco General Hospital, and a senior medical staff at the Prenatal Diagnosis Center at UCSF Medical Center. He is also an obstetrician and geneticist at UCSF Benioff Children's Hospital, specializing in prenatal diagnosis, reproductive genetics, obstetric ultrasound, high-risk pregnancies, drugs in pregnancy, and intrahepatic cholestasis of pregnancy. Dr. Vargas earned a medical degree from the Universidad de Chile, completed a residency in obstetrics and gynecology at UCSF, and did a fellowship in medical genetics at Children's Hospital, Boston. He has served on the medical faculties at Universidad Catolica de Chile and UCSF. Dr. Vargas has received numerous awards for his contributions in medical student and residency education.