



Course Syllabus¹
DMS 333 OB Sonography

Winter 2021

Course Information		Instructor Information	
Quarter Credits:	3	Primary Instructor:	Michelle Wilson Ed.D, RDMS, RDCS, FSDMS
Course Type:	Lecture		
Scheduled Hours:	30	Instructor(s) Email:	lsonohead@gmail.com Michelle.c.wilson@kp.org
Assigned Room:	Online	Instructor(s) Phone:	707-738-1105
Class Day(s):	Monday	Teaching Assistant:	Paris Colunga RDMS
Class Time:	10:00am - 1:00pm		
Pre-Requisite:	DMS 323	Email:	pariscolunga@gmail.com

This course is an in-depth study of the role of the use of sonography in pregnancy. Students are provided extensive didactic instruction in the development of comprehensive sonographic examination protocol for first, second, and third trimester obstetrics following AIUM guidelines. Sonographic evaluation of the normal pregnancy will be discussed including parameters regarding fetal biometric measurements, normal fetal growth, biochemical screening examinations, and potential fetal bioeffects of sonography. Embryogenesis will be examined to better understand relational anatomy and potentials for congenital abnormalities. Normal anatomical and physiological structures of the fetus will be examined, along with supporting structures of the pregnancy which include evaluation of the normal placenta, umbilical cord, amniotic fluid, and maternal cervical canal.

Textbook(s) & Course Materials

REQUIRED TEXT: Stephenson, Susan and Dmitrieva, Julia. (2018). Diagnostic Medical Sonography: Obstetrics and Gynecology, (4th ed.). Wolters Kluwer. ISBN: 9781496385512

MEDIA REQUIREMENTS

1. Operating Systems Windows XP SP3 or newer, Mac OSX 10.6 and newer, Linux-chrome OS.
2. Mobile Operating System iOS 7 and/or newer Android 2.3 and/or newer
3. Computer Speed and Processor Use a computer 5 years old or newer when possible
1GB of RAM 2GHz processor
4. Access to the Internet and Kaiserscholar.com.
5. Ability to watch Microsoft PowerPoint, Prezi presentations, and videos. (Free PowerPoint viewer download is available at <http://www.microsoft.com/downloads/details.aspx> and Prezi Presentation download is available at <https://prezi.com>).
6. Ability to create, save and submit documents using Microsoft Word, Adobe PDF, PowerPoint and/or Prezi.

COURSE TECHNOLOGY NEEDS:

This course utilizes Kaiser Scholar to house relevant course materials and to facilitate course-related communication, and to host the online learning management system (LMS), Moodle. Detailed information regarding assignments and the like are located on the Kaiserscholar.com website, in particular the link in the Sonography Section for DMS 333 is the portal for this online course. Because this course incorporates Internet-based course materials, students need regular and dependable access to a computer with an Internet connection.

METHODS OF PRESENTATION:

1. Moodle on the KPSAHS LMS system
2. Streaming lectures
3. Web site evaluations/pod casts
4. Face to face presentations when permissible

METHOD OF EVALUATION:

1. Written exams
2. Topic Quizzes

3. In class and online collaborative work as well as or individual assignments
4. Presentations and or student facilitating responsibilities
5. Peer group participation in the form of discussion boards
6. Class participation either in a face to face format, or synchronously on line during course designated hours.

Course Approach

Methods of evaluating and grading to evaluate student performance are selected by the instructor. Methods of evaluation may include the following:

Objective Evaluation Methods:

1. True and False Testing
2. Multiple choice Testing
3. Fill-in the blank Testing
4. Competency Testing
5. Identification Testing
6. Problem solving Testing
7. Matching Testing

Subjective Evaluation Methods:

8. Essay and Short Essay Testing
9. Writing Assignments-Case Analysis
10. Research and Literature Review
11. Skills/Proficiency/Competency Testing

Objectives

Prudent Use of Obstetrical Sonography

Ethics for Sonographers

Fertilization

Normal First Trimester

Sonographic Assessment in the Second and Third trimester Extra-Fetal Assessment of the Second and Third trimesters Assess Normal Fetal Growth

Normal Fetal Structures

Assessing Multifetal Pregnancies

Performance standards and documentation

Course Student Learning Outcom

At the completion of the course the student will be able to:

1. Describe the sonographic findings of a first trimester pregnancy. Distinguish the layers of the decidualized endometrium and describe the function of the yolk sac.
2. Discuss the process of fetal embryology and the formation of major organ systems.

3. Identify normal anatomic features of the developing embryo and differentiate the normal stages or milestones along with their sonographic appearances of a first trimester pregnancy.
4. Differentiate the normal and abnormal appearances of a first trimester pregnancy.
5. List the clinical symptoms and risk factors associated with an early pregnancy.
6. Describe the defined AIUM sonographic findings associated and documented with a normal pregnancy and the most common abnormalities seen today.
7. Identify normal fetal anatomical structures identified in the second and third trimesters.
8. Describe the development, function, and sonographic appearance of the placenta, maternal cervix, and maternal adnexa.
9. Identify proper system setting controls for the sonographic examinations used within the specialty of obstetric sonography.
10. Develop proficiency in the correct use of technical and medical terms necessary for a complete discussion of sonographic procedures in obstetric sonography.
11. Identify normal sonographic procedures commonly utilized during the obstetric sonographic examination.
12. Define the appropriate Doppler studies needed to assess the fetus in utero and illustrate how to obtain those during a sonographic examination.
13. Relate the clinical history from the patient or the patient's chart and then develop a preliminary report to the interpreting physician.

Grading Procedure		
Graded Assignment	Points	Percentage of Grade
Assignments	100	24%
Quizzes	90	22%
Mid-Term and Final Exam	100	24%
Presentation	25	6%
Participation	88	21%
Moderator	10	3%
Total	413	100%

Faculty reserves the right to adjust grading methodology (such as total points assigned to exams) throughout the quarter.

Grading Scale and Method		
Letter Grade	Percentage in Performance	Notes
A	94-100	Students must achieve a final grade of 70% or more to receive a passing grade in the course
A-	90-93	
B+	87-89	
B	83-86	
B-	80-82	
C+	77-79	
C	70-76	
F	0-69	

Note: The course schedule below is subject to change.

Week in quarter	Class Meeting Date	Topics of the Week & (Presenter Topic)	Assigned Readings	Class Assignments	DB Facilitators Presenter(s)
1	1/4- 1/10	Role of Sonography in Obstetrics & Clinical Ethics for Obstetrics Sonography Principles of Scanning	Ch. 14 324-332	Introductions Assign. 1 Wkbook – ch.14 (stop after multiple choice)	Discussion Board: Paris Quiz (no pts) Dr. Wilson
2	1/11- 1/17	Fertilization & the First Trimester First Trimester Conception	Ch.15 335-351	Assign. 2 Wkbook – ch. 15 (image labeling section only) Image game Assign. 3 – Board ?'s Quiz 2	Discussion Board: Candee & Hailey Karen & Alexis
3	1/18- 1/24 HOLIDAY	The Fetal Environment: Umb. Cord, Placenta, and Amniotic Fluid Assessments The Placenta: From Formation to Sustainability Umbilical Cord and Amniotic Fluid	Ch. 19 421-430 542-547	Assign. 4 Wkbook – Ch. 19 (stop after Fill-in-the-blank section) Quiz 3	Discussion Board: Zulema & Nailah
4	1/25- 1/31	2nd Trimester Evaluation & Biochemical Assessments/Screening Tests	Ch. 18 391-419 601-602	Assign. 5 Wkbook – Ch. 18 (stop after multiple choice)	Discussion Board: Lania & Allison

		Anatomical Survey Standards Antenatal Fetal Screening Tests and Biochemical Analysis		Assign. 6 Board ?'s Quiz 4	Chrishawna & Leah
5	2/1- 2/7	Fetal Thorax Echocardiographic Assessment Fetal Thoracic Organs	Ch. 23 510-519 Ch. 24 547-555	Assign. 5 Wkbook – Ch.23 (image labeling only) Assign. 6 Fetal Circulation Story (HW) Quiz 5	Discussion Board: Brittany & Lauren Molly & Sarah
6	2/8- 2/14	Fetal Cranium & Face Fetal Cranium Conceptualized Fetal Face How to scan its planes and Structures	Ch. 21 468-479	Assign. 7 Wkbook – ch. 21 (image labeling only) Quiz 6	Discussion Board: Molly Ramandeep & Monica
7	2/15- 2/21 HOLIDAY	Mid-Term Examination	STUDY!!	Mid-Term Examination	Discussion Board: Ramandeep Assignment 7
8	2/22-2/28	Urogenital System and Fetal Abdomen Evaluation Urogenital System Fetal Abdominal Structures	Ch. 25 576-286 608-612 630-631 Ch. 21	Assign. 8 Board ?'s Quiz 7	Discussion Board: Sarah & Monica Brittany & Lauren
9	3/1- 3/7	Fetal Skeletal Evaluation	Ch. 22 496-500	Assign. 9 Videos?	Discussion Board: Chrishawna

		Fetal Skeleton as Sonography Knows It	Ch. 27 639-641	Quiz 8	Lania & Allison
10	3/8- 3/14	Assessing Multiple Gestational Pregnancies Overview of Types of Twinning and What They Look Like	Ch. 29 674-680 681-682	Assign. 10 Wkbook – Ch. 29 (stop after image labeling) Assign. 11 Board ?'s Quiz 9	Discussion Board: Karen & Leah Zulema & Nailah
11	3/15-3/21	Third Trimester Evaluation and Growth & Review for the Final Exam 3rd Trimester Growth Assessment	Ch.18 394-419 (Charts) 702-712	Assign. 11 (for third trimester) Assign. 12 Review Game Quiz 10	Discussion Board: Alexis Candee & Hailey
12	3/22	Final Exam @ 10am	STUDY!!	Then Relax!	

Note: The student is responsible for all assigned reading. Although information may not be covered in the lecture, reading material will be included on tests and quizzes.

Classroom Policies

Audio and video recordings are not permitted in any classroom/lab session. Cell phone and laptop usage is not permitted during the instruction time.

The students are not allowed to use internet access or browsing during the classroom sessions unless instructed by the Instructor for the educational purposes.

Class schedules and topics may be subject to change.

Standardized KPSAHS Instructional Policies

Electronic Device Policy

Use of electronic devices in the classroom is at the discretion of the instructor. These include but are not limited to cell phones, tablets, and laptops.

Recording Lectures

Recording of lectures by students will be allowed at the discretion of the instructor, with the exception of students who have documented ADA accommodations.

Last day to drop with a grade of “W”

The last day to drop with a grade of “W” is typically the last day of the 7th week of the quarter. Refer to the Academic Calendar for the specific date.

Expectations for Work Outside of Class

KPSAHS awards one quarter credit for one hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work per week for didactic coursework. Laboratory, clinical courses, seminar, hybrid, and online courses require an equivalent amount of work (three hours per week) for each quarter credit assigned.

Attendance Policy (On-campus classes)

Attendance will be taken during each class and will be recorded based on the number of minutes attended. A tardy is defined as arrival after the scheduled start time.

Percentage of attendance missed is calculated as follows: Number of missed minutes divided by the total number of minutes available for attendance per term X 100. For example, a course is held two (2) times per week for 2.0 hours. A student misses 288 minutes over the course of the term. Percentage of attendance missed calculation: 288

missed minutes/2880 attendance minutes available X 100 = 10%.

Student Responsibilities

If a student will be absent, he/she must contact instructor prior to the scheduled start time. It is his/her responsibility to obtain all missed material.

Make-up Work

Make-up work is at the discretion of the instructor and is not guaranteed; however, missed laboratory activities cannot be made up.

Consequences

A student who misses 10% in any didactic course will have their course grade lowered one full grade. A student who misses 11-18% in any didactic class will have their course grade lowered two full grades. A student who misses more than 18% will receive a failing grade and may be dismissed from the program.

In the above example, a student missed 288 minutes in a course scheduled for 2,880 minutes, a total of 10%. This student has missed 10% of the course and will receive a full letter grade deduction.

Academic Honesty Policy

All forms of cheating or plagiarism are serious and will not be tolerated. KPSAHS reserves the right to use any process, including use of software, to determine if plagiarism has occurred. Any student who knowingly cheats, plagiarizes, or allows/aids another student in cheating or plagiarism will receive up to and/or including the following:

- A failing grade on a single assignment and/or final course grade
- Suspension or dismissal from the program

Refer to the Academic Catalog, Academic Honesty Policy, for definitions of plagiarism, cheating, fabrication, aiding/abetting dishonesty, and forgery.

Assessment Policy

Assessment is a fundamental part of the educational processes at KPSAHS. We continually strive to improve the institution's programs based on feedback we receive from students, clinical instructors, faculty, employers, and the communities in which we operate and serve. Students

enrolled at our institution can anticipate taking part in assessment activities prior to, during, and upon completion of their education.

Assessment holds may be placed on a student's record under specific circumstances; refer to the Student Handbook for additional information.

Requesting Accommodations under the American for Disability Act

The full procedure and required documentation for requesting disability accommodations is provided in the KPSAHS Academic Catalog. Students begin the process by meeting with the dean of academic affairs, who can be contacted by emailing academicaffairs@kpsahs.edu. Note that accommodations cannot be “retroactively” applied and may require several weeks to finalize, so students are encouraged to request accommodation as soon as possible.

Laboratory Coursework – Diagnostic Medical Sonography

Laboratory courses may require students to serve as volunteer patients for the practice of clinical skills. Serving as a patient for the practice of clinical skills is voluntary, and the student's grades and evaluations will not be affected by their participation or non-participation as a patient in laboratory coursework.

Though students maintain the right to decline serving as a volunteer patient, all students are still required to complete all required procedures in the laboratory classroom. Should a significant number of students choose not to volunteer as patients, classroom hours may be extended.

Other Relevant Academic Policies

Refer to the KPSAHS Academic Catalog for policies relevant to this course, which may include:

- Last day to add/drop (see Academic Calendar)
- Acceptance of Transfer Credit
- Recording of a Class
- Laboratory Course Work – Diagnostic Medical Sonography
- Clinical Education Policies
- Student Records Holds (see both Academic Catalog and Student Handbook)
- Incomplete Grades
- Standards of Academic Progress / Minimum Academic Achievement
- Student Code of Conduct
- Academic Honesty Policy
- Technology Use Policy
- Student Complaints
- Americans with Disabilities Act

The current catalog can be located at www.kpsahs.edu.