# KAISER PERMANENTE® SCHOOL of Allied Health Sciences

# Course Syllabus<sup>1</sup> DMS 443 OB Sonography II

# Winter 2020

Course Information		Instructor Information	
Quarter Credits:	3	Primary Instructor:	Michelle Wilson Ed.D, RDMS, RDCS, FSDMS
Course Type:	Lecture/Hybrid Course		
Scheduled Hours:	30	Instructor(s) Email:	1sonohead@gmail.com
Assigned Room:	RM 400 (SONO 400)	Instructor(s) Phone:	707-738-1105
Class Day(s):	Monday	Instructor(s) Fax:	510-231-5103
Class Time:	9:15am - 12:45pm	Office Hours:	By Appointment
Pre-Requisite:	DMS 333		
Co-Requisite:	None		

# **Course Description**

This course provides the student with an overall perspective of the clinical applications within the specialty of obstetrical sonography. This course includes an advanced study of the sonographic evaluation of fetal pathological processes, including anomalies/abnormalities affecting the fetal neural axis, musculoskeletal system, thorax and heart, abdomen and abdominal wall, and genitourinary system. Advanced gestational dating methods and the evaluation of fetal well-being will also be discussed

Emphasis is placed on the correct use of technical and medical terminology as well as theory that are necessary for a complete discussion of sonographic procedures within the field of obstetrics. Topics will include the related clinical symptoms and laboratory tests used in obstetrics, along with an analysis of fetal embryology, normal and abnormal sonographic patterns of fetal anatomy, related maternal and fetal physiological and pathophysiological processes, with comprehensive reviews of common scanning planes and techniques.

# Textbook(s) & Course Materials

Required Text: Hagen-Ansert, Sandra. (2018). Textbook of Diagnostic Sonography, (8th ed.). Elsevier.

ISBN: 9780323073011

DMS 443 OB II Sonography, Michelle Wilson Ed.D, RDMS, RDCS, FSDMS

<sup>&</sup>lt;sup>1</sup> Syllabus subject to change.

#### **MEDIA REQUIREMENTS**

- 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.
- Ability to watch Microsoft PowerPoint, Prezi presentations, and videos. (Free PowerPoint viewer download is available at <u>http://www.microsoft.com/downloads/details.aspx</u> and Prezi Presentation download is available at <u>https://prezi.com</u>).
- 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. Detailed information regarding assignments and the like are located on the Kaiserscholar.com website. 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

#### **METHOD OF EVALUATION:**

- 1. Written exams
- 2. Topic Quizzes
- 3. Assignments
- 4. Presentations and or student facilitating responsibilities
- 5. Peer group participation to include but not limited to the Learning Management System Discussion Board.

#### **Course Approach**

Methods of evaluating and grading to evaluate student performance are selected by the instructor.

Methods of evaluation may include and the instructor may use any of 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
- 12. Discussion Board Participation and Facilitation
- 13. Case Presentations

# **Course Objectives**

Prudent Use of Obstetrical Sonography Fertilization Normal and Abnormal First Trimester Evaluation Sonographic Assessment in the Second and Third trimester Extra-Fetal Assessment of the Second and Third trimesters Assess Normal Fetal Growth Normal and Abnormal Fetal Structure Evaluation Assessing Multifetal Pregnancies Understand Abnormal Maternal Conditions Associated with Pregnancy Performance standards and documentation

Course Student Learning Outcomes

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

- 1. Describe the sonographic findings of a normal and abnormal first trimester pregnancy.
- 2. Distinguish the layers of the decidualized endometrium and describe the functions of the yolk sac
- 3. Discuss the process of fetal embryology and the formation of major organ systems.
- 4. 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 as well as abnormal presentations.
- 5. List the clinical symptoms and risk factors associated with an early pregnancy.
- 6. Describe the sonographic findings associated with both the normal and abnormal pregnancy.
- 7. Identify normal fetal anatomical structures identified in the second and third trimesters, as well as the abnormal presentations commonly found during these stages.

- 8. Describe the development, function, and sonographic appearance of the placenta, maternal cervix, and maternal adnexa. Document when these structures do not appear normal.
- 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 routine sonographic procedures commonly utilized during the obstetric sonographic examination.
- 12. Relate the clinical history from the patient or the patient's chart and then develop a preliminary report to the interpreting physician and their peers, based on sonographic findings.
- 13. Discuss standard post-partum care as it relates to sonographic evaluation.
- 14. Differentiate the correct invasive procedure for certain obstetrical pathologies and what sonographies role may be in these treatments or diagnostic purposes.

Grading Procedure				
Graded Assignment	Points	Percentage of Grade		
Assignments	80	23%		
Quizzes	60	17%		
Mid-Term and Final Exam	100	29%		
Presentation	20	6%		
Participation/Discussion	90	25%		
Board/Moderator for DB				
Total	350	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:		
А	94 - 100	Students must achieve a final grade of		
A-	90 – 93	70% or more to receive a passing grade in the course.		
В+	88 – 89	the course.		
В	84 - 87			
В-	80 - 83			
C+	78 – 79			
С	70 - 77			
F	0 - 69			

## Course Schedule (Tentative)

Note: The course schedule below is subject to change.

Week in quarter	Class Meeting Date	Topics	Assigned Readings	Graded Assignments (exams, papers, projects, etc.)
1	1/2-1/5	Class Assignments and Familiarizing with the Course Shell-online.	Course Shell Documents	Practice Check -In
2	1/6-1/12	First Trimester Complications	Ch.49. 1179-1180 Ch.50. 1194-1215 Ch.54. 1278-1280 Ch.55. 1298-1313	Ass #1 Discussion Board Presentations Assignment
3	1/13-1/19	The Fetal Environment: Umb. Cord, Placenta, Cervix, Amniotic Fluid Assessments	Ch.51. 1247-1251 Ch.56. 1314-1331 Ch.57. 1333-1345 Ch.58. 1346-1358	Ass #2 Quiz 1 Discussion Board Presentations
4	1/20-1/26	HOLIDAY		
5	1/27-2/2	Neural Tube, Fetal Face, and the Vertebral Column Anomalies	Ch. 59. 1364-1384 Ch. 60. 1385-1405	Ass #3 Quiz 2 Discussion Boards Presentations
6	2/3-2/9	The Chest & Cardiac Evaluation with Pathology	Ch.30. 809-823 (Optional Ch.34. 887-896) Ch. 35. 910-926 Ch. 36. 927-962 Ch. 61. 1406-1418	Ass #4 Quiz 3 Discussion Boards Presentations
7	2/10-2/16	Fetal Abdomen, Pelvis, and Skeletal Dysplasias'	Ch. 62. 1419-1432 Ch. 63. 1433-1447 Ch. 64. 1449-1477 Ch. 65. 1479-1492	Ass #5 Discussion Boards Presentations
8	2/17-2/23	HOLIDAY		

9	2/24-3/1	MIDTERM EXAMINATION	Ch. 53.1268-1277	Ass #6
		Ch. 54. 1288-1290	Quiz 4	
		Third Trimester Concerns,	Ch. 55. 1298-1313	Discussion
		Interventional Ultrasound, and		Boards
		Chromosomal Abnormalities		Presentations
10	3/2-3/8		Ch. 54. 1290-1297	Ass #7
		Assessing Multiple Gestational		Quiz 5
		Pregnancies with Pathology		Discussion
				Boards
				Presentations
11	3/9-3/15	Maternal Disease Processes, IVF, &	Ch.46. 1151-1158	Ass #8
		Post-Partum Evaluation	Ch. 54. 1278-1290	Quiz 6
		Review for the Final Exam	Ch. 56. 1322-1323 Ch.58. 1358-1363	Discussion
				Boards
				Presentation
12	3/16	Final Examination		

Note: The student is responsible for all assigned reading and posted lectures. Although information may not be covered in the in-class 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 7<sup>th</sup> 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 <u>academicaffairs@kpsahs.edu</u>. 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.