

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

<b>SUBJECT AREA</b>	<u><b>Diagnostic Medical Sonography</b></u>
<b>COURSE RUBRIC AND NUMBER</b>	<u><b>DMSO 1260</b></u>
<b>COURSE TITLE</b>	<u><b>Clinical-Diagnostic Medical Sonography/Sonographer and Ultrasound Technician I</b></u>
<b>COURSE CREDIT HOURS</b>	<u>    <b>2</b>    <b>0</b>    <b>:</b>    <b>12</b></u> Credits        Lec        Lab

### I. Catalog Description

Provides a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. A grade of "C" or better is required in this course to take the next course. **(0:12) Professional Practice Insurance required.**

### II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

#### A. Unit I. Student Orientation

1. Locate the various departments within the Radiology Department at his/her assigned clinical site.
2. Guide the DMSO instructor to various departments within the hospital (I.E. ICN, ICU, ER, Surgical Floor, Internal Medicine, CCU, and Operating Room).
3. Locate the "crash-cart" and other emergency equipment (I.E. suction equipment, fire extinguisher).
4. Identify where the wheelchairs and stretchers are stored at his/her clinical facility.
5. Describe the entire ultrasound examination procedure from two (2) perspectives.
  - a. "Tracking" the patient's movements/experiences from his/her room to ultrasound and back.
  - b. Prepare technical impression of ultrasound exam.
  - c. "Tracking" the hardcopy results from the time they are recorded on film through dictation.
6. Schedule patients for various ultrasound examinations, giving the patient the correct preparation instructions for that specific procedure.
7. Identify his/her Clinical Instructor and the chain of command at his/her clinical facility.
8. Describe the filing system used for his/her clinical facility and be able to retrieve a given patient's previous exam.
9. Perform basic computer troubleshooting.
10. Identify the Radiologists by name at his/her clinical facility.
11. Locate the student time sheets at his/her clinical facility.
12. Identify which parking areas at his/her facility are for visitor parking and which are for employee parking.

13. Define the emergency “Code” or “Code Blue” telephone number for his/her clinical facility.
14. Identify exits to be used in case of fire.
15. Verify patient identity.
16. Locate the physician’s orders on the patient’s chart.
17. Locate the laboratory results within the patient’s chart.
18. Give a basic description of the function of the TimeGain curve (TGC) control on the ultrasound machine.
19. Give a basic description of the function of the overall gain control on the ultrasound machine.

**B. Unit II. Fundamental Scanning Obstetric/Abdominal**

1. Determine the position of the fetus in relation to the mother.
2. Demonstrate the placenta and identify its anatomical position within the uterus.
3. Identify amniotic fluid within the uterus.
4. Demonstrate the fetal head in transverse, coronal and sagittal planes.
5. Demonstrate the fetal abdomen in transverse and sagittal planes.
6. Demonstrate the maternal bladder.
7. Demonstrate the fetal spine in transverse and sagittal planes.
8. Demonstrate the fetal femur its longitudinal axis.
9. Demonstrate the fetal heart transversely and sagittally.
10. Perform longitudinal and transverse scan planes through the uterus if a static scanner is present in the clinical facility.
11. Describe the basic differences in operation between the following transducers.
  - a. 3.5 MHz
  - b. 5.0 MHz
  - c. 7.0 MHz
  - d. 10.0MHz
12. Discuss correct and incorrect scan-lane orientation as it relates to the ultrasound machine.
13. Show appropriate patient-technologist relationship.
14. Demonstrate evidence of appropriate manipulation of ultrasonic gain controls to reduce the chance of adverse tissue interactions.
15. Differentiate between a sector scanner and a linear scanner.
16. Demonstrate abdominal aorta and routine adult sonogram.
17. Demonstrate liver, right kidney and pancreas on an adult sonogram of the abdomen.

**III. THECB Learning Outcomes (WECM)**

As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

**IV. Evaluation**

**A. Evaluation Methods:**

1. Monthly Hospital Performance Evaluation – This evaluation will be completed by hospital personnel. Either the clinical instructor or the supervising staff technologist, under the supervision of the clinical instructor, will complete this evaluation on a monthly basis.
2. Hospital Performance Evaluation By College Instructors - This evaluation will be completed by the EPCC DMSO Program Instructors.
3. Bi-Weekly Clinical Evaluations – A minimum of seven (7) clinical performance evaluations will be conducted on a bi-weekly basis by college instructors. Evaluations

will determine if the student has obtained the skills necessary to perform Obstetric and Gynecologic Ultrasound examinations.

4. Final Evaluation – A written exam will be administered during the last two (2) weeks of the semester in the areas of Obstetrics, Gynecology and Abdominal anatomy, terms and concepts.

B. Grading Scale:

100 – 96 = A  
 90 – 86 = C  
 85 – 81 = D  
 80 – 0 = F

No **grade of less** than “C” will be considered as successful completion of a professionally related course. **Grades of .5 or higher** will be rounded of the next whole number grade.

C. Final Grade Determination

Bi-Weekly Performance Evaluations	50% of final grade
Instructor/Hospital Evaluation	30% of final grade
Final Evaluation	<u>20%</u> of final grade
	100%

D. Remediation

Failure to achieve a minimum competency of 85% on bi-weekly evaluations will result in re-evaluation, using the same examination. Failure in the re-evaluation will result in the student being recycled to the college laboratory for additional practice and remedial study. Following remediation, the student will be re-evaluated in the clinic on the examination. Failure in this examination will result in failure of the course.

E. Attendance

1. All students are required to sign an attendance sheet in the Clinic. Failure to do so will indicate an unexcused absence.
2. During this semester, no absent days are allotted all absences or partial absences must be made up.
3. If a student is absent on an assigned clinical day, that student is **REQUIRED** to call both the clinical instructor and the instructor of record at least (30) thirty minutes before the student is scheduled to be present. Failure to do so will indicate an **UNEXCUSED ABSENCE**.
4. Three (3) **UNEXCUSED** absences from the clinic will be cause for dismissal from the DMSO Program.
5. If a student, due to time limitations, is unable to complete the required number of hours for that semester, that student will be given an incomplete (I) until the time is made up. If the time is not made up, the incomplete will change to a grade of “F”.
6. Students are required to remain **AT** the clinical site during the entire assigned period (with the exception of lunches). In the event that all cases have been completed, the student is encouraged to study within the department or the **HOSPITAL LIBRARY**. Students not in their assigned area will be given a written counseling statement. An accumulation of two (2) counseling statements within the 13 month program period will result in student dismissal.

F. Tardiness

1. Students are expected to report to their assigned areas on time. Tardiness will not be tolerated.
2. Excessive or continued tardiness may be cause for dismissal from the DMSO Program.
3. The amount of time that the student is late must be made up the same day.

G. Guidelines for Patient-Student Safety

Students who fail to abide by the “Guidelines for Patient and Student Safety” will be suspended from the clinic for a period of time to be determined by the Program Coordinator. (See attachment “Guidelines for Patient and Student Safety”)

H. Name Tags and El Paso Community College Patches

Name tags and El Paso Community College patches must be worn by students in the clinics at all times.

I. T.B. Tine Test

Evidence of an updated T.B. Tine test must be submitted to a DMSO Instructor for placement in the student’s file no later than one (1) week after the beginning of the semester. Failure to do so will result in that student’s suspension from the clinical facility until the above requirement is met. All hours missed must be made up before the end of the semester.

J. Clinical Affiliation Dress Code

Students who are not in compliance with the “Clinical Affiliation Dress Code” will be placed on clinical probation for a time to be determined by the DMSO Program Coordinator. (See attached Clinical Affiliation Dress Code”)

**V. Disability Statement (Americans with Disabilities Act [ADA])**

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

**VI. 6 Drop Rule**

Students who began attending Texas public institutions of higher education for the first time during the fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.