



BROWARD COLLEGE COURSE OUTLINE

LAST REVIEW: 2008-2009
(i.e. 2003-2004)

NEXT REVIEW: 2013-2014
(i.e. 2008-2009)

STATUS: A
(A, I, D)

COURSE TITLE: Clinic A

COMMON COURSE NUMBER: SON 1804

CREDIT HOURS: 3

CONTACT HOUR BREAKDOWN
(per 16 week term)

CLOCK HOURS:
(Voc. Course ONLY)

Lecture: Lab:
Clinic: 384 Other:

PREREQUISITE(S): SON 1100, SON 1170

COREQUISITE(S): SON 1111, SON 1121, SON 1211, SON 1214

PRE/COREQUISITE(S):

COURSE DESCRIPTION *(750 character maximum):* Clinical education requiring application of the knowledge learned. Professionalism and personal interaction are stressed along with technical abilities. As the student progresses he or she will be performing examinations with less and less supervision.

General Education Requirements – Associate of Arts Degree (AA), meets Area(s): Area
General Education Requirements – Associate in Science Degree (AS), meets Area(s): Area
General Education Requirements – Associate in Applied Science Degree (AAS), meets Area(s): Area

UNIT TITLES

1. Ultrasound Orientation
2. Observation in Ultrasound Department
3. Patient Rapport and Department Protocol
4. Gynecological Examination
5. Obstetrical Examination
6. Abdominal Examination

ASSESSMENT:

Please provide a brief description (250 characters maximum) that details how students will be assessed on the course outcomes.

Attendance in clinic and Cognitive and Psychomotor evaluations through observation showing successful clinical performance of specific tasks and examinations. Affective evaluations using Personal and professional growth assessment and General Progress and Proficiency Report .

**** Complete the following only if course is seeking general education status ****

GENERAL EDUCATION Competencies and Skills *:

Please highlight in green font all Competencies/Skills from the list below that apply to this course. In the box to the right of the Competency/Skill, enter all specific learning outcome numbers (i.e. 1.1, 2.7, 5.12) that apply.

1. Read with critical comprehension	
2. Speak and listen effectively	
3. Speak and listen effectively	
4. Think creatively, logically, critically, and reflectively (analyze, synthesize, apply, and evaluate)	
5. Demonstrate and apply literacy in its various forms: (highlight in green ALL that apply) (1. technological, 2. informational, 3. mathematical, 4. scientific, 5. cultural, 6. historical, 7. aesthetic and/or 8. environmental)	
6. Apply problem solving techniques to real-world experiences	
7. Apply methods of scientific inquiry	
8. Demonstrate an understanding of the physical and biological environment and how it is impacted by human beings	
9. Demonstrate an understanding of and appreciation for human diversities and commonalities	
10. Collaborate with others to achieve common goals.	
11. Research, synthesize and produce original work	
12. Practice ethical behavior	
13. Demonstrate self-direction and self motivation	
14. Assume responsibility for and understand the impact of personal behaviors on self and society	
15. Contribute to the welfare of the community	

** General Education Competencies and Skills endorsed by '05-'06 General Education Task Force*

Common Course Number: SON 1804

UNITS

Unit 1 Ultrasound Orientation

General Outcome:

- 1.0 The student shall:** demonstrate skills in utilizing equipment, in scanning techniques and in interpersonal relationships associated with a routine sonography department

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 1.1 Define the role of the sonographer in relationship to the radiologist and health care team
- 1.2 Describe and list the various modes involved in sonography
- 1.3 Demonstrate the loading and processing of film cassettes and/or handling of other hard copy
- 1.4 Name the major sectional parts and controls of an ultrasonic unit
- 1.5 Identify transverse and longitudinal scans and distinguish coronal and/or lateral decubitus (right or left side up) views
- 1.6 Describe transducer function, construction and types
- 1.7 State major areas of examination in diagnostic scans
- 1.8 Describe what is meant by "plane anatomy"
- 1.9 Define various scanning techniques
- 1.10 Match sonographic procedure with patient preparation needed for examination
- 1.11 Understand the medical ethics involved in sonography
- 1.12 Demonstrate personal skills and qualifications of a sonographer.
- 1.13 Describe the basic pulse-echo system and Doppler principles
- 1.14 Describe the correct manipulation of the TGC
- 1.15 Demonstrate communication skills required on a daily basis in the typical sonography setting

Common Course Number:

UNITS

Unit 2 Observation in Ultrasound Department

General Outcome:

- 2.0 The student shall:** describe the basic protocol used for assigned clinical affiliate.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 2.1** Observe procedures in a routine ultrasound department
- 2.2** Observe a cardiac sonographic procedure (if possible) to help prepare for future courses
- 2.3** Observe a peripheral vascular procedure to help prepare for future courses

Common Course Number: SON 1804

UNITS

Unit 3 Patient Rapport and Department Protocol

General Outcome:

- 3.0 The student shall:** interact with the patient in a manner appropriate for a sonographer, and should be able to follow Department protocol.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 3.1** Schedule patients for examinations
- 3.2** Prepare room and equipment for examination
- 3.3** Instruct patient concerning procedure
- 3.4** Prepare and position the patient for the scan
- 3.5** Accurately record the patient's history
- 3.6** Process the sonograms correctly
- 3.7** Identify on sonograms the anatomical structures concerned in the examination

Common Course Number: SON 1804

UNITS

Unit 4 Gynecological Examination**General Outcome:**

- 4.0 The student shall: demonstrate** understanding of protocol and procedures associated with gynecological examinations.

Specific Measurable Learning Outcomes:**Upon successful completion of this unit, the student shall be able to:**

- 4.1 Describe the normal anatomy and scanning techniques used to demonstrate the female pelvis, utilizing both transabdominal (TA) and transvaginal (TV) approaches
- 4.2 Explain the protocol for scanning the female pelvis - TA and TV
- 4.3 Assess pelvic anatomy
- 4.4 Distinguish uterus location, position and size
- 4.5 Identify ovarian location, position and size
- 4.6 Identify other adnexal structures
- 4.7 Distinguish gynecological pathology from normal gynecological anatomy and note size, consistency and contour
- 4.8 Perform all preliminary procedures leading to actual examination by sonography and all procedures necessary post examination
- 4.9 Identify sonographic representation of normal anatomy
- 4.10 Describe uses of Doppler techniques in gynecologic sonography

Common Course Number: SON 1804

UNITS

Unit 5 Obstetrical Examination

General Outcome:

- 5.0 The student shall:** demonstrate understanding of scanning protocol and scanning procedures associated with obstetrical examinations in all stages of pregnancy.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 5.1** Confirm intrauterine pregnancy
- 5.2** Assess fetal viability
- 5.3** Describe methods used to determine gestational age in the first trimester
- 5.4** Describe methods used to determine gestational age after the first trimester
- 5.5** Determine placental location
- 5.6** Demonstrate knowledge of normal fetal anatomy
- 5.7** Explain routine measurements obtained and methods used to measure fetal structures
- 5.8** Distinguish discrepancies in fetal measurements
- 5.9** Describe the scanning techniques and routine protocols for scanning obstetrical patients with both the transabdominal and transvaginal approach
- 5.10** Identify situations where the transabdominal approach is advantageous in scanning obstetric patients
- 5.11** Identify situations where the transvaginal approach is advantageous in scanning obstetric patients
- 5.12** Identify sonographic representation of normal fetal anatomy
- 5.13** Describe appropriate uses for Doppler techniques in obstetric sonography
- 5.14** Perform all preliminary procedures leading to actual examination by sonography and all procedures post examination

Common Course Number: SON 1804

UNITS

Unit 6 Abdominal Examination

General Outcome:

- 6.0 The student shall:** demonstrate understanding scanning protocol and other procedures associated with scanning abdominal structures

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 6.1** Explain the normal preparations for the sonographic demonstration of the upper abdominal organs
- 6.2** Explain the protocol for scanning the each of the upper abdominal organs
- 6.3** Demonstrate the normal anatomy of the upper abdomen
- 6.4** Assess abdominal anatomy and identify gross abdominal structures as demonstrated by ultrasound, such as the liver, gallbladder, aorta, IVC, stomach, pancreas, bowel and spleen
- 6.5** Distinguish abdominal organ, location and size
- 6.6** Perform positioning and scanning procedures for the gallbladder and biliary tract
- 6.7** Perform positioning and scanning procedures for the liver
- 6.8** Perform positioning and scanning procedures for the prevertebral vessels
- 6.9** Perform positioning and scanning procedures for the kidneys
- 6.10** Perform positioning and scanning procedures for the spleen
- 6.11** Perform positioning and scanning procedures for the pancreas
- 6.12** Perform positioning and scanning procedures for general retroperitoneum studies
- 6.13** Explain appropriate Doppler techniques for abdominal vessels
- 6.14** Identify normal spectral and color-flow Doppler patterns in abdominal vasculature
- 6.15** Perform all preliminary procedures leading to actual examination by sonography and all procedures necessary post examination
- 6.16** Obtain and evaluate patient history and chart/record data pertinent to the examination



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