



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 C

COMMON COURSE NUMBER: SON 1824

CREDIT HOURS: 4

CONTACT HOUR BREAKDOWN
(per 16 week term)

CLOCK HOURS:
(Voc. Course ONLY)

Lecture: Lab:
Clinic: 384 Other:

PREREQUISITE(S): SON 1804, SON 1814, SON1211, SON 1212, SON 1111 SON1112, SON 1121, SON 1122, SON 1214, SON 1215

COREQUISITE(S): SON 1141

PRE/COREQUISITE(S):

COURSE DESCRIPTION *(750 character smaximum)*: Application of all the material presented requiring the student to make judgmental decisions regarding technical aspects, to interact in a professional manner with those with whom he or she comes in contact, and to generally progress to the point where, after successful testing, he or she may be accepted as a competent sonographer for general sonographic exams.

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. Patient Rapport and Department Protocol
3. Gynecological Examination
4. Obstetrical Examination
5. Abdominal Examination
6. Small Parts (Superficial Structures)

ASSESSMENT:

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

Psychomotor and Cognitive evaluation at the third Clinic level (advanced) by observation of Clinical Competency in performing exams at the Clinical Affiliate. Affective, Psychomotor and Cognitive evaluation by 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

UNITS

Unit 1 Ultrasound Orientation

General Outcome:

- 1.0 The student shall:** demonstrate an understanding of the role and responsibility of the sonographer in the health care field.

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 Name the major sectional parts and controls of an ultrasonic unit
- 1.4 Define various scanning techniques
- 1.5 Match sonographic procedures with patient preparation needed for
- 1.6 Understand the medical ethics involved in sonography
- 1.7 Demonstrate personal skills and qualifications of a sonographer.
- 1.8 Demonstrate the correct manipulation of the TGC
- 1.9 Explain and use the various techniques of instrumentation required to create a diagnostic sonogram
- 1.10 Explain and use methods of patient preparation and care before and after a sonogram
- 1.11 Present a sonographic exam in completed form
- 1.12 Demonstrate skills to develop and maintain the special relationship of the sonographer to the patient and to other persons in medicine
- 1.13 Demonstrate laboratory safety techniques as related to sonographic imaging units in the patient examination situation
- 1.14 Use basic techniques for orientation and labeling of sonograms
- 1.15 Demonstrate skills needed to relate with tact and diplomacy with patients, physicians, nurses, other imaging personnel and the general hospital population
- 1.16 Demonstrate those characteristics that reflect the high degree of professionalism associated with the field of ultrasound

Common Course Number: SON 1824

UNITS

Unit 2 Patient Rapport and Department Protocol

General Outcome:

- 2.0 The student shall:** demonstrate an understanding of sonographer-patient relationship and interactions and of Department protocol.

Specific Measurable Learning Outcomes:

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

- 2.1 Schedule patients for examinations
- 2.2 Prepare room and equipment for examination
- 2.3 Instruct patient concerning procedure
- 2.4 Prepare and position the patient for the scan
- 2.5 Accurately record the patient's history
- 2.6 Process the sonograms correctly
- 2.7 Identify on sonograms the anatomical structures concerned in the examination
- 2.8 Provide psychological support

Common Course Number: SON 1824

UNITS

Unit 3 Gynecological Examination

General Outcome:

3.0 The student shall: demonstrate advanced understanding of the sonographic gynecological examination.

Specific Measurable Learning Outcomes:

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

- 3.1** Distinguish gynecological pathology from normal gynecological anatomy and note size, consistency and contour
- 3.2** Perform positioning and scanning procedures for the female pelvis
- 3.3** Correlate patient history, laboratory results and sonographic appearance to provide a differential diagnosis
- 3.4** Perform gynecological examinations, without assistance, following the protocol of the clinical affiliate
- 3.5** Present completed examinations in detail with justification of all techniques, methods or procedures used to obtain data
- 3.6** Identify normal anatomy and gross pathology of the pelvis both on sonograms and related imaging modalities
- 3.7** Utilize Doppler techniques when appropriate to the clinical or sonographic findings related to the patient's condition
- 3.8** Modify standard image protocol as required by patient history or initial sonographic findings

Common Course Number: SON 1824

UNITS

Unit 4 Obstetrical Examinations

General Outcome:

- 4.0 The student shall:** demonstrate advanced understanding of sonographic examination of the obstetrical patient.

Specific Measurable Learning Outcomes:

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

- 4.1** Perform scanning procedures for an obstetrical exam with an estimated fetal age of less than 10 weeks.
- 4.2** Perform scanning procedures for an obstetrical exam in the second trimester of pregnancy
- 4.3** Perform scanning procedures for an obstetrical exam in the third trimester of pregnancy
- 4.4** Confirm or disprove pregnancy
- 4.5** Determine fetal age
- 4.6** Determine fetal condition
- 4.7** Perform scanning procedures for a suspected ectopic pregnancy
- 4.8** Perform scanning procedures for a suspected IUGR
- 4.9** Identify abnormal conditions if present in pelvis
- 4.10** Perform obstetrical examinations, without assistance, following the protocol of the clinical affiliate
- 4.11** Present completed examinations in detail, with justification of all techniques, methods or procedures used to obtain data
- 4.12** Identify normal anatomy and abnormal conditions/gross pathology of the obstetrical patient, both on sonograms and related imaging modalities
- 4.13** Utilize Doppler techniques when appropriate, and explain rationale for Doppler use
- 4.14** Modify standard protocol as required by patient history or initial sonographic findings

Common Course Number: Son 1824

UNITS

Unit 5 Abdominal Examination

General Outcome:

5.0 The student shall: demonstrate an advanced understanding of abdominal sonographic examination

Specific Measurable Learning Outcomes:

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

- 5.1** Perform positioning and scanning procedures for the gallbladder and biliary tract
- 5.2** Perform positioning and scanning procedures for the liver
- 5.3** Perform positioning and scanning procedures for the prevertebral vessels
- 5.4** Perform positioning and scanning procedures for the kidneys
- 5.5** Perform positioning and scanning procedures for the spleen
- 5.6** Perform positioning and scanning procedures for the pancreas
- 5.7** Perform positioning and scanning procedures for the gastrointestinal tract
- 5.8** Distinguish abdominal pathology from normal abdominal anatomy and assess size, consistency and contour and distinguish abnormal blood flow patterns from those that are normal
- 5.9** Correlate patient history, laboratory results and sonographic appearance to offer a differential diagnosis
- 5.10** Perform all abdominal examinations, without assistance, according to the protocol of the clinical affiliate
- 5.11** Present completed examinations in detail with justification of all techniques, methods or procedures used to obtain data
- 5.12** Identify normal anatomy and gross pathology of the abdomen, both on sonograms and related imaging modalities
- 5.13** Utilize Doppler techniques when the patient's clinical or sonographic indications warrant
- 5.14** Identify normal and abnormal color-flow, spectral or amplitude Doppler patterns

- 5.15** Modify standard exam protocol as required by patient history or initial sonographic findings

Common Course Number: SON 1824

UNITS

Unit 6 Small Parts (Superficial Structures)

General Outcome:

- 6.0 The student shall:** demonstrate an understanding of sonographic and/or Doppler examination of superficial structures.

Specific Measurable Learning Outcomes:

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

- 6.1** Complete routine documentation related to the examination of superficial structures which are associated with duties of a typical ultrasound department