



Course Number and Title: DMS 231 Abdominal/Small Parts Sonography II

Campus Location:

Georgetown

Effective Date:

2018-51

Prerequisite:

DMS 131

Co-Requisites:

none

Course Credits and Hours:

2.00 credits

2.00 lecture hours/week

1.00 lab hours/week

Course Description:

This course provides the skills necessary to produce diagnostic sonographic images of peritoneal and retroperitoneal structures, the urinary system, spleen, and superficial structures.

Required Text(s):

Obtain current textbook information by viewing the [campus bookstore - https://www.dtcc.edu/bookstores](https://www.dtcc.edu/bookstores) online or visit a campus bookstore. Check your course schedule for the course number and section.

Additional Materials:

None

Schedule Type:

Classroom Course

Disclaimer:

None

Core Course Performance Objectives (CCPOs):

1. Examine the cross-sectional anatomy of the abdominal viscera and superficial structures. (CCC 1, 2, 3, 4, 5, 6; PGC 1, 2, 3, 4)
2. Explain the principles of scanning technique in examining the abdominal viscera, superficial structures, and small parts. (CCC 1, 2, 4, 5, 6; PGC 1, 2)
3. Identify the sonographic appearance of abdominal viscera, superficial structures, small parts, and vasculature. (CCC 1, 2, 3, 4, 5, 6; PGC 1, 2, 3, 4)
4. Identify and document the sonographic appearance of pathology and pathophysiology relating to abdominal viscera, superficial structures, and small parts. (CCC 1, 2, 3, 4, 5, 6; PGC 1, 2, 3, 4)
5. Discuss the laboratory testing associated with the abdominal viscera, superficial structures, and small parts. (CCC 1, 2, 3, 4, 5, 6; PGC 1, 2, 3, 4)
6. Explain and document the preparation that should precede a sonographic examination of the abdominal viscera, superficial structures, and small parts. (CCC 1, 2, 4, 5; PGC 3, 4)
7. Perform basic abdominal imaging techniques. (CCC 1, 2, 3, 4, 5, 6; PGC 1, 2, 3, 4)
8. Explain and document the completion process of a sonographic examination of the abdominal viscera, superficial structures, and small parts. (CCC 1, 2, 3, 4, 5, 6; PGC 1, 2, 3, 4)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

Measurable Performance Objectives (MPOs):

Upon completion of this course, the student will:

1. Examine the cross-sectional anatomy of the abdominal viscera and superficial structures.
 1. Explain the normal gross anatomy, location, size, and adjacent organ relationships of abdominal viscera, superficial structures, and small parts including but not limited to gastrointestinal tract, pancreas, spleen, adrenal glands, retroperitoneum, lymphatic system, thyroid, breast, scrotum, prostate, and musculoskeletal.
 2. Discuss the importance of a technical systematic approach in examining the normal morphological structures.
 3. Explain directional terms, anatomic position, and anatomic planes relating to cross-sectional anatomy.
 4. Explain image quality terms and internal echo patterns used in sonographic procedures.
2. Explain the principles of scanning technique in examining the abdominal viscera, superficial structures, and small parts.
 1. Explain the importance and benefit of using proper transducer selection and technique in sonographic examinations.
 2. Perform the accepted guidelines and scanning protocols use in sonographic examinations.
 3. Use scan protocol while remaining within allowable scan time.
3. Identify the sonographic appearance of abdominal viscera, superficial structures, small parts, and vasculature.
 1. Discuss visceral physiology and its essential importance to life.
 2. Discuss and identify the sonographic appearance of relational anatomy of abdominal viscera and superficial structures including gastrointestinal tract, pancreas, spleen, adrenal glands, retroperitoneum, lymphatic system, thyroid, breast, scrotum, prostate, and musculoskeletal.
4. Identify and document the sonographic appearance of pathology and pathophysiology relating to abdominal viscera, superficial structures, and small parts.
 1. Describe and identify the sonographic appearances of pathologies relating to inflammatory, neoplastic, infectious, obstructive, metabolic, traumatic, degenerative, iatrogenic, congenital, and immunologic process of gastrointestinal tract, pancreas, spleen, adrenal glands, retroperitoneum, lymphatic system, thyroid, breast, scrotum, prostate, and musculoskeletal.
 2. Explain and identify specific anatomic variants.
5. Discuss the laboratory testing associated with the abdominal viscera, superficial structures, and small parts.
 1. Discuss tests of adrenal function.
 2. Discuss tests of thyroid and parathyroid function.
 3. Discuss prostate specific antigen (PSA) tests.
6. Explain and document the preparation that should precede a sonographic examination of the abdominal viscera, superficial structures, and small parts.
 1. Apply the steps involved in patient preparation for abdominal studies.
 2. Apply and demonstrate the scanning unit preparation with regard to transducer selection, exam table height, and patient body habitus.
7. Perform basic abdominal imaging techniques.
 1. Perform imaging techniques required to evaluate normal relational anatomy of organs/systems, including but not limited to gastrointestinal tract, pancreas, spleen, adrenal glands, retroperitoneum, lymphatic system, thyroid, breast, scrotum, prostate, and musculoskeletal.
8. Explain and document the completion process of a sonographic examination of the abdominal viscera, superficial structures, and small parts.
 1. Write reports of findings using sonographic terminology.

Evaluation Criteria/Policies:

Students must demonstrate proficiency on all CCPOs at a minimal 75 percent level to successfully complete the course. The grade will be determined using the Delaware Tech grading system:

92	-	100	=	A
83	-	91	=	B
75	-	82	=	C
0	-	74	=	F

Students should refer to the [Student Handbook - https://www.dtcc.edu/handbook](https://www.dtcc.edu/handbook) for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

Core Curriculum Competencies (CCCs are the competencies every graduate will develop):

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):

1. Graduates will demonstrate clinical competence by performing a full range of diagnostic medical sonography procedures on all patient populations pertaining to their learning concentration.
2. Graduates will professionally utilize verbal, nonverbal, and written communication skills in patient care, procedure intervention, and professional relationships.
3. Graduates will demonstrate professional growth and development by acting in a professional and ethical manner and comply with the professional scope of practice.
4. Graduates will integrate critical thinking and problem solving skills as expected of a healthcare professional.

Disabilities Support Statement:

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.