



## **Abdominopelvic Pathology (DMSO 2341)**

**Credit:** 3 semester credit hours (3 hours of lecture)

**Prerequisite/Co-requisite:** Completion of DMSO 1441 and DMSO 1355 with a C or better/ DMSO 1342, DMSO 2405, and DMSO 1366

### **Course Description:**

Pathologies and disease states of the abdomen and pelvis as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Emphasizes endocavitary sonographic anatomy and procedures including pregnancy.

### **Required Text and Materials:**

*Abdomen and Superficial Structures*, Diane M. Kawamura and Bridgette M. Lunsford, 3<sup>rd</sup> Edition  
ISBN # 978-1-60547-995-8

### **Course Objectives**

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

- A. Identify and differentiate abnormal abdominal and pelvic structures.
- B. Demonstrate appropriate scanning techniques using standard protocol guidelines.
- C. Evaluate patient history and laboratory data as it relates to ultrasound.
- D. Select appropriate transducer for area of interest.
- E. Identify etiology and sonographic appearance of abdominal wall pathology
- F. Identify etiology and sonographic appearance of benign and malignant changes seen in the peritoneum
- G. Identify etiology and sonographic appearance of abnormalities in the vascular system
- H. Identify etiology and sonographic appearance of abnormalities of superficial structures, i.e. thyroid/parathyroid, prostate, and scrotum
- I. List the types of Sonography-guided interventional procedures
- J. Discuss the indications and contraindications for Sonography-guided interventional procedures

## Course Outline

- I. Vascular Pathology
  - A. Abnormalities of the Portal System
  - B. Diseases of Arteries
  - C. Diseases of Veins
  - D. A-V Shunts
  - E. Etiology
  - F. Clinical Signs and Symptoms
  - G. Sonographic Appearance
- II. Pathology of Retroperitoneal and Peritoneal Cavity, and Abdominal Wall
  - A. Invasive Procedures
    - i. Biopsy
    - ii. Aspirations
  - B. Adenopathy
  - C. Diseases of the Adrenal Glands
    - i. Benign
    - ii. Malignant
  - D. Laboratory Values
  - E. Abnormal Fluid Collections
  - F. Etiology
  - G. Clinical Signs and Symptoms
  - H. Sonographic Appearance
- III. Gastrointestinal Pathology
  - A. Abnormal Bowel Signature
  - B. Hypertrophic Pyloric Stenosis
  - C. Infectious Diseases
  - D. Benign Neoplasms
  - E. Malignant Neoplasms
  - F. Etiology
  - G. Laboratory Values
  - H. Clinical Signs and Symptoms
  - I. Sonographic Appearance
- IV. Urinary System Pathology
  - A. Benign Neoplasms
  - B. Malignant Neoplasms
  - C. Cystic Diseases
- V. Liver Pathology
  - A. Infectious Diseases
  - B. Benign Neoplasms
  - C. Malignant Neoplasms
  - D. Vascular Abnormalities
  - E. Trauma
  - F. Etiology
  - G. Clinical Signs and Symptoms
  - H. Laboratory Values
  - I. Sonographic Appearance
- VI. Gallbladder and Biliary System
  - A. Diseases of Gallbladder
    - i. Benign
    - ii. Malignant
  - B. Bile Duct Abnormalities
  - C. Etiology
  - D. Clinical Signs and Symptoms
  - E. Laboratory Values
  - F. Sonographic Appearance
- VII. Pancreas Pathology
  - A. Infectious Diseases
  - B. Benign Neoplasms
  - C. Malignant Neoplasms
  - D. Etiology
  - E. Clinical Signs and Symptoms
  - F. Laboratory Values
  - G. Sonographic Appearance
- VIII. Splenic Pathology
  - A. Congenital Abnormalities
  - B. Benign Neoplasms
  - C. Malignant Neoplasms
  - D. Infectious Diseases
  - E. Trauma
  - F. Etiology
  - G. Clinical Signs and Symptoms
  - H. Laboratory Values
  - I. Sonographic Appearance

- J. Infectious Diseases
  - K. Parenchymal Disease
  - L. Etiology
  - M. Clinical Signs and Symptoms
  - N. Laboratory Values
  - O. Sonographic Appearance
- IX. Superficial Structures
- A. Thyroid/Parathyroid Gland Abnormalities
    - i. Functional
    - ii. Benign
    - iii. Malignant
  - B. Prostate
    - i. Benign
    - ii. Malignant
    - iii. Infectious
  - C. Scrotum
    - i. Benign
    - ii. Malignant
    - iii. Infectious
- D. Breast
- i. Benign
  - ii. Malignant
  - iii. Infectious
- E. Etiology
- F. Clinical Signs and Symptoms
- G. Laboratory Values
- H. Sonographic Appearance

### Grade Scale:

A	100-93
B	92-85
C	84-75
D	74
F	73.5 and Below

### Course Evaluation:

• Case Study	20%
• Unit Exams	20%
• Quizzes	10%
• Final Exam	50%

### Course Requirements:

Reading Assignments

Quizzes

Case Study Presentation (Power Point)

*Abdominal or Small Parts Pathology*

Unit Exams

Final Exam

## Course Policies

### General:

- Students must provide their own textbooks, writing instruments, and other necessary supplies for classes.
- Pagers, cell phones, and any other electronic devices must be turned off during class.
- No food or drinks will be allowed in the classroom.
- Students must respect one another and all faculty.

### Attendance:

- Absences must be limited to serious illness and/or immediate family emergencies; unexcused absences are not allowed. 3 (three) absences will result in a letter grade reduction.
- Tardiness is discouraged. Excessive tardiness (more than 10 minutes/class or more than 2 consecutive classes) will result in an absence being awarded. **It is extremely important that students communicate with faculty regarding absences by telephone and/or email at all times.**
- In the event that LIT is forced to cancel classes due to inclement weather, DMS classes and clinical rotations will also be canceled. Notification of closures will be made through local radio and TV stations. Students out of the immediate broadcast area should contact either their instructor or the program director.

### Excused Absences:

*The following reasons will be considered at instructor's discretion*

- Participation in an approved institute activity (i.e. Student Government)
- Death or major illness in a student's immediate family
- Illness of a dependent family member
- Participation in legal proceedings or administrative procedures that require student's presence
- Required participation in military duties.

### Policies associated with Assignments:

- Topics for research paper and case study must be cleared with the instructor.
- All assignments are due when stated.
- Late assignments are not accepted.
- If a student has an ***excused absence*** with written documentation, assignments will be accepted at the beginning of class upon return.

### Policies associated with Examinations:

- All exams will be on the dates specified unless the instructor makes a change.
- In case of an absence on exam day, the exam must be completed on the day the student returns to class or a grade of zero will be awarded.
- Students are responsible for material in handouts and on videos/DVDs. Exam questions may come from this material.
- There is no make up for a missed quiz. The lowest quiz grade will be dropped.
- **Students must have a 75% exam average to pass this course.**

### **Academic Dishonesty**

Cheating and Plagiarism are two types of academic dishonesty.

Cheating is taking an examination or test in a dishonest way, as by improper access to answers.

Plagiarism is taking someone else's work and misrepresenting it as your own. Student's work should always be his/her own unless participating in a group project. Cheating and/or plagiarism will result in disciplinary action; i.e., zero on assignment/exam or an **F** in the course, expulsion from the Sonography program, as per the Sonography Student Handbook.

### **Drop/Withdrawal:**

The student is responsible for initiating the drop/withdrawal process. Please refer to the LIT Catalog for the Institute policy on student or instructor initiated withdrawal.

Please see the Sonography Student Handbook for Sonography Course Requirements; continuance in the program will be affected if a student drops/withdraws from a Sonography course or courses.

### **Students with Disabilities:**

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator, (409) 880-1737 or visit the office located in the Cecil Beeson Building.

### **Contact Information:**

**Instructor:** Sheila Trahan

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**Office Hours:** MWF by Appointment

## Course Calendar

Date	Topic	Reading
<b>Week 1</b>	Abdominal Wall and Diaphragm	Chapter 2, pg. 23-37
<b>Week 2</b>	Peritoneal Cavity	Chapter 3, pg. 48-55
<b>Week 3</b>	Adrenal Glands & Retroperitoneum	Chapter 13 & 14, pg. 397-416, 424-432
<b>Week 4</b>	Vascular Structures	Chapter 4, pg. 64-94
<b>Week 5</b>	Liver, Portal System	Chapter 5, pg. 121,127-162
<b>Week 6</b>	GB & Biliary	Chapter 6, pg. 174-203
<b>Week 7</b>	Pancreas	Chapter 7, pg. 210-211,214-221
<b>Week 8</b>	Spleen	Chapter 8, pg. 232-241
<b>Week 9</b>	GI	Chapter 9, pg. 246-262
<b>March 16-20</b>	<b>Spring Break</b>	
<b>Week 10</b>	Kidneys	Chapter 10, pg.283-337
<b>Week 11</b>	Lower Urinary System	Chapter 11, pg. 351-365
<b>Week 12</b>	Prostate & Scrotum	Chapter 12, pg. 375-387
<b>Week 13</b>	Thyroid & Parathyroid	Chapter 15, pg. 442-459, 462-467
<b>Week 14</b>	<b>*Breast</b>	Chapter 16, pg. 483-525
<b>April 28<sup>th</sup> &amp; 29<sup>th</sup></b>	Case Study Presentation	
<b>Week 16</b>		
<b>Tuesday, May 12<sup>th</sup></b>	<b>Final Exam</b>	

### Holidays:

Jan. 19

Mar. 16-20

Apr. 3

MLK Day

Spring Break

Good Friday

### NOTE:

**Dates for Unit Exams will be announced as the material is covered.**