

**Middlesex Community College**

**SYALLBUS**

**I. Course Title: CAT \*207 – Procedures and Instrumentation II**

**II. Credits:** 3

**III. Prerequisites:** Admission to the Computed Tomography Program, ARRT Registered Radiographer, CAT201, CAT202, CAT203, and CAT204 with a “C” or better for all.

**IV. Semester:** Spring 2018

**V. Instructor:** Jason Bohn, B.S., RT (R)(CT)  
Office Hours: by appointment  
Phone: 860-358-6293  
Email: jason.bohn@midhosp.org

**VI. Course Description:** This course will reinforce, and go into further detail the set-up and operation necessary to acquire optimal images of the chest, abdomen, pelvis, and extremities. Emphasis will be placed on the acquisition techniques required to obtain optimal images of the chest, abdomen, pelvis, and extremities.

**VII. Course Text:** **Recommended note Required: Computed Tomography**, Seeram, 2009, Elsevier.  
**Required: Computed Tomography Review**, DeMaio, 20011, Elsevier

**VIII. Course Objectives:** At the end of this course, the student will be able to:

1. Describe and differentiate clinical indications for chest, abdomen, pelvis, and extremity imaging based on patient symptoms.
2. List and explain patient preparation for CT imaging of the chest abdomen, pelvis, and extremity imaging based on patient symptoms.
3. Distinguish the differences in the different protocols for the chest, abdomen, pelvis, and extremities.
4. Explain scan protocols for the chest, abdomen, pelvis and extremities based on patient symptoms.
5. Compare techniques to reduce patient radiation exposure while obtaining optimal images
6. Correctly explain appropriate contrast usage for CT imaging of the chest, abdomen, pelvis, and extremities.
7. Correctly identify anatomic structures of the chest, abdomen, pelvis, and extremities on CT images.

**IX. Course Goals:**

1. Provide students with the opportunity to describe and differentiate clinical indications for chest, abdomen, pelvis and extremity imaging.

2. Provide students the opportunity to list and explain patient preparation for CT imaging of the chest, abdomen, pelvis, and extremities.
3. Provide students the opportunity to distinguish and explain different protocols for the chest, abdomen, pelvis, and extremities based on patient symptoms.
4. Provide student the opportunity to identify appropriate images for chest, abdomen, pelvis, and extremity protocols.

**X: General Unit Outline:**

- I. Clinical Indications for chest imaging
  - a. Signs
  - b. Symptoms
- II. Patient Preparation
- III. Positioning for specific chest anatomy
  - a. Lungs
  - b. Mediastinum
  - c. Heart
  - d. Blood vessels
- IV. Scan protocols for specific abdomen anatomy
  - a. GI tract
  - b. GU tract
  - c. Accessory organs
  - d. Blood vessels
- V. Scan protocols for specific pelvic anatomy
  - a. Female pelvis
  - b. Male pelvis
- VI. Scan protocols for specific extremities (joints)
  - a. Shoulder
  - b. Hip
  - c. Elbow
  - d. Wrist
- VII. Contrast media usage
- VIII. Image review and critique of chest, abdomen, pelvis, and extremity images.

**XI: Course Presentation:** This course consists of the following components:

Assignments - 125 points

Final Exam - 50 points

Total Points = 175 points

**XII: Grade Scale:**

94 = A

83 = B -

92 = A -

80 = C +

89 = B +

77 = C

86 = B

76 = F

## **ADDITIONAL COLLEGE INFORMATION:**

### **IMPORTANT COLLEGE POLICIES!! PLEASE READ CAREFULLY!**

For information about the college's policies and procedures regarding academic honesty, accessibility/disability services, attendance, audio-recording in the classroom, grade appeals, plagiarism, religious accommodations, weather and emergency closings, and more, please go to the following website:

[www.mxcc.edu/catalog/syllabus-policies/](http://www.mxcc.edu/catalog/syllabus-policies/) or scan the QR code with your smart phone. Also, please become familiar with the policies regarding nondiscrimination, sexual misconduct, and general student conduct at the following website: [www.mxcc.edu/nondiscrimination/](http://www.mxcc.edu/nondiscrimination/).

### ***NON-DISCRIMINATION STATEMENT***

*Middlesex Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression or genetic information in its programs and activities. In addition, the College does not discriminate in employment on the additional basis of veteran status or criminal record. The following people have been designated to handle inquiries or complaints regarding non-discrimination policies and practices:*

*Primary Title IX Coordinator*

*Dr. Adrienne Maslin*

*Dean of Students/Title IX and Section 504/ADA Coordinator*

*[amaslin@mxcc.edu](mailto:amaslin@mxcc.edu); 860-343-5759; Founders Hall Room 123*

*Secondary Title IX Coordinator*

*Ms. Mary Lou Phillips*

*Director of Human Resources, Middlesex Community College*

*[mphillips@mxcc.edu](mailto:mphillips@mxcc.edu); 860-343-5751; Founders Hall Room 115*

*Secondary Title IX Coordinator*

*Ms. Queen Fordham*

*Coordinator of the Meriden Center Welcome Desk*

*[qfordham@mxcc.edu](mailto:qfordham@mxcc.edu); 203-608-3011*

**CELL PHONE POLICY: \*Whether in clinical or class, personal cell phones should be placed on silent mode and put away so that professional activities are not disrupted. Students are not permitted to “text” during class or clinic.**

**CAT\*207 – CT Procedures and Instrumentation II**  
 Course Topics and Schedule

<b>Week</b>	<b>Study Topic(s)</b>	<b>Assignment(s)</b>
1	Clinical Indications and patient preparation for chest imaging	
2	Patient Positioning of the chest	Module 7 assignment 1
3	Image critique of the chest	
4	Clinical Indications and patient preparation for abdomen/pelvis imaging	
5	Patient Positioning of the Abdomen/pelvis	Module 7 assignment 2
6	Image critique of the abdomen/pelvis	
7	Clinical indications and patient prep for extremities	Module 7 assignment 3
8	Patient Positioning of extremities	
9	Image critique of the extremities	
10	Clinical Indications and patient preparation for CT interventional procedures	Module 7 assignment 4
11	Patient Positioning of CT interventional procedures	
12	Image critique of CT interventional procedures	Module 7 assignment 5
13	Exam Review	
14	Exam Review	
15	Final Exam	accumulative

**\*SUBJECT TO CHANGE WITH NOTIFICATION\***