**Purpose**: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

**Course Title** – Advanced Medical Imaging  
**Course Prefix and Number** – RADR 2333  
**Department** – Radiologic Technology  
**Division** – Allied Health  
**Course Type**: (check one)  
- Academic General Education Course (from ACGM – but not in WCJC Core)  
- Academic WCJC Core Course  
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

**Semester Credit Hours # : Lecture Hours# : Lab/Other Hours #**  
3:3:0

**EQUATED PAY HOURS FOR COURSE** - 3

**Course Catalog Description** – Specialized imaging modalities. Includes concepts and theories of equipment operations and their integration for medical diagnosis.

**Prerequisites/Co requisites** – RADR 2309, 2217, 2431, and 2266 with a C or better.

**Prepared by** Allyson Matheaus  
**Date** 02/07/2014

**Reviewed by Department Head** Sharla Walker  
**Date** 02/10/2014

**Accuracy Verified by Division Chair** Carol Derkowski  
**Date** 7/24/14

**Approved by Dean or Vice President of Instruction** Amy LaPan  
**Date** 6/30/2014
I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

I. Special Procedures
II. Computed Tomography (CT)
   A. Basic principals of CT
   B. Sectional Anatomy
III. Magnetic Resonance Imaging (MRI)
IV. Mammography
V. Ultrasound
VI. Radiation Therapy
VII. Nuclear Medicine

II. Course Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Methods of Assessment</th>
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<td>Upon successful completion of this course, students will: Differentiate the specialized imaging modalities and associated equipment; and identify and compare anatomy as imaged by different modalities.</td>
<td>Final comprehensive examination</td>
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III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student. Textbook of Radiographic Positioning and Related Anatomy, Kenneth L. Bontrager and Barry T. Anthony Multi-media Pub., Denver, Co.

IV. Suggested Course Maximum - 18

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.
Radiology classroom and energized x-ray lab.

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

1. End of unit exam  75%
2. Final exam  25%

Grading scale: 100 - 92 = A  
91 - 83 = B  
82 - 75 = C  
74.9 - below = F
VII. Curriculum Checklist

☐ - Academic General Education Course (from ACGM – but not in WCJC Core)
   No additional documentation needed

☐ - Academic WCJC Core Course
   Attach the Core Curriculum Checklist, including the following:
   • Basic Intellectual Competencies
   • Perspectives
   • Exemplary Educational Objectives

☒ - WECM Courses
   If needed, revise the Program SCANS Matrix & Competencies Checklist.