

Request for Undergraduate Course Addition

Prepare one paper copy with all signatures and forward to the University Curriculum Committee Chair. Additionally, immediately following attainment of the College Curriculum Chair signature, send one identical ELECTRONIC COPY sans signatures in PDF format with all supporting documentation converted to PDF format by email to the University Curriculum Committee chair for electronic distribution.

College: COHP Department/Division: Medical Imaging Alpha Designator / Number : MI 207 Graded: CR/NC:

Contact Person: Dr. Shelia Kyle, Vice President Phone: 304-526-1412
St. Mary's Center for Education

Dr. Rita Fisher 304-526-1259
Director – School of Medical Imaging

NEW COURSE DATA:

New Course Title: Imaging Procedures II

Alpha Designation/Number:

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Title Abbreviation:

I	M	A	G	I	N	G		P	R	O	C	E	D	U	R	E	S		I	I				
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(Limit of 25 characters and spaces.)

Course Description (Limit of 30 words): Content is designed to provide the knowledge base necessary to perform special imaging procedures and basic computed tomography.

Co-requisite(s): MI 207, MI 208, MI 209, MI 210, MI 211 First Term to be offered: SPRING 10

Prerequisite(s): BSC 228, MI 206; Admission to the Medical Imaging Program Credit Hours: 4

Course(s) being deleted in place of this addition (*must submit course deletion form*): None

CHECKLIST/REQUIREMENTS:

1. After completing this two page form in its entirety, include a complete syllabus and route through the departments/committees below.
2. A complete syllabus can be from when this course was previously taught as a special topics course or by creating a new, intended syllabus to use with the course. The sample syllabus must at a minimum address the following areas:
 - a. COURSE OBJECTIVES
 - b. COURSE OUTLINE
 - c. SAMPLE TEXT(S) WITH AUTHOR(S) AND PUBLICATION DATE
 - d. INSTRUCTIONAL METHODS (Lecture, Lab, Internship, Practicum, etc...)
 - e. EVALUATION METHODS (Unit/Chapter, Midterm, Final, Projects, etc...)
3. If this course will replace a course that is required by another department, please send a memo to the affected department and include it with this packet, as well as, the response received from the affected department.
4. If this course will be similar in title or content to another department's courses, please send a memo to the affected department and include it with this packet, as well as, the response received from the affected department.
5. Send a copy of this completed form to the Marshall University Catalog Editor.

SIGNATURES: (If disapproved at any level, do not sign. Return to previous signer.)

Department Chair/Division Head _____	Date: _____
Registrar: _____	Date: _____
Librarian: _____	Date: _____
College Dean: _____	Date: _____
College Curriculum Chair _____	Date: _____
University Curriculum Committee Chair: _____	Date: _____
Faculty Senate Chair: _____	Date: _____
VP Academic Affairs/VP Health Services: _____	Date: _____

Request for Undergraduate Course Addition - Page 2
Additional Information Required for Undergraduate Course Addition

College: COHP

Department/Division: Medical Imaging

Alpha Designator/Number: MI 207

Provide complete information regarding the new course addition for each topic listed below. Before routing this form, a complete syllabus also must be attached addressing the items listed on the first page of this form.

1. Identify by name the faculty in your department/division who may teach this course.

Rita Fisher, PhD RT (R)(CT)(CV)(ARRT), Debby Moore, RBA RT (R)(CT)(ARRT)

2. If your department/division requires additional faculty, equipment, or specialized materials, attach an estimation of money and time required to secure these items.

No additional funding required

3. If this course will be required by a department/division other than your own, identify by name.

N/A

4. If there are any agreements required to provide clinical experience, attach details and signed agreements.

No additional agreements will be needed for this class

5. If library resources are deemed inadequate, attach a plan to overcome this. The plan must include the cost as stated by the Dean of Libraries.

No additional Library Resources to be provided by Marshall University

6. EQUIPMENT/SUPPLIES NEEDED TO TEACH THIS COURSE (this does not refer to additional equipment/supplies that need to be purchased; simply what materials are needed in order to teach this course successfully.):

Computer, LCD Projector, Projector Screen, White Board, Markers, Handouts, CD Rom's

No additional equipment or supplies will need to be provided by Marshall University

7. ADDITIONAL GRADUATE REQUIREMENTS IF LISTED AS AN UNDERGRADUATE OR GRADUATE COURSE (please also submit to Graduate Council course addition for 5xx graduate component):

None

8. PROVIDE A COMPLETE BIBLIOGRAPHY INCLUDING ALL PUBLICATIONS RESEARCHED TO CREATE THIS COURSE AND WHAT PUBLICATIONS MAY BE BENEFICIAL TO STUDENTS TAKING THIS COURSE (separate page).

See attached sheet

BIBLIOGRAPHY:

- Bontrager K. *Radiographic Positioning and Related Anatomy*. 6th ed. St. Louis, Mo: Elsevier Mosby; 2005.
ISBN 0323025072
- Bontrager K, Lampignano J. *Workbook and Laboratory Manual*, 6th ed. Volumes I and II. St. Louis, Mo: Elsevier Mosby; 2005.
Volume I – ISBN 0323025048; Volume II – ISBN 0323025056
- Bontrager K. *Pocket Atlas-Handbook of Radiographic Positioning and Techniques*. 4th ed.
St. Louis, Mo: Elsevier Mosby; 2002.
ISBN 0964172348
- Burke M, Giesa M, Seager KR, et al. *Orthopaedist's Guide to Plain Film Imaging*. New York: Thieme Medical Publishers Inc; 1999.
ISBN 0865777179
- Carlton RR, Greathouse JS. *Delmar's Principles of Radiographic Positioning & Procedures Pocket Guide*. Albany, NY: Delmar Publishers; 2005.
ISBN 0766862461
- Cornuelle AG. *Competency Manual for Radiographic Anatomy & Positioning*. New York: McGraw-Hill Inc; 1998.
ISBN 0838582397
- Cornuelle AG, Gronefeld DH. *Radiographic Anatomy Positioning*. Stamford, Conn: Appleton & Lange; 1998.
ISBN 0838582389
- Cowling C. *Delmar's Radiographic Positioning & Procedures Volume II: Advanced Positioning and Procedures*. Albany, NY: Delmar Publishers; 1998.
ISBN 0827363176
- Dowd SB, Wilson BG. *Encyclopedia of Radiographic Positioning*. Philadelphia, Pa: WB Saunders; 1995.
ISBN 0721642020
- Eisenberg RL, Dennis CA, May CR. *Radiographic Positioning*. 2nd ed. Boston, Mass: Little, Brown and Company; 1995.
ISBN 0316224995
- Frank ED., Long, BW, Smith, BJ. *Merrill's Atlas of Radiographic Positions & Radiologic Procedures*. 11th ed. St. Louis, Mo: Mosby; 2007.
ISBN 032304210-4
- Frank ED., Long, BW, Smith, BJ. *Merrill's Pocket Guide to Radiography*. 6th ed. St. Louis, Mo: Mosby; 2007.
ISBN: 0323042090
- Frank ED, Long, BW, Smith, BJ. *Mosby's Radiography Online: Anatomy and Positioning for Merrill's Atlas of Radiographic Positioning & Procedures*. 11th ed. St. Louis, Mo: Mosby; 2007.
ISBN-10: 0323044921 and ISBN-13: 978-0323044929
- Frank ED, Long, BW, Smith, BJ, Hall Rollins, J. *Workbook for Merrill's Atlas of Radiographic Positions & Radiologic Procedures*. 11th ed. St. Louis, Mo: Mosby; 2007.
ISBN: 0323042163
- Lufkin R. *Teaching Atlas of Head & Neck Imaging*. New York, NY: Thieme Medical Publishers; 2002.
ISBN 0865776911
- Ramsey RG. *Teaching Atlas of Spine Imaging*. New York: Thieme Medical Publishers Inc; 1999.
ISBN 0865777780
- Weill FS, Manco-Johnson ML. *Imaging of Abdominal and Pelvic Anatomy*. New York, NY: Churchill Livingstone; 1997.
ISBN 0443052387
- Yochum TR, Rowe LJ. *Essentials of Skeletal Radiology*. 2nd ed. Baltimore, Md: Williams & Wilkins; 1996.
ISBN 0683099116

COURSE SYLLABUS OUTLINE

Course Title and Number: MI 207 Imaging Procedures II

Semester and Year: Spring 2010

Text Information: Bontrager: Textbook of Radiographic Positioning and Related Anatomy 6th Edition, Workbook and Laboratory Manual, Pocket Atlas.

Instructor: Name: Rita Fisher, PhD, RT (R) (CT), (CV) (ARRT)
Debby Moore BA, RT (R) (CT)-Lecture/Lab
Office: Debby Moore Room 211, Jeff Jobe Room 209
Office Hours: Debby: 11:30am-12:00pm, 3:30pm-4:30pm M-F
Phone/email: Debby: (304)-526-8396/dmoore@st-marys.org

Class Time: Lecture T TR 11:00-12:00
Lab T TR 1:00-2:15 (session one)
T TR 2:15-3:30 (session two)
Lecture/Lab Exams Alternate Fridays 9:00

Course Description: Content is designed to provide a knowledge base necessary to perform standard radiographic procedures along with the application to special studies and computed tomography. Students will perform procedures requiring the administration of contrast media. Consideration will be given to the production of images of optimal diagnostic quality. Laboratory experience is used to complement the didactic portion. Focus is on special radiographic procedures including computed tomography and cranial radiography.

Credits: 4 CR (Two hours theory and two hours laboratory).

Prerequisites: BCS 227, BSC 228, MI 204, MI 205, MI 206

Corequisites: MI 210

Desired Learner Outcomes/Objectives: When finished with this course you should be able to:

1. Discuss general procedural considerations for radiographic examinations.
2. Adapt general procedural considerations to specific clinical settings.
3. Cite the structures demonstrated on routine radiographic/fluoroscopic procedures.
4. Adapt radiographic/fluoroscopic procedures based on special considerations.
5. Simulate radiographic/fluoroscopic procedures on a person or phantom in a laboratory setting for cranial radiography and special views of the extremities, spine, and reproductive system.
6. Evaluate images for positioning, centering, appropriate anatomy and overall image quality.
7. Discuss equipment and supplies necessary to complete radiographic/fluoroscopic procedures.
8. List and explain the procedures of cranial radiography, special views of extremities, spine and reproductive system.
9. Name the type, dosage and route of administration of contrast media commonly used to perform radiographic contrast and special studies.
10. Describe the general purpose, and unique features resulting from special radiographic/fluoroscopic studies.
11. Identify methods and barriers of communication and describe how each may be utilized or overcome effectively during patient education.
12. Apply general radiation safety and protection practices associated with radiologic examinations.

Evaluation/Measurement/Assessment of Learner Outcomes:

Course consists of a lecture and a lab component. The lecture component is worth 75% of the grade and the laboratory component is worth 25% of the grade.

1. 8 Lecture Exams: Exams will be administered to cover the content material found in the text, delivered in lecture and any additional materials. Exams will be multiple choice and short answer.
2. Class participation
3. In class exercises, quizzes, homework
4. 7 Lab Exams: Two students will be assigned as lab partners for lab and exams. Each student will be allowed a maximum of 15 minutes to demonstrate the assigned procedure. Students are not allowed to consult their pocket atlas during a lab exam. Once a student has successfully completed the lab exam, they may begin practicing the procedure on patients with direct supervision by a qualified radiographer. After the student has completed a sufficient quantity of practice exams they may then proceed to demonstration of competency with a clinical instructor or a designated staff radiographer.

Exams: There will be lecture and lab exam on alternate Fridays covering the previous two weeks material.

Terminal Lab/Lecture Exams: Students will be required to successfully demonstrate selected procedures from Imaging Procedures I or II. The lab instructor will select the procedures. A lecture will be given at the end of the course. A schedule will be provided.

Grading Policy:

Lecture Exams	(8)	50%
* Lab Exams	(7)	15%
* Terminal Lab Final	(1)	10%
Quizzes/WBook		5%
Lecture Exam Final	(1)	20% (lecture)

Students with a lecture exam average equaling 93.1% or better may be exempt from the final lecture exam.

*Lab Component of Grade

Grades will be determined by the following scale:

92.3-100	A
84.3-92.2	B
74.3-84.2	C
Below 74.3	F

Policy Statements:

- 1. Attendance:** Regular attendance is expected. Students who miss more than two classes will receive a one letter drop in the final grade. You cannot pass the course with more than four absences. You must be present at the beginning of the class and stay until the end of class in order to be counted present. Students must attend lecture and lab each day that is assigned. An absence in either lecture or lab will be counted as a full absence unless prior arrangements have been made with the instructor. The School of Medical Imaging follows Marshall University inclement weather policy. Refer to the Student Handbook.
- 2. Preparation, participation, punctuality.** All preparation material should be completed prior to its scheduled discussion in class. All class sessions will be conducted with the assumption that all appropriate readings and/or assignments have been completed. Doing the preparation work prior to class will allow you to identify specific topics with which you need the most help, and you can then raise the pertinent questions when the topic is scheduled for class time. If you have a question about a particular subject, you have the responsibility of using class time to get your questions answered. This necessitates having attempted the work prior to class. Class time should be used to clarify issues; it is difficult to know what issues you need to have clarified if you have not prepared. **Labs:** individual time in the lab will be limited; therefore, each student is expected to be prepared for the lab session PRIOR to the session. Each student must bring their pocket atlas, pencil and paper and radiographic markers to lab. Each student will be assigned a group and this will determine the lab time or session the student must attend. **Failure to do so will result in a 1 point deduction from the laboratory component (lab exams). Students not paying attention during a lab session may be dismissed and considered absent.**
- 3. Academic integrity:** Please refer to the Student Handbook. Students may not copy or utilize prior exams as study material unless provided by the instructor for review. Students who obtain copies of old exams from current or former students will be sanctioned.
- 4. Make-up assignments:** Late assignments will receive 50% credit. Students who miss scheduled exams may make them up only in the event of a medical emergency or by prior arrangement with the instructor.
- 5. Missed classes:** If you are absent for lecture, it is your responsibility to find out from a classmate what notes, handouts, assignments, or other course material you missed and to make arrangements with me to receive handouts. If you are absent for lab, it is your responsibility to see your instructor to set up a time for you to make up the lab missed.
- 6. Office hours:** Instructors are available to meet individually by appointment.
- 7. Learning Disabled Students:** consideration toward learning disabled students will be in accordance to SMI Student Handbook policies. Please make certain the instructor is made aware of any special needs.

8. Computing policy at SMMC:

1. Authorized users of SMMC or other clinical affiliates institutional networks are those individuals who have been granted a username and password. Unauthorized use of usernames or passwords is prohibited
2. Use of computer systems in the clinical setting is limited to authorized patient data entry. Unauthorized access or attempts to access privileged patient information is a HIPAA violation and may result in dismissal from the SMI.
3. Students are provided access to the Internet through computers located in the School of Nursing Library, the computer lab and the SMI office. **Internet access is limited to assigned research projects.** Students may not access personal e-mail accounts (such as Hotmail or Yahoo) from these computers. Non school related use of the internet is prohibited. Students may access the internet via computers located in the Mojo/vending area in the hospital.
4. Internet access at SMMC is monitored by Information Services. Any attempts to download material of an obscene nature may result in dismissal from the SMI.
5. Students have access to computers located in the computer lab next to the SMI classroom. Students may not store information of the hard drive of these computers.
6. Users must adhere to the ethical standards governing copyright, software licensing, and intellectual property.
7. Suspected violation of these guidelines constitutes unacceptable use of information resources, and may violate other institutional policies and/or state and federal law including HIPPA. Suspected or known violations should be reported to the appropriate supervisory authority. The SMI and/or law enforcement agencies will process violations.
8. Violations may result in revocation of computing resource privileges, academic dishonest proceedings, disciplinary action or legal action.
9. Violations are subject to the appeal or grievance process.
10. Students should refer to computer policy in the CFE Student handbook

Proposed Course Schedule.

Dates and content are subject to change as the semester progresses. Changes will be announced in class as far in advance as possible.

Topic Outline

Week/Date	Topic	Reading Assignment	Exam/Quiz
	IVU/VCUG/ Urethrogram	Bontrager Ch 17 Handouts	
	Ribs	Bontrager Ch 11	
	Sternum	Bontrager Ch 11	
			Lecture/Lab Exam One
	Skull/Sella	Bontrager Ch 12	Quiz-Skull Positioning Lines
	Facial Bones	Bontrager Ch 13	
	Zygoma/SMV	Bontrager Ch 13	
			Lecture/Lab Exam Two
	Sinus	Bontrager Ch 13	
	Oribts/Rhese	Bontrager Ch 13	
	Nasal Bones	Bontrager Ch 13	
			Lecture/Lab Exam Three
	Mandible	Bontrager Ch 13	
	TMJ's	Bontrager Ch 13	
	Fuchs/Judd	Bontrager Ch 13	
			Lecture/Lab Exam Four
	AC/SC Joints	Bontrager Ch 6,11	
	Scaphoid	Bontrager Ch 5	
	Transthoracic Axillary Shoulder	Bontrager Ch 6	
			Lecture/Lab Exam Five

	Scapula/Clavicle	Bontrager Ch 6	
	Patella/Sunrise	Bontrager Ch 7	
	Tunnel Knee	Bontrager Ch 7	
	Calcaneous	Bontrager Ch 7	
			Lecture/Exam Six
	Weight Bearing Feet/Knees	Bontrager Ch 7	
	Judet	Bontrager Ch 8	
	Pelvis Inlet/Outlet	Bontrager Ch 8	
	SI Joints	Bontrager Ch 8	
			Lecture/Lab Exam Seven
	Trauma/Mobile/ Surg	Bontrager Ch 19	
	Pediatrics/ Additional Proc.	Bontrager Ch 20,1,2-19	
	HSG/ Hepatobiliary Venography/Sialogram/ Myelogram/Arthogram	Handouts	
			Lecture Exam 8
			Lecture Final
			Lab Terminal Finals times TBA