MASTER SYLLABUS

WASHTENAW COMMUNITY COLLEGE

Course Discipline Code & No: RAD 100 **Title:** Introduction to Diagnostic Imaging **Effective Term** Fall 2009

Division Code: HAT **Department Code:** ALHD **Org #:** 15600

Don't publish: ☐ College Catalog ☐ Time Schedule ☐ Web Page

Reason for Submission. Check all that apply.

- ☐ New course approval
- ☒ Three-year syllabus review/Assessment report
- ☐ Course change
- ☐ Reactivation of inactive course
- ☐ Inactivation (Submit this page only.)

Change information: Note all changes that are being made. Form applies only to changes noted.

- ☐ Consultation with all departments affected by this course is required.
- ☐ Course discipline code & number (was _____)*
  *Must submit inactivation form for previous course.
- ☐ Course title (was _____)
- ☒ Course description
- ☐ Course objectives (minor changes)
- ☐ Credit hours (credits were: _____)
- ☐ Total Contact Hours (total contact hours were: _____)
- ☐ Distribution of contact hours (contact hours were: lecture: _____ lab _____ clinical _____ other _____)
- ☐ Pre-requisite, co-requisite, or enrollment restrictions
- ☐ Change in Grading Method
- ☒ Outcomes/Assessment
- ☒ Objectives/Evaluation
- ☐ Other _____

Rationale for course or course change. Attach course assessment report for existing courses that are being changed.

Approvals Department and divisional signatures indicate that all departments affected by the course have been consulted.

Department Review by Chairperson ☐ New resources needed ☐ All relevant departments consulted

Print: Connie Foster Faculty/Preparer Signature Connie Foster Date: 9/03/09

Print: Connie Foster Department Chair Signature Connie Foster Date: 09/03/09

Division Review by Dean

☐ Request for conditional approval

Recommendation ☒ Yes ☐ No Dean's/Administrator's Signature Date 9/4/09

Curriculum Committee Review

Recommendation

☐ Tabled ☒ Yes ☐ No Curriculum Committee Chair's Signature Date 11/12/09

Vice President for Instruction Approval

Vice President's Signature Date 11/18/09

Approval ☒ Yes ☐ No ☐ Conditional

Do not write in shaded area.
Entered in: Banner ☒ C&A Database _____ Log File 9/4/09 ☒ Basic skills spreadsheet updated ☐ Contact fee ☐

Please return completed form to the Office of Curriculum & Assessment.

***Complete ALL sections which apply to the course, even if changes are not being made.**

Course: RAD 100	**Course title:** Introduction to Diagnostic Imaging

Credit hours: 2

If variable credit, give range:

_____ to _____ credits

Contact hours per semester:

	Student	Instructor
Lecture:	30	30
Lab:		
Clinical:		
Practicum:		
Other:		
Totals:	30	30

Are lectures, labs, or clinicals offered as separate sections?

☐ Yes - lectures, labs, or clinicals are offered in separate sections

☐ No - lectures, labs, or clinicals are offered in the same section

Grading options:

☐ P/NP (limited to clinical & practical)

☐ S/U (for courses numbered below 100)

☒ Letter grades

Prerequisites. Select one:

☒ College-level Reading & Writing ☐ Reduced Reading/Writing Scores (Add information at Level I prerequisite) ☐ No Basic Skills Prerequisite (College-level Reading and Writing is not required.)

In addition to Basic Skills in Reading/Writing:

Level I (enforced in Banner)

	Course	Grade	Test	Min. Score	Concurrent Enrollment (Can be taken together)	Corequisites (Must be enrolled in this class also during the same semester)
					☐	
☐ and ☐ or					☐	
☐ and ☐ or					☐	
☐ and ☐ or					☐	

Level II (enforced by instructor on first day of class)

	Course	Grade	Test	Min. Score
☐ and ☐ or				
☐ and ☐ or				

Enrollment restrictions (In addition to prerequisites, if applicable.)

☐ and ☐ or Consent required ☐ and ☐ or Admission to program required ☐ and ☐ or Other (please specify):

Program: _____

Please send syllabus for transfer evaluation to:

Conditionally approved courses are not sent for evaluation.

Insert course number and title you wish the course to transfer as.

☐ E.M.U. as _____

☐ U of M as _____

☐ _____ as _____

☐ _____ as _____

☐ _____ as _____

☐ _____ as _____

Course	Course title
RAD 100	Introduction to Diagnostic Imaging

Course description State the purpose and content of the course. Please limit to 500 characters.	This course is a prerequisite for admission to the radiography program. The purpose of this course is to provide an overview of diagnostic medical imaging modalities with emphasis on the role of the radiologic technologist in the healthcare delivery system. Topics include historical development of radiological sciences, professionalism, career development, organization of healthcare systems, introduction to radiographic equipment, procedures, radiation protection, and medicolegal issues.

Course outcomes

List skills and knowledge students will have after taking the course.

Assessment method

Indicate how student achievement in each outcome will be assessed to determine student achievement for purposes of course improvement.

Outcomes (applicable in all sections)	Assessment Methods for determining course effectiveness
Recognize the historical events that lead to the development of diagnostic medical imaging.	Departmental unit and final exams
Identify the different medical imaging modalities, their equipment, practice standards, and the principles of image production.	Departmental unit and final exams
Identify the role of the radiologic technologist in the healthcare delivery system, their practice standards, educational requirements, professional organizations, and career outlook.	Departmental unit and final exams

Course Objectives
Indicate the objectives that support the course outcomes given above.

Course Evaluations
Indicate how instructors will determine the degree to which each objective is met for each student.

Objectives (applicable in all sections)	Evaluation Methods for determining level of student performance of objectives
Identify the historical pioneers and leaders in the development of the radiological sciences.	Given a set of homework questions, students will identify historical leaders in the field of diagnostic medical imaging.
Compare and contrast the different types of diagnostic imaging equipment used today.	Given a set of homework questions, students will differentiate between the different types of diagnostic imaging equipment.
Compare and contrast the different methods of diagnostic image production.	Given a set of homework questions, students will compare and contrast the different methods of image production.
Identify the professional organizations for each diagnostic imaging modality.	Given a set of homework questions, student will identify professional organization for each imaging modality.
Identify the radiologic technologist's responsibility in caring for a patient during a radiographic procedure.	Given a set of homework questions students will identify the radiologic technologist's role in caring for patients during a radiographic procedure.
Explain the organization and operation of a diagnostic imaging department.	Given a set of homework questions, students will explain the organizational structure and operation of a diagnostic imaging department.
Identify and explain the basic principles and practices of radiation protection for the patient, healthcare worker and others.	Given a set of homework questions, students will identify and explain the basic principles and practices of radiation protection for the patient, healthcare worker, and others.
Identify the medicolegal issues pertaining to diagnostic medical imaging.	Given a set of homework questions, students will identify the medicolegal issues pertaining to diagnostic medical imaging.
Identify the educational and professional requirements for the different diagnostic imaging modalities: radiography, computed tomography, interventional radiology, magnetic resonance imaging, diagnostic medical sonography, nuclear medicine, and radiation therapy.	Given a set of homework questions, students will identify the educational and professional requirements for the different imaging modalities: radiography, computed tomography, interventional radiology, magnetic resonance imaging, diagnostic medical sonography, nuclear medicine, and radiation therapy.

List all new resources needed for course, including library materials. None

Student Materials:

List examples of types		Estimated costs
Texts Supplemental reading Supplies Uniforms Equipment Tools Software	Gurley, LaVerne Tolley, and Callaway, William J., Introduction to Radiologic Technology, 6th edition, Mosby	$ 50.00

Equipment/Facilities: Check all that apply. (All classrooms have overhead projectors and permanent screens.)

Check level only if the specified equipment is needed for all sections of a course.

☐ Level I classroom
Permanent screen & overhead projector

☐ Level II classroom
Level I equipment plus TV/VCR

☒ Level III classroom
Level II equipment plus data projector, computer, faculty workstation

☐ Off-Campus Sites
☒ Testing Center
☐ Computer workstations/lab
☐ ITV
☐ TV/VCR
☐ Data projector/computer
☐ Other _____

Assessment plan:

Learning outcomes to be assessed (list from Page 3)	Assessment tool	When assessment will take place	Course section(s)/other population	Number students to be assessed
Explain the historical development of diagnostic medical imaging.	Departmental RAD unit and final exams	Fall term 2011	All students	~60
Identify the different medical imaging modalities, their equipment, practice standards, and the principles of image production.	Departmental RAD unit and final exams	Fall term 2011	All students	~60
Identify the role of the radiologic technologist in the healthcare delivery system, their practice standards, educational requirements, professional organizations, and career outlook.	Departmental RAD unit and final exams	Fall term 2011	All students	~60

Scoring and analysis of assessment:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric.

   Itemized analysis of departmental unit and final exam questions. Exam questions with less that 70% correct will be reviewed.

2. Indicate the standard of success to be used for this assessment. Students will score 70% or above on exam questions.

3. Indicate who will score and analyze the data. A Radiography Program faculty member.

4. Explain the process for using assessment data to improve the course.

   The radiography program faculty will review the results of the assessment and make changes to the unit and final exams.