Date: Wednesday, April 23, 2008

From: Jan Gibson, Radiologic Technology

To: Lynne Rowan, School of Speech Pathology and Audiology

Re: Basic Data Sheets

Enclosed is the proposal, CCP, BDS, Catalog Changes and Requirement Sheet for the changes in the RADT and RIS programs. Please forward them to Dr. Arhar's office in the College of EHHS. Thank you.

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		Pr	eparation Dat	e 1-Apr-08	Curriculum Bulletin	
		Ef	fective Date	Fall 2009	Approved by EPC	
Department	ЕН					
College		gional Cam	nuese			
Proposal	Revise	-	ipuses			
Course Subject	RIS		umber 440	no		
Course Title			Procedures			
Minimum Credits	03		Credits 03			
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Selected items are new	☐ Credit ☑ Prere ☑ Descr	her Abbreviation t Hours quisites	☐ Grad ☐ Cred ☐ Cour	it by Exam rse Fee ral Education I ng-Intensive rsity	Requirements (LER)	
		adic Type		.1		
Describe impact of enrollment and sta					, encroachment and duplication is: isites):	sues
No impact on an	y other p	rograms.	·		,	
Units consulted (c	ther depa	artments, pro	ograms or ca	mpuses affe	cted by this proposal):	
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Preparation Date	1-Apr-08	Requested Effect	ive Term	Fall 2	009				
Course Subject	RIS	Course Number	44002						
Course Title	Nuclear Medicin	ne Procedures I							
Title Abbreviation	NM Procedures I Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)								
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with							
Minimum Credit	03 ☐ to ☐ or	Maximum Credit	03 (e.g.,	3 to 3 cre	edits, 1 to 12 credits, 2 or 4 credits)				
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours d be per week.		to □ or	Maximum Hours Maximum Hours Maximum Hours				
Repeat Status	NR - Course ma	y not be repeated e limit OR maxi	i mum hou	urs					
Course Level	UG - Undergrad	uate							
Grade Rule	B - Letter								
Schedule Type(s)	LEC - Lecture								
Course Attribute(s)	None								
Credit By Exam	D - Credit by Ex	am as Approved	by Depa	rtment					
COMPLETE ONLY WHAT	F IS APPLICABLE TO	THE COURSE		n de electron de la composition de la compositio	. Поская в кот за инверреня свые очененням и на навером на промененням очененням пред пред пред пред пред пред Поская в кот за инверреня свые очененням в на навером на промененням пред пред пред пред пред пред пред пред				
Prerequisite Course(s) Test Score(s)	RIS major				COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code				
Corequisite(s)	RIS 44001, 4400	5, 44006, 44011			OBR Course Level				
Registration is by per	mission only 🖂 \	∕es □ No			CIP Code				
Restrict Registration (e.g., VCD majors, East Li		homore level and abov	re, graduate	e standing	I, BA-CHEM program)				
Catalog Description	An anatomical and physiological review of the skeletal, cardiovascular, gastrointestinal, endocrine, genitourinary, respiratory, lymphatic, and central nervous organ systems. Basic nuclear medicine imaging procedures as related to the above listed organ systems is covered.								
Previous Title									
Previous Subject		Previous Number							

Contact Hours	Outline
3.00	Orientation to the human body
6.00	Skeletal System
9.00	Cardiovascular System
9.00	Digestive System
6.00	Endocrine System
3.00	Genitourinary System
3.00	Lymphatic System
3.00	Respiratory System
3.00	Central Nervous System

45.00 **Total Contact Hours**

Textbook(s) Used in this Course

Nuclear Medicine Technology Procedures and Quick Reference

Writing Expectations

None

Instructor(s) Expected To Teach

Janet Berger

Instructor(s) Contributing to Content

REQUIRED ENDORSEMENT

4,24,08

		ł	Preparation Date	1-Apr-u8	Curriculu	m Bulletin		
			Effective Date	Fall 2009	Approved	by EPC		
Department	ЕН							
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College	RC - Reg		mpuses					
Proposal	Revise C							
Course Subject	RIS	Course	Number 4400	5				
Course Title	Nuclear N	<i>l</i> ledicine	Clinical Educ	ation I				
Minimum Credits	03	Maximu	m Credits 03					
Selected items are new	Subject □ Cross-Listed / Slash Number □ Grade Rule □ Title □ Credit by Exam □ Title Abbreviation □ Course Fee □ Credit Hours □ Liberal Education Requirements (LER) ☑ Prerequisites □ Writing-Intensive ☑ Description □ Diversity □ Schedule Type □ Other							
Describe impact o enrollment and sta	affing consi	derations				ment and dup	lication issues;	
Units consulted (o	ther depart	ments r	rograms or car	nnuses affe	cted by this	s proposal).		
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Preparation Date	1-Apr-08	Requested Effective Term Fall 2009							
Course Subject	RIS	Course Number	44005						
Course Title	Nuclear Medicir	ne Clinical Educati	ion l						
Title Abbreviation	Maximum 30 spaces	NM Clinical Ed I Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)							
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with							
Minimum Credit	3 ☐ to ☐ or	Maximum Credit	03 (e.g., 3	to 3 credi	ts, 1 to 12 credits, 2 or 4 credits)				
Contact Hours Per Week	☐ Lecture☑ Laboratory☑ OtherContact hours should	Laboratory Minimum Hours 02 □ to □ or Maximum Hours Other Minimum Hours 24 □ to □ or Maximum Hours							
Repeat Status	NR - Course may not be repeated If repeats, course limit OR maximum hours								
Course Level	UG - Undergrad	uate							
Grade Rule	B - Letter								
Schedule Type(s)	LAB - Laborator	ry CLN - Clinic							
Course Attribute(s)	None								
Credit By Exam	D - Credit by Ex	am as Approved b	by Departi	ment					
COMPLETE ONLY WHA	T IS APPLICABLE TO	THE COURSE	1800-1804 - 1800-1804 - 1804 -	计多分 化混合性分泌性 化多元素 化多元素 化多元素 化多元素 化多元素	ભગવાનમાં આવેલ ૧૯૫૧ છે. જે પણ અને ભગવાન ભગવાન કરિયા છે. એ પણ દર કરે છે. કરિયા કરે કરિયા કરે છે. એક લેવા માનવાન મન ભગવાન કરવા મુખ્ય વાગ કરેશા				
Prerequisite Course(s)									
Test Score(s)	RIS major				COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code				
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Test Score(s)	RIS 44001, 4400	•			OBR Program CodeOBR Subsidy Code				
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Contact Hours	Outline
10.00	Venipuncture
8.00	Instrumentation
9.00	Image evaluation
8.00	Nuclear Medicine procedures
10.00	Radiation safety and protection
8.00	Radiopharmacy

45.00 **Total Contact Hours**

Textbook(s) Used in this Course

Nuclear Medicine Technology Procedures and Quick Reference

Writing Expectations

Clinical Journal/Clinical Notebook

Instructor(s) Expected To Teach **Debra Stull**

Instructor(s) Contributing to Content

Janet Berger

REQUIRED ENDORSEMENT

4,24,08

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		Effective D	ate Fall 2	2009	Approved by EPC
Department	EH				
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Proposal			4.4000		
Course Subject		ourse Number			
Course Title		edicine Physics		ımentat	ion I
Minimum Credits	04 N	laximum Credits	s 04		
Selected items are new	☐ Subject ☐ Number ☐ Title ☐ Title Abbr ☐ Credit Ho ☐ Prerequis ☐ Descriptic ☐ Schedule	eviation	Cross-Listed Grade Rule Credit by Ex Course Fee Liberal Educ Writing-Inter Diversity Other	am ation Re	quirements (LER)
Describe impact o enrollment and sta	affing conside	erations; need, a	procedures audience, pr	s (e.g., e erequisi	encroachment and duplication issues; tes):
Units consulted (o	ther denartm	ente nrograme	or campuse	s affect	ed by this proposal):
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Preparation Date	1-Apr-08	Requested Effective Term Fall 2009						
Course Subject	RIS	Course Number 44006						
Course Title	Nuclear Medicine Physics and Instrumentation I							
Title Abbreviation	NM Physics I Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)							
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with						
Minimum Credit	04 ☐ to ☐ or	Maximum Credit	04 (e.g., 3	to 3 cre	edits, 1 to 12 credits, 2 c	or 4 credits)	
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours to be per week.	04	☐ to	_ □ or	Maximum Hours Maximum Hours Maximum Hours	04	
Repeat Status								
Course Level	UG - Undergrad	uate						
Grade Rule	B - Letter							
Schedule Type(s)	LEC - Lecture							
Course Attribute(s)	None							
Credit By Exam	D - Credit by Ex	am as Approved	by De	epart	ment			
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<u>Prerequisite</u> Course(s) Test Score(s)	RIS major					OBR Program COBR Subsidy C	ode	
Corequisite(s)	RIS 44001, 4400	2, 44005, 44011				OBR Course Le		
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Restrict Registration (e.g., VCD majors, East Li		nomore level and abov	e, grad	duate s	standing	, BA-CHEM program)		
Catalog Description	including interac	ctions with matte	r. Inf	orma	tion re	of nuclear medici egarding radiation ctions and limitati	detectors and	
Previous Title								
Previous Subject	Previous Number							

Contact Hours	Outline
10.00	The atom, nuclides and nature of radiation
10.00	Methods of radioactive decay and interactions with matter
12.00	Principles of radioactive decay
12.00	Principles of Radiation Detection
16.00	Instrumentation and Quality Control

60.00 Total Contact Hours

Textbook(s) Used in this Course

Nuclear Medicine and PET/CT Technology and Techniques

Writing Expectations

None

Instructor(s) Expected To Teach

Janet Berger

Instructor(s) Contributing to Content

REQUIRED ENDORSEMENT

Department Chair / School Director / Campus Dean

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			Preparation Date	1-Apr-08	Curriculum Bulletin
			Effective Date	Fall 2009	Approved by EPC
Department	EH				
College	RC - Rea	ional C	ampuses		
Proposal	Revise C				
Course Subject	RIS	Course	e Number 4401	0	
Course Title	Nuclear I	Vledicir	ne Clinical Educ	ation II	
Minimum Credits	03	Maxim	um Credits 03		
Selected items are new	☐ Subject ☐ Numbe ☐ Title ☐ Title Ab ☐ Credit H ☐ Prerequ ☐ Descrip ☐ Schedu	r breviatio lours lisites tion	☐ Grade ☐ Credit ☐ Cours ☐ Libera ☐ Writin ☐ Divers	t by Exam se Fee al Education R g-Intensive sity	h Requirements (LER)
Describe impact o enrollment and sta	affing consi	deration	ns; need, audien	edures (e.g., ce, prerequis	encroachment and duplication issues; sites):
Units consulted (o				•	oted by this proposal):
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Department Chair / :	School Dire	ctór / Ca	mpus Dean	-	1
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Preparation Date	1-Apr-08	Requested Effecti	ive Te	erm	Fall 20	009		
Course Subject	RIS	Course Number 44010						
Course Title	Nuclear Medicine Clinical Education II							
Title Abbreviation	NM Clinical Ed II Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)							
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with						
Minimum Credit	3 ☐ to ☐ or	Maximum Credit	03 (e.g., 3	to 3 cre	dits, 1 to 12 credits, 2 or 4 credits)		
Contact Hours Per Week	☐ Lecture☑ Laboratory☑ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours be per week.	02	☐ to	or	Maximum Hours Maximum Hours Maximum Hours		
Repeat Status	NR - Course ma	y not be repeated e limit OR maxi		hour	s			
Course Level	UG - Undergrad	uate						
Grade Rule	B - Letter							
Schedule Type(s)	LAB - Laborator	y CLN - Clinic						
Course Attribute(s)	None							
Credit By Exam	D - Credit by Ex	am as Approved	by De	parti	ment			
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Prerequisite Course(s) Test Score(s)	RIS 44005					COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code		
Corequisite(s)	RIS 44012, 4401	•				OBR Course Level		
Registration is by per	· —	∕es □ No				CIP Code		
Restrict Registration (e.g., VCD majors, East Li	RIS majors verpool Campus, sopl	nomore level and abov	e, grad	duate s	standing	, BA-CHEM program)		
Catalog Description	Continuation of Clinical Education I will be instructed at both the clinical education sites and Salem Campus, with particular emphasis on Clinical procedures covered in RIS 44002 (NM Procedures I) and RIS 44012 (Procedures II). Clinical correlation for Radiopharmacy rotations and RIS 44014 (NM Physics and Instrumentation II) will be included. Competency testing continues; proficiency testing begins.							
Previous Title								
Previous Subject		Previous Number						

Contact Hours

Outline

5.00 10.00 Venipuncture Instrumentation

10.00

Image evaluation

10.00

Nuclear Medicine Procedures

10.00

Radiopharmacy

45.00 Total Contact Hours

Textbook(s) Used in this Course

Nuclear Medicine Technology Procedures and Quick Reference

Writing Expectations

Clinical Journals/Clinical Notebook

Instructor(s) Expected To Teach

Debra Stull

Instructor(s) Contributing to Content

Janet Berger

REQUIRED ENDORSEMENT

Department Chair,

School Director / Camous Dear

4,24,08

		Pre	paration Date	31-Apr-08	Curriculum Bulletin
		Effe	ective Date	Fall 2009	Approved by EPC
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Proposal	Revise C		puses		
Course Subject	RIS		ımber 4401	10	
Course Title					
			rocedures l	il .	
Minimum Credits	03	Maximum	Credits 03		
Selected items are new	☐ Subject ☐ Number ☐ Title ☐ Title Ab ☐ Credit H ☑ Prerequ ☑ Descript ☐ Schedul	breviation lours isites tion	☐ Grade ☐ Credi ☐ Cours ☐ Libera	t by Exam se Fee al Education ng-Intensive sity	sh Requirements (LER)
Describe impact o enrollment and sta					, encroachment and duplication issues; iisites):
No impact on any	other pro	grams.			
Units consulted (o	-	,	-	•	ected by this proposal):
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Preparation Date	1-Apr-08	Requested Effect	ive Te	erm	Fall 20	009
Course Subject	RIS	Course Number	440′	12		
Course Title	Nuclear Medicin	e Procedures II				
Title Abbreviation	NM Procedures Maximum 30 spaces no spaces before or	, with no punctuation o	r spec	ial cha	aracters	(exception: forward slash "/" is allowed with
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with				
Minimum Credit	03 ☐ to ☐ or	Maximum Credit	03 (e.g., 3	to 3 cre	dits, 1 to 12 credits, 2 or 4 credits)
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours be per week.	03	_ to	_ □ or	Maximum Hours Maximum Hours Maximum Hours
Repeat Status	NR - Course ma	y not be repeated limit OR maxi		hour	'S	
Course Level	UG - Undergrad	uate				
Grade Rule	B - Letter					
Schedule Type(s)	LEC - Lecture					
Course Attribute(s)	None					
Credit By Exam	D - Credit by Ex	am as Approved	by De	epart	ment	
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Prerequisite Course(s) Test Score(s)	RIS 44002					COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code
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Catalog Description	as related to the system, inflamn	e cardiovascular s natory and tumor	syste imag	m, th jing,	e endo	ural aspects of nuclear medicine ocrine system, the genitourinary ntral nervous system, the and the skeletal system.
Previous Title						T.
Previous Subject		Previous Number	•			

Outline
Genitourinary System
Gastrointestinal System
Inflammatory Process and Tumor Imaging
Central Nervous System
Endocrine System
Respiratory System
Cardiovascular System
Skeletal System
All system review

Total Contact Hours 45.00

Textbook(s) Used in this Course

Mettler, Essentials of Nuclear Medicine Imaging

Writing Expectations

Article Summaries

Janet Berger

Instructor(s) Expected To Teach

Instructor(s) Contributing to Content

REQUIRED ENDORSEMENT

			Preparation Date	e 1-Apr-u8	Curriculum Bulletin	
			Effective Date	Fall 2009	Approved by EPC	
Department	EH					
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Course Subject	RIS		e Number 440	14		
Course Title			ne Physics and		ration II	
Minimum Credits	3		num Credits 3			
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	☐ Sched	•		•		
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Executive Dean of F	≺egional Ca	ampuses				
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Preparation Date	1-Aug-08	Requested Effecti	ve Term I	Fall 2009	
Course Subject	RIS	Course Number	44014		
Course Title	Nuclear Medicin	e Physics and In	strumentat	ion II	
Title Abbreviation	NM Physics And Maximum 30 spaces no spaces before or a	, with no punctuation o	r special chara	acters (excep	tion: forward slash "/" is allowed with
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with			
Minimum Credit	3 ☐ to ☐ or	Maximum Credit	3 (e.g., 3 to	3 credits, 1 to	12 credits, 2 or 4 credits)
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours be per week.	□ to	_ □ or Maxi	num Hours 3 mum Hours mum Hours
Repeat Status	If repeats, course	e limit on maxi	mum hours		
Course Level	UG - Undergrad	uate			
Grade Rule	B - Letter				
Schedule Type(s)	LEC - Lecture				
Course Attribute(s)	None				
Credit By Exam	D - Credit by Ex	am as Approved	by Departn	nent	
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Prerequisite Course(s) Test Score(s)	RIS 44006			OF	MPLETED BY PROVOST OFFICE BR Program Code BR Subsidy Code
Corequisite(s)	RIS 44010			ļ	BR Course Level
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Catalog Description	function of radia	ation detection de CT and PET instr	evices to in	clude cou	dicine instrumentation, the nting and imaging er applications as related to
Previous Title					
Previous Subject		Previous Number			

Contact Hours	Outline
7.50	Quality Control of Nuclear Medicine Instrumentation
6.00	Considerations of Counting and Imaging
6.00	Emission Computed Tomography (ECT)
10.50	Computer Science/Laboratory equipment
7.50	Principles of Single Photon Emission Computed Tomography Imaging (SPECT)
7.50	Fundamentals of Molecular Imaging with PET

45.00 Total Contact Hours

Textbook(s) Used in this Course

Writing Expectations

Instructor(s) Expected To Teach

Instructor(s) Contributing to Content

Nuclear Medicine and PET/CT Technology & Techniques

Quality Control Assignments

Janet Berger

REQUIRED ENDORSEMENT

Department Chair / \$chool Director / Campus Dean

4,24,08

			Preparation Date	e 1-Apr-08	Curriculum Bulletin
			Effective Date	Fall 2009	Approved by EPC
Department	EH				
College	RC - Re	gional C	ampuses		
Proposal	Revise (_	•		
Course Subject	RIS	Course	Number 440	15	
Course Title	Nuclear	Medicin	e Clinical Edu	cation III	
Minimum Credits	02	Maxim	um Credits 02		
	☐ Subjec	ot	☐ Cros	s-Listed / Slas	sh
	☐ Numbe	er	☐ Grad	e Rule	
	☐ Title			it by Exam	
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are new	☐ Credit ☑ Prered			al Education i ng-Intensive	Requirements (LER)
	□ Perce □ Descri □ Descri	•	☐ Dive	=	
	☐ Sched	•	☐ Othe	•	
Units consulted (c	ther depa	rtments,	programs or ca	•	cted by this proposal):
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Department Chair /	School Dire	ector/l/Ca	mpus Dean		
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College Dean					
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Executive Dean of F	Regional Ca	ampuses			
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Provost					

Preparation Date	1-Apr-08	Requested Effect	ive Lei	rm	Fall 2	009
Course Subject	RIS	Course Number	4401	5		
Course Title	Nuclear Medicin	ne Clinical Educat	tion III			
Title Abbreviation	Nm Clinical Ed Maximum 30 spaces no spaces before or	s, with no punctuation o	or specia	al cha	racters	(exception: forward slash "/" is allowed with
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with				
Minimum Credit	02 ☐ to ☐ or	Maximum Credit	02 (e	.g., 3	to 3 cre	edits, 1 to 12 credits, 2 or 4 credits)
Contact Hours Per Week	☐ Lecture☑ Laboratory☑ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours d be per week.	02	_ □ to	_ □ or	Maximum Hours Maximum Hours Maximum Hours
Repeat Status		iy not be repeated e limit OR maxi		nour	S	
Course Level	UG - Undergrad	luate				
Grade Rule	B - Letter					
Schedule Type(s)	LEC - Lecture					
Course Attribute(s)	None					
Credit By Exam	D - Credit by Ex	am as Approved	by De _l	partı	ment	
COMPLETE ONLY WHA	T IS APPLICABLE TO	D THE COURSE	\$ \$55.00 Per \$10.00 Pe	TO SHE WAS THE	arra rainmeadh addiniolae headhlais	
Prerequisite Course(s) Test Score(s)	RIS 44010					COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code
Corequisite(s)	RIS 44016					OBR Course Level
Registration is by per	mission only 🖂 🕻	Yes □ No				CIP Code
Restrict Registration (e.g., VCD majors, East L		homore level and abov	ve, gradı	uate s	standing	L
Catalog Description	Salem Campus 44012 (NM Proc	Clinical III will en	nphas 3 4401	ize d 4 (N	clinica M Phy	e clinical education sites and il procedures covered in RIS ysics and Instrumentation II). tinues.
Previous Title						
Previous Subject		Previous Number	•			

Contact Hours

Outline

8.00 Instrumentation 8.00 Image evaluation

8.00 **Nuclear Medicine Procedures**

6.00 Radiopharmacy

30.0 **Total Contact Hours**

Textbook(s) Used in this Course

Nuclear Medicine Technology Procedures and Quick Reference

Writing Expectations

Clinical Journal/Clinical Notebook

Instructor(s) Expected To Teach

Debra Stuli

Instructor(s) Contributing to Content

Janet Berger

REQUIRED ENDORSEMENT

Department Chair / School Director / Campus Dean

4,24,08

			Preparation Date	e 1-Apr-U8	Curriculum Bulletin
			Effective Date	Fall 2009	Approved by EPC
Department	ЕН				
College	RC - Red	nional C	ampuses		
Proposal	Revise (-			
Course Subject	RIS		e Number 440 1	16	
Course Title		_ + +	ne Procedures		
Minimum Credits	03		num Credits 03		
William Ground	00	MAXIII	idiii Orodito oo		
Selected items are new	☐ Subject ☐ Numbet ☐ Title ☐ Title A ☐ Credit ☐ Prerect ☐ Descrit ☐ Sched	er bbreviation Hours uisites ption	☐ Grad ☐ Cred on ☐ Cour ☐ Liber ☐ Writii ☐ Diver	it by Exam se Fee ral Education I ng-Intensive rsity	sh Requirements (LER)
Describe impact of enrollment and sta					, encroachment and duplication issue isites):
No impact on an	y other pi	ograms	5.		
Units consulted (c	•		. •	•	ected by this proposal):
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Department Chair /	School Dir	ector 1/0/a	ampus Dean '		
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Preparation Date	1-Apr-08	Requested Effect	ive T	erm	Fall 20	009
Course Subject	RIS	Course Number	440	16		
Course Title	Nuclear Medicin	e Procedures III				
Title Abbreviation	NM Procedures Maximum 30 spaces no spaces before or	, with no punctuation c	or spec	cial cha	aracters	(exception: forward slash "/" is allowed with
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with				
Minimum Credit	03 ☐ to ☐ or	Maximum Credit	03	(e.g., 3	3 to 3 cre	edits, 1 to 12 credits, 2 or 4 credits)
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours d be per week.	03	_ to	o 🗆 or	Maximum Hours Maximum Hours Maximum Hours
Repeat Status	NR - Course ma	y not be repeated e limit OR maxi		n hour	rs .	
Course Level	UG - Undergrad	uate				
Grade Rule	B - Letter					
Schedule Type(s)	LEC - Lecture					
Course Attribute(s)	None					
Credit By Exam	D - Credit by Ex	am as Approved	by D	epari	tment	
COMPLETE ONLY WHA	T IS APPLICABLE TO	THE COURSE	CONTROL STATE	ACMED SETTINGSCC	C.C. C.C. C.C. C.C. C.C. C.C. C.C. C.C	(1944) (1959) (1944) (1
Prerequisite Course(s) Test Score(s)	RIS 44012					OBR Program Code OBR Subsidy Code
Corequisite(s)	RIS 44015					OBR Course Level
Registration is by per	mission only 🖂 🕽	∕es □ No				CIP Code
Restrict Registration (e.g., VCD majors, East Li		homore level and abov	ve, gra	aduate	standing	ı, BA-CHEM program)
Catalog Description	imaging, and en	nerging technolo	gies,	inclu	uding F	radionuclide therapy, pediatric PET oncology imaging. Includes a ed in RIS 44002 and RIS 44012.
Previous Title						
Previous Subject		Previous Number	r			

 6.00 Radionuclide Therapy 6.00 Hematopoietic Syste 6.00 Pediatric Imaging 6.00 Clinical Oncology including PET 21.00 Review of Systems and Nuclear Medicine Procedures 	Contact Hours	Outline
6.00 Pediatric Imaging 6.00 Clinical Oncology including PET	6.00	Radionuclide Therapy
6.00 Clinical Oncology including PET	6.00	Hematopoietic Syste
5 ,	6.00	Pediatric Imaging
21.00 Review of Systems and Nuclear Medicine Procedures	6.00	Clinical Oncology including PET
	21.00	Review of Systems and Nuclear Medicine Procedures

45.00 Total Contact Hours

Textbook(s) Used in this Course

Review of Nuclear Medicine Technology

Writing Expectations

None

Instructor(s) Expected To Teach

Janet Berger

Instructor(s) Contributing to Content

REQUIRED ENDORSEMENT

Department Chai**r** //School Director / Campus Dean

Title

Revision of courses offered in the Associate of Applied Science in Radiologic Technology, Associate of Technical Study in Radiology Management Technology, and the Bachelor of Radiologic and Imaging Sciences Technology degree

Subject Specifications

The intent of this proposal is to revise courses in Radiologic Technology (RADT) and Radiologic and Imaging Sciences (RIS) majors.

Background Information

In 2007, many changes were made in the Associate of Applied Science in Radiologic Technology and the Bachelor of Radiologic and Imaging Sciences Technology degree. Those changes have created the need to alter pre-requisites in some courses because it is affecting Banner and student registration. Because of these changes, some course descriptions were updated to comply with the national curriculum for radiology. MATH 12001 should be removed as a choice from RADT Associate of Technical Study: Radiologic Technology Management.

Alternative and Consequences

No alternative

Specific Recommendations

Change in Course Description:

RADT 14000-Introduction to Radiologic Technology

• Change delineates lecture, lab and clinical hours

Change in Pre-requisite and Course Descriptions

RADT 14004-Radiologic Physics

RADT 14010-Clinical Education I

RADT 14019-Radiographic Exposure and Imaging I

RADT 24001-Radiologic Pathology

RADT 24048-Radiographic Techniques

RIS 44002-NM Procedures I

RIS 44005-NM Clinical Education I

RIS 44006-NM Physics and Instrumentation I

RIS 44010-NM Clinical Education II

RIS 44012-NM Procedures II

RIS 44014-NM Physics and Instrumentation II

RIS 44015-NM Clinical Education III

RIS 44016-NM Procedures III

RIS 44017-NM Radiation Safety

RIS 44020-NM Clinical Education IV

Change in Pre-requisite

RIS 34065 Ultrasound Clinical Education III

RIS 44083 Pathophysiology for Medical Imaging

MATH 12001-Algebra & Trigonometry

For the Associate of Technical Study: Radiology Department Management Technology degree, delete MATH 12001 Algebra & Trigonometry as a choice of math.

Inactivate RADT 24000 Medical Terminology course (2 hr)

Students currently take HED 14020 Medical Terminology for Radiologic Technology. Course has not been offered in many years and should be inactivated.

Program Assessment

The changes do not alter the outcome assessment program for these majors.

Timetable and Actions Required

April 22, 2008: Review by the School of Speech Pathology and Audiology FC meeting

May 2, 2008: Review by the UC of the College of EHHS

Fall 2008: Review by EPC

			Preparation Date	≘ 11-Apr-08	Curriculum Bulletin
			Effective Date	Fall 2009	Approved by EPC
Department	ЕН				
College		nional C	ampuses		
Proposal	Revise (_			
Course Subject	RADT		e Number 1400	30	
Course Title			Radiologic Tec		
Minimum Credits	3		um Credits 03	miology	
William Oreans	3	IVIANIII	dir Credits 03		
Selected items are new	☐ Subject ☐ Numbet ☐ Title ☐ Title A ☐ Credit ☐ Prereq ☐ Descri ☐ Sched	er bbreviatio Hours juisites ption	Grad Grad Credi Cours Liber Writir	it by Exam se Fee al Education F ng-Intensive rsity	h Requirements (LER)
enrollment and sta	affing cons	sideration	ns; need, audier	nce, prerequi	encroachment and duplication issues sites): a and Salem Campus
Units consulted (o	•			·	cted by this proposal):
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Preparation Date	11-Apr-08	Requested Effect	ive Terr	n	Fall 200	9
Course Subject	RADT	Course Number	14000			
Course Title	Introduction to	Radiologic Techn	ology			
Title Abbreviation	Intro To Radiolo Maximum 30 spaces no spaces before or	, with no punctuation of	or special	cha	racters (e	xception: forward slash "/" is allowed with
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with				
Minimum Credit	3 ⊠ to □ or	Maximum Credit	3 (e.g.,	, 3 to	o 3 credits	s, 1 to 12 credits, 2 or 4 credits)
Contact Hours Per Week	☑ Lecture☑ Laboratory☑ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours d be per week.	5 🗆	to	_ □ or M	Maximum Hours aximum Hours Maximum Hours
Repeat Status	NR - Course ma	y not be repeated e limit OR max		ours	S	
Course Level	UG - Undergrad	uate				
Grade Rule	B - Letter					
Schedule Type(s)	LLB - Combined	l Lecture and Lab	orator	у	CLN -	Clinic
Course Attribute(s)	None					
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Credit By Exam		am as Approved	by Dep	artı	ment	
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Credit By Exam COMPLETE ONLY WHATE Prerequisite Course(s)	D - Credit by Ex) THE COURSE	by Dep	arti	ment	
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Credit By Exam COMPLETE ONLY WHAT Prerequisite Course(s) Test Score(s) Corequisite(s) Registration is by per Restrict Registration	D - Credit by Ex I IS APPLICABLE TO Program Admis mission only RADT majors iverpool Campus, sop Introduction to radiologic proce exposure, radia	THE COURSE sion Yes	e, gradua logy pi oning, rofessi	ate s rog ima iona	ram, ge	OBR Program Code OBR Subsidy Code OBR Course Level CIP Code
Credit By Exam COMPLETE ONLY WHAT Prerequisite Course(s) Test Score(s) Corequisite(s) Registration is by per Restrict Registration (e.g., VCD majors, East Li	D - Credit by Ex I IS APPLICABLE TO Program Admis mission only RADT majors iverpool Campus, sop Introduction to radiologic proce exposure, radia	THE COURSE sion Yes	e, gradua logy pi oning, rofessi	ate s rog ima iona	ram, ge	OBR Program Code OBR Subsidy Code OBR Course Level CIP Code BA-CHEM program) Internal anatomy, introduction to quipment, radiographic nizations and clinical education.

Contact Hours	Outline
3.00	Introduction to Radiologic Technology program and handbook
1.00	Introduction to general human anatomy
4.00	Introduction to radiologic procedures and positioning
3.00	Introduction to radiographic equipment and imaging techniques
2.00	Introduction to radiation protection
1.00	Clinical survival skills
1.00	Radiology professional organizations
15.00	Total lecture hours
2.00	Radiographic procedures
2.00	Radiographic equipment
1.00	Clinical education primer
5.00	Total lab hours
60.00	Minimum clinical education hours

100.00 Total Contact Hours

Textbook(s) Used in this Course

Introduction to Radiologic Technology

Writing Expectations

Short essays

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Silon essays

Instructor(s) Expected To Teach

Jan Gibson, Margie lagulli, Jackie Hammonds

Instructor(s) Contributing to Content

Clinical Coordinators

REQUIRED ENDORSEMENT

Department Chair / School Director / Campus Dean

4,24,08

		Preparation Date	e 11-Apr-08	Curriculum Bulletin
		Effective Date	Fall 2009	Approved by EPC
Department	ЕН			
College		onal Campuses		
Proposal	Revise Co	•		
·			3.4	
Course Subject		Course Number 1400	J4	
Course Title	•	c Physics		
Minimum Credits	4	Maximum Credits 4		
Selected items are new	☐ Subject ☐ Number ☐ Title ☐ Title Abb ☐ Credit Ho ☑ Prerequi ☑ Descripti ☐ Schedule	Grad Gred Cred Dreviation Cour Curs Liber isites Diver	it by Exam se Fee ral Education F ng-Intensive rsity	h Requirements (LER)
enrollment and sta	affing consid	cies, programs or prod derations; need, audier gy programs at Ashta	nce, prerequi	,
	•	ments, programs or ca y and Audiology and	•	, , ,
Department Chair /	Le Le School Direct	REQUIRED EN	DORSEMENT	4 124 108
College Dean				/
Executive Dean of F	Regional Car	nnices		
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Provost				

Preparation Date	11-Apr-08	Requested Effect	ive Term	Fall 2009	
Course Subject	RADT	Course Number	14004		
Course Title	se Title Radiologic Physics				
Title Abbreviation	Radiologic Physics Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)				
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with			
Minimum Credit	04 □ to □ or	Maximum Credit	04 (e.g., 3	to 3 credits, 1 to 12 credits, 2 or 4 credits)	
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours d be per week.	□ to	□ or Maximum Hours 04 □ or Maximum Hours □ □ or Maximum Hours	
Repeat Status	NR - Course may not be repeated If repeats, course limit OR maximum hours				
Course Level	UG - Undergraduate				
Grade Rule	B - Letter				
Schedule Type(s)	e Type(s) LEC - Lecture				
Course Attribute(s)	None				
Credit By Exam	D - Credit by Exam as Approved by Department				
COMPLETE ONLY WHA	T IS APPLICABLE TO	THE COURSE	open komercop erioda acorda arreste o do estada e estada e e e e e e e e e e e e e e e e e e		
<u>Prerequisite</u> Course(s) Test Score(s)	RADT 14019			OBR Program Code OBR Subsidy Code	
Corequisite(s) RADT 24024				OBR Course Level	
Registration is by per	mission only 🖂 🕽	∕es □ No		CIP Code	
Restrict Registration (e.g., VCD majors, East Li		homore level and abov	e, graduate s	standing, BA-CHEM program)	
Catalog Description	Introduction to general physics, units and measurement, atomic structure, electricity, magnetism, electromagnetism, x-ray circuitry equipment, x-ray production.				
Previous Title					
Previous Subject		Previous Number			

Contact Hours	Outline
2.00	Introduction to general physics
5.00	Atomic structure
6.00	Electromagnetic Spectrum, Electromagnetic wave characteristics
9.00	Electrostatics and electrodynamics
2.00	Magnetism
9.00	Electromagnetism, Generators, Motors
9.00	Voltage Selection & Production, Variable Resistors, Rectification
9.00	X-ray Production
9.00	X-ray Circuitry

60.00 **Total Contact Hours**

Textbook(s) Used in this Course

Radiographic Imaging

Writing Expectations

none

Instructor(s) Expected To Teach

RADT program personnel

Instructor(s) Contributing to Content

Jan Gibson

REQUIRED ENDORSEMENT

4124108

		Preparation Date	3 11-Apr-08	Curriculum Bulletin	
		Effective Date	Fall 2009	Approved by EPC	
Department	EH				
College		al Campuses			
Proposal	Revise Cour	•			
•			10		
Course Subject		ourse Number 1401	10		
Course Title	Clinical Edu				
Minimum Credits	1 Ma	aximum Credits 1			
Selected items are new	☐ Subject ☐ Number ☐ Title ☐ Title Abbre ☐ Credit Hou ☐ Prerequisite ☐ Description ☐ Schedule T	Grade Grade Credi Viation Cours S Libers S Writin Diver	it by Exam se Fee al Education F ng-Intensive rsity	h Requirements (LER)	
		s, programs or proc ations; need, audier		encroachment and duplication issistes):	ues;
Affects radiologic	c technology	programs at Ashta	abula and Sa	alem campuses	
•	,	ents, programs or ca	•	cted by this proposal):	
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Department Chair /	School Director	// Campus Dean		1 1	
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Preparation Date	11-Apr-08	Requested Effect	ive Term	Fall 2009	
Course Subject	RADT	Course Number	14010		
Course Title Clinical Education I					
Title Abbreviation					
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with			
Minimum Credit	01 ☐ to ☐ or	Maximum Credit	01 (e.g., 3	3 to 3 credits, 1 to 12 credits, 2 or 4 credits)	
Contact Hours Per Week	□ Lecture Minimum Hours □ to □ or Maximum Hours □ Laboratory Minimum Hours □ to □ or Maximum Hours ☑ Other Minimum Hours 1 □ to □ or Maximum Hours Other Minimum Hours 1 □ to □ or Maximum Hours Contact hours should be per week.				
Repeat Status	lepeat Status NR - Course may not be repeated If repeats, course limit OR maximum hours				
Course Level	Course Level UG - Undergraduate				
Grade Rule	C - Letter and In Progress (IP)				
Schedule Type(s)	Schedule Type(s) CLN - Clinic				
Course Attribute(s)	ourse Attribute(s) None				
Credit By Exam	D - Credit by Exam as Approved by Department				
COMPLETE ONLY WHAT	Γ IS APPLICABLE TO	THE COURSE			
Prerequisite Course(s) Test Score(s)	RADT 14001			OBR Program Code OBR Subsidy Code	
Corequisite(s) RADT 14020				OBR Course Level	
Registration is by per	mission only 🖂 🗎	∕es □ No		CIP Code	
Restrict Registration (e.g., VCD majors, East Li		homore level and abov	ve, graduate	standing, BA-CHEM program)	
Catalog Description	Supervised experience and observation with emphasis on clinical skills of radiologic technology and the exams covered in Radiographic Procedures I. Competency testing begins. Students assigned to clinical education setting 24 hours per week.				
Previous Title					

Contact Hours

Outline

15.00 Clinical practice and competency testing

15.00 Total Contact Hours

Textbook(s) Used in this Course

None

Writing Expectations

None

Instructor(s) Expected To Teach

Gail Schroeder and Carol Kuner

Instructor(s) Contributing to Content

Jan Gibson

REQUIRED ENDORSEMENT

Department Chair

🕊 hool Director / Campus Dear

4124108

		Preparation Date	e 11-Apr-08	Curriculum Bulletin
		Effective Date	Fall 2009	Approved by EPC
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Department				
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Proposal	Revise Cou	ırse		
Course Subject	RADT C	ourse Number 1401	19	
Course Title	Radiograph	nic Exposure and In	naging I	
Minimum Credits	3 N	laximum Credits 3		
Selected items are new	☐ Subject ☐ Number ☐ Title ☐ Title Abbre ☐ Credit Hot ☑ Prerequist ☐ Descriptio ☐ Schedule	Grad Grad Cred eviation Cour urs Liber ites Writin	it by Exam se Fee al Education F ng-Intensive rsity	h Requirements (LER)
·		es, programs or proc erations; need, audier	, -	encroachment and duplication issues; sites):
Affects radiologic	c technology	y programs at Ashta	abula and Sa	alem campuses
·	nology Prog	ram at Ashtabula Ca	•	cted by this proposal): ool of Speech Pathology and
	/	REQUIRED EN	DORSEMENT	уда и утра в обла в компания остава и са на на населения оставления ост Оставления оставления ос
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BASIC DATA SHEET

All data entered below should reflect revised information.

Preparation Date	11-Apr-08	Requested Effecti	ve Term	Fall 2009	9			
Course Subject	RADT	Course Number	14019					
Course Title	itle Radiographic Exposure and Imaging I							
Title Abbreviation	Rad Exposure And Imaging I Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)							
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with						
Minimum Credit	3 □ to □ or	Maximum Credit	3 (e.g., 3 t	o 3 credits,	1 to 12 credits, 2 or 4 credits)			
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours be per week.	_ □ to	_ □ or N	aximum Hours 3 Maximum Hours Maximum Hours			
Repeat Status NR - Course may not be repeated If repeats, course limit OR maximum hours								
Course Level	UG - Undergraduate							
Grade Rule	B - Letter							
Schedule Type(s)	LEC - Lecture							
Course Attribute(s)	None							
Credit By Exam	D - Credit by Ex	am as Approved	by Depart	ment				
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Prerequisite Course(s) Test Score(s)	RADT 14000			, very market and a second and a	COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code			
Corequisite(s)	RADT 14010				OBR Course Level			
Registration is by per	mission only 🛛 🗎	res □ No			CIP Code			
Restrict Registration (e.g., VCD majors, East L		homore level and abov	e, graduate	د standing, E	BA-CHEM program)			
Catalog Description	beam restrictors		detectors	used in	ographic x-ray tubes, filtration, intensifying screens and digital ng.			
Previous Title	same							
Previous Subject	same	Previous Number	. 0					

Content Outline (include contact hours for each section)

Contact Hours	Outline
3.00	Overview of x-ray circuitry and equipment
3.00	Introduction to Computers as used in medical imaging
3.00	X-ray Tube and Production of X-rays
3.00	Filtration
3.00	Beam Restrictors
6.00	Grids
6.00	Intensifying screens
6.00	Computed radiography equipment
3.00	Digital radiography equipment
3.00	Radiographic Film
6.00	Automatic Processing of film

45 Total Contact Hours

Textbook(s) Used in this Course

Radiographic Imaging

Writing Expectations

Research Paper

Instructor(s) Expected To Teach

Jan Gibson and Jackie Hammonds

Instructor(s) Contributing to Content

REQUIRED ENDORSEMENT

Department Chair / S

√ Director / C≱mpus Dean

4124108

		Preparation Date	: 11-Apr-08	Curriculum Bulletin
		Effective Date	Fall 2009	Approved by EPC
Department	EH			
College	RC - Regiona	l Campusas		
Proposal	Revise Cours	•		
Course Subject		rse Number 2400	14	
Course Title			7 1	
	Radiologic Pa			
Minimum Credits	3 Max	kimum Credits 3		
Selected items are new	☐ Subject ☐ Number ☐ Title ☐ Title Abbrevi ☐ Credit Hours ☑ Prerequisites ☑ Description ☐ Schedule Ty	Grade Grade Credi ation Cours Libers Writin	t by Exam se Fee al Education f ng-Intensive sity	Requirements (LER)
enrollment and sta	affing considera	, programs or proc tions; need, audier programs at Ashta	nce, prerequi	•
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College Dean				
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Executive Dean of F	Regional Campus	ses		
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BASIC DATA SHEET

All data entered below should reflect revised information.

Preparation Date	11-Apr-08	Apr-08 Requested Effective Term Fall 2009			9			
Course Subject	RADT	Course Number	24001					
Course Title	Radiologic Pathology							
Title Abbreviation	Radiologic Pathology Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)							
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with						
Minimum Credit	3 □ to □ or	Maximum Credit	3 (e.g., 3 to	3 credits,	, 1 to 12 credits, 2 or 4 credits)			
Contact Hours Per Week	 ☑ Lecture Minimum Hours ☑ Laboratory Minimum Hours ☐ Other Minimum Hours ☐ to ☐ or Maximum Hours ☐ to ☐ or Maximum Hours ☐ to ☐ or Maximum Hours 							
Repeat Status NR - Course may not be repeated If repeats, course limit OR maximum hours								
Course Level	UG - Undergraduate							
Grade Rule	B - Letter							
Schedule Type(s)	LEC - Lecture							
Course Attribute(s)	None							
Credit By Exam	D - Credit by Exam as Approved by Department							
COMPLETE ONLY WHA	T IS APPLICABLE TO	THE COURSE	etronolitet un fendemonde d'efficiele de l'enfinit de l'enfinit per acceptant contraction	974 974 974 974 974 974 974 974 974 974	ти в от ниже выправно образивания на выстранивания выправности в постоя по постоя по постоя по постоя по посто			
<u>Prerequisite</u> Course(s) Test Score(s)	BSCI 11010, 110)20, HED 14020, R	RADT 24024	4	COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code			
Corequisite(s)	RADT 24011				OBR Course Level			
Registration is by per	mission only 🛭 🗎 Y	∕es □ No			CIP Code			
Restrict Registration (e.g., VCD majors, East Li		homore level and abov	ve, graduate si	L tanding, B	SA-CHEM program)			
Catalog Description			_		application to radiologic maging modality is discussed.			
Previous Title								
Previous Subject		Previous Number						

Content Outline (include contact hours for each section)

Contact Hours	Outline
6.00	Introduction to pathology, processes and modality information
6.00	Skeletal system
6.00	Digestive system and hepatobiliary systems
3.00	Urinary system
6.00	Reproductive systems
3.00	Respiratory system
6.00	Cardiovascular and lymphatic system
9.00	Student presentations of various pathologies and imaging modalities

45.00 Total Contact Hours

Textbook(s) Used in this Course

Radiologic Pathology

Writing Expectations

Research paper

Instructor(s) Expected To Teach

RADT program personnel

Instructor(s) Contributing to Content

Margie lagulli

REQUIRED ENDORSEMENT

Department Chair

School Director / Campus Dear

4,24,08

			rieparation Dati	e II-Apr-vo	Curreum buneum
			Effective Date	Fall 2009	Approved by EPC
Department	EH				
College	RC - Red	aional (Campuses		
Proposal	Revise (•		
Course Subject	RADT	Cours	se Number 2404	48	
Course Title			echniques		
Minimum Credits	03	=	num Credits 03		
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	☐ Numbe		 ☐ Grad		
	☐ Title			it by Exam	
Selected items	☐ Title A				
are new	☐ Credit				Requirements (LER)
			□ vvntii □ Divei	ng-Intensive	
	☐ Sched			•	
Describe impact of	n other po	olicies, p	programs or proc	edures (e.g.,	, encroachment and duplication issue
enrollment and sta	affing cons	ideratio	ons; need, audiei	nce, prerequi	isites):
Impacts Radiolog	gic Techn	ology _I	orograms at As	htabula and	Salem campuses only.
Units consulted (c	ther depa	rtments	, programs or ca	mpuses affe	cted by this proposal):
School of Speec	h Patholo	gy and	Audiology, Col	lege of EHH	IS
		00m2443200000x20q066420000000		Note consider 1000 to Scientific Cen Note Helius (Auguste programs programment	
<i>27</i>	in approximate	0	REQUIRED EN	DORSEMENT	гs
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1/		To ye	re for	van	4,29,08
Department Chair /	School Dire	eotor / C	ampus Dean		
					/
College Dean					
					/
Executive Dean of F	Regional Ca	ampuses	5		
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Provost					

BASIC DATA SHEET

All data entered below should reflect revised information.

Preparation Date	17-Mar-08	Requested Effective	Term Fa	ill 2009				
Course Subject	RADT	Course Number 24	1048					
Course Title	Radiologic Techniques							
Title Abbreviation	Radiologic Techniques Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)							
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with						
Minimum Credit	3 □ to □ or	Maximum Credit 03	e.g., 3 to 3	3 credits	, 1 to 12 credits, 2 or 4 credits)			
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours 03 Minimum Hours Minimum Hours d be per week.	□ to □	or M	aximum Hours 03 aximum Hours aximum Hours			
Repeat Status	peat Status RP - Course may be repeated If repeats, course limit 1 OR maximum hours							
Course Level	UG - Undergraduate							
Grade Rule	B - Letter							
Schedule Type(s)	LEC - Lecture							
Course Attribute(s)	None							
Credit By Exam	D - Credit by Exam as Approved by Department							
COMPLETE ONLY WHA	r is applicable to) THE COURSE	A SE PRIL'E DE VICE DE VICE PRILIPE SE PRILIPE SE PRILIPE SE SE PRILIPE SE PRILIPE SE PRILIPE SE PRILIPE SE P		eeguusiis kaasa kaanaa ka maran ka ka sa			
Prerequisite Course(s) Test Score(s)	BSCI 11020,RAI	DT 14002,14004,1402	22,24002,2	24020	COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code			
Corequisite(s)					OBR Course Level			
Registration is by per	mission only 🛛 🕻	Yes □ No			CIP Code			
Restrict Registration (e.g., VCD majors, East L		Salem campus only shomore level and above, g	graduate stan	L nding, B	4-CHEM program)			
Catalog Description	radiologic proc	edures, equipment a	and image	produ	care, anatomy and physiology, action, radiologic physics, and ohy certification exam.			
Previous Title								
Previous Subject		Previous Number						

Content Outline (include contact hours for each section)

Contact Hours	Outline
3.00	Pre-test
3.00	Review of patient care
9.00	Review of radiographic anatomy and procedures
6.00	Review of image production
6.00	Review of equipment operation and maintenance
3.00	Review of radiobiology and radiation protection
12.00	Simulated exams
3.00	Graduate assessment exam and its review

45.00 Total Contact Hours

Textbook(s) Used in this Course

Writing Expectations

Instructor(s) Expected To Teach

Instructor(s) Contributing to Content

Comprehensive Review of Radiography

None

Jan Gibson, Margie lagulli, Jackie Hammonds

Jan Gibson

REQUIRED ENDORSEMENT

Department Chair / School Director/Ca

Campus Dean

4,24,08

			Preparation Date	11-Apr-08	Curriculum bulletin	
			Effective Date	Fall 2009	Approved by EPC	
Department	EH					
College	RC - Reg	ional C	amnuses			
Proposal	Revise C					
Course Subject	RIS		Number 3406	5		
Course Title			ical Education I			
Minimum Credits	02		um Credits 02	**		
	.	WOXIII				
Selected items are new	Subject □ Cross-Listed / Slash Number □ Grade Rule □ Title □ Credit by Exam □ Title Abbreviation □ Course Fee □ Credit Hours □ Liberal Education Requirements (LER) ☑ Prerequisites □ Writing-Intensive □ Description □ Diversity ☑ Schedule Type □ Other					
Describe impact o enrollment and sta					encroachment and duplication issue sites):	
No impact on any	y other pro	grams				
Units consulted (o	•		. •	•	cted by this proposal): S	
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Department Chair /	School Dire	ctor / Ca	mpus Dean			
College Dean					/	
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Executive Dean of F	Regional Car	npuses		<u> </u>		
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Provost						

BASIC DATA SHEET

All data entered below should reflect revised information.

Preparation Date	11-Apr-08	Requested Effecti	ve Term Fall 2	009			
Course Subject	RIS	Course Number	34065				
Course Title	Ultrasound Clinical Education III						
Title Abbreviation	Ultrasound Clinical Ed. III Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)						
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with					
Minimum Credit	□ to □ or	Maximum Credit	(e.g., 3 to 3 cr	edits, 1 to 12 credits, 2 or 4 credits)			
Contact Hours Per Week	☐ Lecture☐ Laboratory☐ OtherContact hours should	Minimum Hours Minimum Hours Minimum Hours be per week.	□ to □ or	r Maximum Hours r Maximum Hours r Maximum Hours			
Repeat Status	NR - Course may not be repeated If repeats, course limit OR maximum hours						
Course Level	UG - Undergraduate						
Grade Rule	C - Letter and In Progress (IP)						
Schedule Type(s)	LAB - Laborator	y CLN - Clinic					
Course Attribute(s)	None						
Credit By Exam	D - Credit by Exam as Approved by Department						
COMPLETE ONLY WHAT	TIS APPLICABLE TO	THE COURSE	ern armet kommun artemetisma aktronomia kantanatekanja ana artemetisma aktronomia aktronomia aktronomia aktronomia				
Prerequisite Course(s) Test Score(s)	RIS 34055			COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code			
Corequisite(s)	44072			OBR Course Level			
Registration is by per	mission only 🛭 🗎	∕es □ No		CIP Code			
Restrict Registration (e.g., VCD majors, East Li		homore level and above	e, graduate standin	g, BA-CHEM program)			
Catalog Description	opportunity to p	ractice skills nec	essary to obtai	clinical site to allow students the n quality sonographic images, to image quality problems.			
Previous Title							
Previous Subject		Previous Number					

Content Outline (include contact hours for each section)

Contact Hours	Outline
9.00	Instrumentation
9.00	Scanning techniques
9.00	Examination protocols
9.00	Clinical objectives
9 00	Competency evaluation

Total Contact Hours 45.00

Textbook(s) Used in this Course

Sonographic Techniques in Obstetrics-Gynecology

Writing Expectations

Journal entries

Sheri Tilton

Instructor(s) Expected To Teach

Instructor(s) Contributing to Content

Cynthia Peterson

REQUIRED ENDORSEMENT

4,24,08

			Preparation Date	1-Apr-08	Curriculum Bulletin
			Effective Date	Fall 2009	Approved by EPC
Department	EH				
College		vional C	ampuses		
Proposal	Revise (="	/ampuses		
,	RIS		e Number 4401	7	
Course Subject					
Course Title			ne Radiation Sa	rety	
Minimum Credits	03	Maxim	num Credits 03		
Selected items are new	☐ Subject ☐ Numbet ☐ Title ☐ Title A ☐ Credit ☑ Prereq ☑ Descri ☐ Sched	er bbreviati Hours uisites ption	☐ Grade ☐ Credit on ☐ Cours ☐ Libera ☐ Writin ☐ Divers	t by Exam se Fee al Education F g-Intensive sity	h Requirements (LER)
Describe impact of enrollment and standard on any	affing cons	ideratio	ns; need, audien		encroachment and duplication issues; sites):
Units consulted (o	•			·	cted by this proposal): S
_			REQUIRED EN	OORSEMENT	⁻ S
/d/-l/W	James	Lyn	ne ERou	My	4,24,08
Department Chair /	School Dire	ectof/Ca	ampus Dean		
College Dean					
Executive Dean of F	Regional Ca	ampuses	3		
Provost		······································	,		

BASIC DATA SHEET

All data entered below should reflect revised information.

Preparation Date	1-Apr-08	Requested Effecti	ve Term	F	all 20	09			
Course Subject	RIS	Course Number 44017							
Course Title	Nuclear Medicin	Nuclear Medicine Radiation Safety							
Title Abbreviation	Maximum 30 spaces	Nm Radiation Safety Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)							
Slash Course	/ / 4/5, 4/5/7 or 6/7	, , G. G. G. Maria							
Minimum Credit	03 ☐ to ☐ or	Maximum Credit	03 (e.g.,	. 3 tc	3 cre	dits, 1 to 12 credits, 2 or 4 credits)			
Contact Hours Per Week	 ✓ Lecture Minimum Hours 03 ☐ to ☐ or Maximum Hours 03 ☐ Laboratory Minimum Hours ☐ to ☐ or Maximum Hours ☐ Other Minimum Hours ☐ to ☐ or Maximum Hours Contact hours should be per week. 								
Repeat Status	NR - Course may not be repeated If repeats, course limit OR maximum hours								
Course Level	UG - Undergraduate								
Grade Rule	B - Letter								
Schedule Type(s)	LEC - Lecture								
Course Attribute(s)	None								
Credit By Exam	D - Credit by Ex	am as Approved	by Depa	rtm	ent				
COMPLETE ONLY WHAT	roomanaanaanaanaanaanaanaanaanaanaanaanaana	THE COURSE	missioned a brandom described method West		ACRES PAREORES SARV	ONTITUDE CONTRACTOR ACCIDENCE AND ACCIDENCE AND ACCIDENCE			
Prerequisite Course(s) Test Score(s)	RIS 44006					COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code			
Corequisite(s)	RIS 44014					OBR Course Level			
Registration is by per	mission only 🖂 \	∕es □ No				CIP Code			
Restrict Registration (e.g., VCD majors, East Li		homore level and abov	e, graduate	e sta	anding	, BA-CHEM program)			
Catalog Description	Includes the units of radiation measurement, radiation exposure dose limits, radiation safety regulations and monitoring devices, safe handling and contamination control of radioactive materials. Also presented are biologic effects of radiation, patient dosimetry, NRC/ODH licensing requirements, rules and regulations, including Title 10CFR Parts 19, 20, and 35.								
Previous Title									
Previous Subject	Previous Number								

Content Outline (include contact hours for each section)

Contact Hours	Outline
6.00	Review of Nuclear Medicine Physics
12.00	Radiation Safety in Nuclear Medicine
6.00	Biologic Effect of Radiation and Dosimetry
18.00	NRC Rules and Regulations
3.00	Nuclear Reactor and Radiation Accidents

45.00 Total Contact Hours

Textbook(s) Used in this Course

Writing Expectations

Instructor(s) Expected To Teach

Instructor(s) Contributing to Content

Nuclear Medicine Technology and PET/CT Techniques

Radiation Hormesis Research Paper

Janet Berger

REQUIRED ENDORSEMENT

Department Chair / 🕏 þool Director / Campus Dear

		Pre	paration Date	e 1-Apr-u8	Curriculum Bulletin
		Effe	ctive Date	Fall 2009	Approved by EPC
Department	EH				
College	RC - Rea	ional Camp	uses		
Proposal	Revise C	-			
Course Subject	RIS		mber 440 2	20	
Course Title			inical Edu		
Minimum Credits	02		Credits 02		
					
	☐ Subject			s-Listed / Slas	sh
		•	☐ Grad		
Selected items	☐ Title Ab	breviation	☐ Cour	it by Exam se Fee	
are new	☐ Credit H				Requirements (LER)
		isites	☐ Writin	ng-Intensive	
	□ Descrip □		☐ Diver	•	
	☐ Schedu	ie Type	☐ Othe	r	
Describe impact o enrollment and sta					, encroachment and duplication issues
No impact on any	"		eeu, auulei	ice, prerequ	isites).
No impact on any	y other pro	granis.			
Units consulted (o	ther depart	ments, proc	rams or ca	mpuses affe	cted by this proposal):
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Department Chair /	School Direc	ctor/Campu	s Dean	Word _	
		<i>V</i>			/
College Dean					
		···			/
Executive Dean of F	Regional Car	npuses			
					/
Provost					

BASIC DATA SHEET

All data entered below should reflect revised information.

Previous Subject

Preparation Date	1-Apr-08	Requested Effecti	ve Term	Fall 20	009		
Course Subject	RIS	Course Number 44020					
Course Title	Nuclear Medicine Clinical Education IV						
Title Abbreviation	NM Clinical Ed I Maximum 30 spaces no spaces before or	, with no punctuation o	r special ch	aracters ((exception: forward slash "f" is allowed with		
Slash Course	/ / 4/5, 4/5/7 or 6/7	/ / Cross-listed with 4/5, 4/5/7 or 6/7					
Minimum Credit	02 🗌 to 🗌 or	Maximum Credit	02 (e.g.,	3 to 3 cre	dits, 1 to 12 credits, 2 or 4 credits)		
Contact Hours Per Week	☐ Lecture☑ Laboratory☑ OtherContact hours should	Minimum Hours	02 🗆 t	o 🗌 or	Maximum Hours Maximum Hours Maximum Hours		
Repeat Status	NR - Course may not be repeated If repeats, course limit OR maximum hours						
Course Level	UG - Undergrad	UG - Undergraduate					
Grade Rule	B - Letter						
Schedule Type(s)	LEC - Lecture						
Course Attribute(s)	None						
Credit By Exam	D - Credit by Exam as Approved by Department						
COMPLETE ONLY WHAT	r is applicable to	THE COURSE	A. Crambarolo Selva que populações (Consultado 2017, Sun que		(*************************************		
Prerequisite Course(s) Test Score(s)	none				COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code		
Corequisite(s)					OBR Course Level		
Registration is by per	mission only ⊠ Yes □ No CIP Code						
Restrict Registration (e.g., VCD majors, East Li	RIS majors verpool Campus, sop	homore level and abov	re, graduate	standing	J, BA-CHEM program)		
Catalog Description	Salem Campus. scanning, adva- critical thinking Graduate comp comprehensive	The course will enced and emerging skills for the cline etency evaluation review of all nuch, radiopharmacy,	emphasizing techno ical site. is will be lear medi	e adva ologies, Compe perfori icine pr	ne clinical education sites and need procedures, SPECT and PET, teleradiology and PACS, and etency testing will be completed. med. There will be a rocedures, physics and realth safety. Prequisitie RIS 44015		
Previous Title							

Previous Number

Content Outline (include contact hours for each section)

Contact Hours	Outline
6.00	Instrumentation
6.00	Image Evaluation
6.00	Nuclear Medicine procedures
6.00	Radiopharmacy
6.00	Radiation Safety

30.00 Total Contact Hours

Textbook(s) Used in this Course

Nuclear Medicine Technology Procedures and Quick Reference

Writing Expectations

Clinical Journal/Clinical Notebook

Instructor(s) Expected To Teach

Debra Stull

Instructor(s) Contributing to Content

Janet Berger

REQUIRED ENDORSEMENT

Department Chair / School Direc

School Director / Campus Dea

4,24,08

			Preparation Date	11-Apr-08	Curriculum Bulletin
			Effective Date	Fall 2009	Approved by EPC
Department	EH				
College		ional C	ampuses		
Proposal	Revise C				
Course Subject	RIS		e Number 4408	3	
Course Title			y for Medical In		
Minimum Credits	03	_	um Credits 03	naging	
will initially Creaks	03	Maxim	un Credits 03		
Selected items are new	☐ Subject ☐ Numbe ☐ Title ☐ Title Ab ☐ Credit I ☐ Prerequ ☐ Descrip ☐ Schedu	r obreviation dours uisites otion	☐ Grade ☐ Credit ☐ Cours ☐ Libera ☐ Writin ☐ Divers	t by Exam se Fee al Education Re g-Intensive sity	equirements (LER)
Describe impact o enrollment and sta	affing cons	ideratio	ns; need, audien		encroachment and duplication issues; ites):
Units consulted (other departments, programs or campuses affected by this proposal): School of Speech Pathology and Audiology, College of EHHS					
Department Chair / School Director Campus Dean					
College Dean		'		······································	
Executive Dean of F	Regional Ca	mpuses			
		•			
Provost					/

BASIC DATA SHEET

All data entered below should reflect revised information.

Preparation Date	11-Apr-08	Requested Effective Term Fall 2009						
Course Subject	RIS	Course Number 44083						
Course Title	Pathophysiolog	y for Medical Ima	ging					
Title Abbreviation	Pathophysiology Med Imaging Maximum 30 spaces, with no punctuation or special characters (exception: forward slash "/" is allowed with no spaces before or after the slash)							
Slash Course	/ / 4/5, 4/5/7 or 6/7	Cross-listed with						
Minimum Credit	03 ☐ to ☐ or	Maximum Credit	03 (e.g., 3	3 to 3 cred	its, 1 to 12 credits, 2 or 4 credits)			
Contact Hours Per Week	☑ Lecture☐ Laboratory☐ OtherContact hours should	☐ Laboratory Minimum Hours ☐ to ☐ or Maximum Hours						
Repeat Status	epeat Status NR - Course may not be repeated If repeats, course limit OR maximum hours							
Course Level	UG - Undergraduate							
Grade Rule	C - Letter and in Progress (IP)							
Schedule Type(s)	LEC - Lecture							
Course Attribute(s)	None							
Credit By Exam	D - Credit by Ex	am as Approved	by Depart	ment				
COMPLETE ONLY WHA	T IS APPLICABLE TO	THE COURSE	ek-falentlende och film ock vormers svenssa zorn frusta st-rom	2011 19 400 A 44 (19,00 100 40 ACT 10 17 T T 0 ATT 10 18 ATT	NSGORDANINA MILITAR PROCESS (NEW PROPERTY PROPERTY PROPERTY PROCESS AND			
Prerequisite Course(s) Test Score(s)	Program Admis	sion			COMPLETED BY PROVOST OFFICE OBR Program Code OBR Subsidy Code			
Corequisite(s)					OBR Course Level			
Registration is by per	mission only 🖂 🕻	Yes □ No			CIP Code			
Restrict Registration (e.g., VCD majors, East L		homore level and abov	ve, graduate	standing,	BA-CHEM program)			
Catalog Description					causes of disease and the body's ies that will demonstrate them.			
Previous Title								
Previous Subject		Previous Number	-					

Content Outline (include contact hours for each section)

Contact Hours	Outline
3.00	Disease and its process
3.00	Causes of disease
6.00	Central nervous system
6.00	Cardiovascular system
3.00	Respiratory system
6.00	Digestive system
6.00	Urinary system
6.00	Reproductive system
3.00	Endocrine system
3.00	Musculoskeletal system

45.00 **Total Contact Hours**

Textbook(s) Used in this Course

Pathophysiology

Writing Expectations

Research paper

Instructor(s) Expected To Teach

Cynthia Peterson

Instructor(s) Contributing to Content

REQUIRED ENDORSEMENT

4,24,08

		Preparation Date	e 11-Apr-08	Curriculum Bulletin
		Effective Date	Fall 2009	Approved by EPC
Department	EH			
College	RC - Regional (Campuses		
Degree	ATS - Associate	e of Technical Stu	ıdies	
Program Name	RADT Progr	ram Code RDM	Γ	
Concentration(s)	Radiology Dept	. Management Te	echnology	Concentration(s) Code(s)
Proposal	Revise Program	1		
Description of prop Delete MATH 120		pice		
Does proposed re If yes,	vision change pro current total c	•		□ Yes ⊠ No I total credit hours
issues; enrollment The change only a management tech	and staffing con affects the radiolo nology at the Sal	siderations; need ogy completion pr lem campus.	l, audience, p ogram in rad	•
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: 21 M	l _a	REQUIRED EN	DORSEMENT	'S
Idam W	Lyn	e Elowa	Marie America	4,24,08
Department Chair /	School Director / C	Campus Dean		
College Dean				1
Executive Dean of F	Regional Campuse	S		
Senior Vice Preside	nt for Academic Al	ffairs and Provost		

		Preparation Dat	te 11-Apr-08	Curriculum Bulletin				
		Effective Date	Fall 2009	Approved by EPC				
Department	EH							
College	RC - Reg	ional Campuses						
Degree	AAS - As	AAS - Associate of Applied Science						
Program Name	RADT	Program Code						
Concentration(s)		Concentration(s) Cod	e(s)					
Proposal	Revise P	rogram						
	AS in Rad	iologic Technology cou on of RADT 24000 as a		e revision of prerequisites of				
Does proposed rev		nge program's total cre total credit hours		□ Yes ☑ No I total credit hours				
issues; enrollment	and staffi	ng considerations; need	d, audience, p	encroachment and duplication prerequisites) shtabula and Salem campuses				
•	•	tments, programs or ca and Audiology, Colleg	•	cted by this proposal): n, Health and Human Services.				
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Department Chair / S	1/4	Lynne (G	e wan	4,24,08				
College Dean								
Executive Dean of R	egional Ca	impuses						

Senior Vice President for Academic Affairs and Provost

	,	Preparation Date	e 11-Apr-08	Curriculum Bulletin
		Effective Date	Fall 2009	Approved by EPC
Department	EH			
College	RC - Regional C	Campuses		
Degree	_	r of Radiologic In	naging Scien	ces
Program Name		am Code RTAS		
Concentration(s)	Ŭ	ical Sonography		Concentration(s) Code(s)
Proposal	Revise Program	0, 1	,	() ()
Description of pro	posal:			
•	rerequisites for R			he AAS of the Diagnostic g Sciences major.
Does proposed re If yes,	vision change pro current total c	-		□ Yes ⊠ No I total credit hours
Describe impact of issues; enrollment The changes affection	t and staffing con	siderations; need	d, audience, p	encroachment and duplication prerequisites)
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Department Chair /	School Directory/ C	Campus Dean		/ /
College Dean				
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Executive Dean of I	Regional Campuse	S		
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Senior Vice President for Academic Affairs and Provost

		Preparation Dat	e 11-Apr-08	Curriculum Bulletin			
		Effective Date	Fall 2009	Approved by EPC			
Department	EH						
College	RC - Reg	gional Campuses					
Degree	BRIT - Bachelor of Radiologic Imaging Sciences						
Program Name	RIS	Program Code	- -				
Concentration(s)	Diagnost	ic Medical Sonography	Freshman Er	nt Concentration(s) Code(s)			
Proposal	Revise P	rogram					
	orerequisite			the Freshman Entry of the and Imaging Sciences major.			
Does proposed re If yes,		nge program's total cre total credit hours		□ Yes ⊠ No I total credit hours			
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Executive Dean of F	Regional Ca	ampuses		1 1			
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		Preparation Date	11-Apr-08	Curriculum Bulletin
		Effective Date	Fall 2009	Approved by EPC
Department	EH			
College	RC - Regional C	ampuses		
Degree	BRIT - Bachelor	•	naging Scienc	ces
Program Name		am Code HATS		
Concentration(s)	Diagnostic Medi	cal Sonography	Hosp Based	Concentration(s) Code(s)
Proposal	Revise Program		·	
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				ne Hospital Based Entry of the and Imaging Sciences major
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Department Chair /	School Director)/ Ca	ampus Dean		/ /
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Executive Dean of F	Regional Campuses	i		
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		Preparatio	n Date	11-Apr-08	Curriculum Bulletin				
		Effective [Date	Fall 2009	Approved by EPC				
Department	EH								
College									
Degree	·								
Program Name		Program Code	Ŭ	0 0					
Concentration(s)		MRI, NM, RTH	Cond	centration(s)	Code(s)				
Proposal	Revise Pro								
Description of prop Revision of pre-red		RIS 34065 and 4	4983						
Does proposed rev If yes,		ge program's tota otal credit hours			☐ Yes ⊠ No d total credit hours				
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Program Requirement Sheet Associate of Technical Study Category B

Student Name: Campus:

RADIOLOGY DEPARTMENT MANAGEMENT TECHNOLOGY

Completion Program 2008-2009

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Principles of Microeconomics(3)___Principles of Macroeconomics (3)___ Introduction to Technical Writing First Year Golfoquium: Exp Fiesk Pount Introduction to Human Communication Ecology, Evolution & Soc. (3) Human Biology (3) College Writing I General Studies Elective Select one of the following pairs 22060 10001 22061 Title Number Course ECON 15000 10097 11011 20002 BSCI BSCI COMM Dept. ENG ENG S Thirty-two (32) semester hours are awarded on the basis of certification by the American Registry Determined by Basic Skills Assessment (Check Required Courses) Complete Hours Credit TECHNICAL COURSES Study Strat/for College Success Reading Strat/College Success Intro. to College Writing S (3) College Writing I – Stretch (3) Fundamentals of Math IV "undamentals of Math III Fundamentals of Math V Fundamentals of MathVI Fundamentals of Math II "undamentals of Math I Number 10006 11002 10032 0033 10034 10035 10036 10003 10031 11001 MATH MATH MATH MATH MATH MATH ENG SO

Completed Sem./Yr.

Hours Credit

GENERAL STUDIES COURSES

of Radiologic Technologists (attach a copy of the certification card)

Oheese Kirom

MATH 11010 Algebra for Calculus (3) Psychology of Adjustment (3) MATH 12001 Algebra & Trig. (4) 11012 Intuitive Calculus (3) General Psychology (3) **Fotal General Studies Course Hours** 11762 21211 and MATH PSYC PSYC Date Certificate Awarded 없 RELATED COURSES Dates and Place of Attendance Total Technical Course Hours

Sem./Yr. <u>Completed</u>	***************************************						
		Introduction to Management Technology 3		Case Studies in Management Technology 3		Introduction to Computer Systems 3	9,
Course	11000	11009	21006	21008	21096	11000	21095
Dept.	BMRT	BMH	BMRT	BMRT	BMRT	COMT	RADT

Issued by the office of the Executive Dean for Regional Campus

20

Fotal Related Course Hours

NOTES: The total degree will consist of 68-69 hours. Coursework may be pursued at any Kert Campus, but students must be advised by the Director of Radiologic Technology Date housed at the Salem Campus. Advisor Signature

Date

69-89

TOTAL REQUIREMENTS

Student Signature

ENG	11011	College Writing I			
	20002	Introduction to Technical Writing			
PSYC	11762	General Psychology3			
US	10097	First Year Experience FLASH Point			
General studies electives					
Select from the LER list in this Catalog, in consultation with an					
academic advisor.					

TOTAL 65

Coursework may be pursued at any Regional Campus, but students must be advised at the Geauga or Trumbull campuses.

Radiologic Technology Completion Program

The Salem Campus offers associate degree completion programs for certified radiologic technologists and diagnostic medical sonographers who have completed their training at an accredited institution and have been certified by the American Registry of Radiologic Technologists or American Registry of Diagnostic Medical Sonographers.

Students interested in one of these programs should apply to the Salem Campus and meet with the director of radiologic technology for additional application details. Upon admission to these programs, students will be granted 32 credit hours on the basis of their certification. In addition, they must successfully complete a minimum of 32 or 33 hours of courses selected in accordance with the following curricula:

- Associate of Technical Study in Diagnostic Medical Sonography
- Associate of Technical Study in Nuclear Medicine Technology
- Associate of Technical Study in Radiation Therapy Technology
- · Associate of Technical Study in Radiologic Technology

			TOTAL	ť			
US	10097	First Year Experience FLASH Point					
Social	Science	\$					
Humar	nities an	d Fine Arts					
	21011	College Writing II					
ENG	11011	College Writing I					
Basic S	Sciences	s*, Math**, Computer Technology					
Credits awarded on the basis of certification							

*Up to six semester hours of RADT 14096 or 24196, Individual Investigation, may be used for this requirement. The total degree will consist of 66 hours. Coursework may be pursued at any Regional Campus, but students must be advised by the director of radiologic technology, housed at the Salem Campus.

Radiology Department Management Technology

Radiology Department Management Technology is a concentration within the A.T.S. in Radiologic Technology. Thirty-two credits are awarded on the basis of certification as radiologic technologist.

ſ.	TECHN	ICAL CO	DURSES32		
	(Credit	s award	ed on the basis of certification.)		
ìI.	RELAT	ED COU	RSES		
	BMRT	11000	Introduction to Business		
		11009	Introduction to Management Technology 3		
		21006	Human Resources Management 3		
		21008	Case Studies in Management Technology 3		
		21096	Individual Investigation 2		
	COMT	11000	Introduction to Computer Systems		
			Individual Investigation in Advanced Readings		
			in Radiologic Technology		
Ш,	GENER	GENERAL STUDIES COURSES			
	COMM	15000	Introduction to Human Communication 3		
	ENG	11011	College Writing I		
			Introduction to Technical Writing		
	US		First Year Experience FLASH Point		
	One of		lowing pairs:		
	BSCI		and 10002		
	ECON	22060	and 22061		
	MATH	11012	and (11010 or 12001)		
	PSYC		and 21211		
			TOTAL 68-69		

The total degree will consist of 68-69 hours. Coursework may be pursued at any Regional Campus offering appropriate courses, but students must be advised by the director of radiologic technology, housed at the Salem Campus.

^{**}MATH 10004 Developmental Mathematics and MATH 10005 Introduction to College Mathematics and MATH 10031 through 10036 Fundamentals of Mathematics I-VI cannot be included in this section.

Course Descriptions

40383 Psychological Interventions (3)
Application of psychological principles and techniques to the problems of the individual. This course is designed to introduce the field of clinical psychology, including models of understanding abnormal behavior, treatment of individuals, and ethics and professional issues. Prerequisite: PSYC 11762.

40461 Psychology of Language (3) Investigates psychological processes involved in language production, comprehension and development. Within each broad area, emphasis is on theories, psychological experiments, key findings and the relationships between theory, method and data. Prerequisites: PSYC 11762 and 30445.

40625 Development of Gender Role and Identity (3)

A life span, developmental model is used to analyze the changes which occur with age in gender-related role performance and identity formation. Prerequisite: PSYC 11762. This course may be used to satisfy the diversity requirement.

40974 History of Psychology (3)
Course examines the historical context, influences and individuals instrumental in the development of psychology. Course organization is designed to compare and contrast systems, theories and fundamental issues with which psychologists have concerned themselves in past and contemporary stages of the science. Prerequisites: PSYC 11762 and special approval.

41282 Personality (3)

A review of the data, concepts and theories of psychology that contribute to our understanding of personality. Prerequisite: PSYC 11762.

41363 Biopsychology (3)

Covers the relationship between brain and behavior at the physiological, chemical and anatomical levels. Focuses on the association between the central nervous system and various processes and behaviors such as learning, emotions, neurological disorders and psychopathology. Prerequisite: PSYC 11762.

41495 Special Topics in Psychology (3) (Repeated registration permissible) In-depth examination of particular topics of current interest to faculty and students. Specialized areas of research, theory or methodology may be covered. Specific topics announced. Prerequisites: junior standing and special approval.

41498 Individual Investigation (1-6)
(Repeatable for a total of 16 credit hours but see arts and sciences and psychology major/minor requirements for applicability limits) Involves participation in empirical research, review of psychological literature and preparation of a paper or annotated bibliography. IP grade permissible. Prerequisite: PSYC 11762 and special approval.

41532 Social Psychology (3)

ing-intensive requirement.

Study of environmental/situational influences on our own and others' thoughts, behaviors and feelings-focus on topics, such as aggression, attitudes and behaviors, conformity, helping, personal relationships and social cognition. Prerequisite: PSYC 11762.

41573 Laboratory Experience in Psychotogical Research: Social/Clinical (3)
Intensive experience in the conduct, analysis and reporting of empirical research in social or clinical psychology. Specific content will vary with the instructor. Repeatable once with instructor and departmental special approval if topic is different. Prerequisites: 3.2 GPA; PSVC 11762, 21621 and 31574. This course may be used to satisfy the writ-

41574 Laboratory Experience in Psychological Research: Cognitive/Learning (3) Intensive experience in the conduct, analysis and reporting of empirical research in cognitive psychology or human/animal learning. Specific content will vary with the instructor. Repeatable once with instructor and departmental special approval if topic is different. Prerequisites: 3.2 GPA: PSYC 11762, 21621, 31574 and special approval. This course may be used to satisfy the writing-intensive requirement.

41581 Health Psychology (3)
Role of psychological and social factors in health
and illness, typically covering three general areas: 1)
psychological factors affecting disease, 2) psychological and social consequences of illness, and 3)
psychotherapeutic interventions. Prerequisite: PSYC
11762.

41990 Writing in Psychology (1)
Writing-intensive course taken in conjunction with a
3-credit-hour upper-division psychology course
(except PSVC 31498, 41498, 41573, 41574 or
41993). Prerequisite: departmental special approval.
This course may be used to satisfy the writingintensive requirement with approval of major
department.

41993 Variable Title Workshop in Psychology (1-6)
Variable topic offered as need arises. Specific topics are announced in the Schedule of Classes. S/U grading. Prerequisites: PSYG 11762 and special approval.

*Course ineligible to be repeated for GPA recalculation-effective spring 2008.

RADIOLOGIC TECHNOLOGY (RADT)**

14000 Introduction to Radiologic Technology (3) Introduction to: radiologic technology, radiographic anatomy and physiology, imaging equipment, radiographic procedures, radiation protection, radiographic terminology. X-ray tube and production, and X-ray film. Two-hour lecture, three-hour laboratory weekly. Prerequisite: admission to program.

14001 Orientation to Clinical Radiography (2)
Radiographic positioning of the chest and abdomen.
Darknoom chemistry, beam restriction devices and
introduction to confrast mediums. One hour lecture,
three hours laboratory weekly. Prerequisite: RADT
14000 and HED 14020.

14002 Introduction to Patient Care (3)
Medicolegal aspects of patient care, ethics, nursing
procedures for radiographic examinations, techniques, radiography and taking and recording vital
signs. Introduction to venipuncture and clinical pharmacology, Prerequisite: RADT 14000 and HED 14020.

14004 Radiologic Physics (4)
Introduction to concepts of physics. Study of the X-ray machine circuit and components, the production of X-rays and the interaction with matter. Prerequisite: admission to pregram.

14010 Clinical Education I (1)
Supervised experience and observation with emphasis on basic radiological examinations, patient care, professionalism and the procedures covered in RADT 14020. Competency testing begins. Assigned to a clinical education center 16-20 hours per week. Prerequisite: RADT 14001. Corequisites: RADT 14020 and BSGI 11000.

14011 Clinical Education II (1)
Continuation of Clinical Education I, with emphasis on clinical practice of basic skills of radiologic technology and the examinations covered in RADT 14021. Competency testing continues. Assigned to a clinical education center 16-20 hours per week. Prerequisite: RADT 14010, 14019, 14020; BSCI 11000. Corequisite: RADT 14021.

14012 Clinical Education III (1)
Continuation of Clinical Education II, with more emphasis on independent clinical practice of procedures previously mastered and problem solving. Competency testing continues. Assigned to a clinical education center for 40 hours per week for five weeks. Prerequisite: RADT 14011, 14021, 14022.

^{**}Courses offered only at Regional Campuses.

14019 Radiographic Exposure and Imaging I (2) Brems and characteristic radiation, Planck's Quantum Theory, radiographic artifacts, silver recovery, intensifying screens, radiographic grids, preparation of exposure charts and introduction to radiographic quality. Tyo-hour lecture-weekly. Prerequisite: RADT 14001. Corequisite: RADT 14020.

14020 Radiographic Procedures I (5)
Radiographic anatomy and positioning of the upper and lower extremitles, pelvic and pectoral girdles, skull, facial bones, sinuses, vertebral column and bony thorax. Four hours lecture, two hours laboratory weekly. Prerequisite: RADT 14002. Corequisite: RSCI 11000.

14021 Radiographic Procedures II (4)
Radiographic anatomy and positioning of the gastrointestinal system, urinary and biliary systems, and trauma patients. Three hours lecture, two hours laboratory weekly. Prerequisite: RADT 14020 and BSCI

14022 Radiographic Exposure and Imaging II (3)
Aspects of radiographic quality, fluoroscopic equipment, X-ray timers and tomography. Experiments involving the factors that influence radiographic quality. Two hours lecture, two hours laboratory weekly. Prerequisite: RADT 14019.

14096 Individual Investigation in Directed Readings in RADT (3)*

Student selects prescribed number of medical journals, completes questions, paper and presentation. Prerequisite: program admission or graduate of medical imaging program.

21095 Special Topics in Radiologic Technology (2-4)*

(Repeated registration permissible) Student participation course on topics pertinent to radiologic technology. Topics are chosen by the instructor. Students may enroll in course more than once. Preregulsite: special approval of instructor.

24000 Medical Terminology (2)
Method of construction and recognition of medical terms from Greek and Latin prefixes, suffixes, word roots and combining forms. Radiologic terminology is emphasized. Prerequisite: admission to the program.

24001 Radiologic Pathology (3)
Introduction to disease and injury states and their application to radiologic technology. Each anatomical system is discussed and appropriate imaging modalities demonstrated Prerequisites: BSCI 11000; HED-14020; RADT 14692, 24010 and 24020.

24002 Radiation Protection (3)
Fundamentals of radiation safety. Introduction to state and federal regulations. Radiation biology. A brief survey of biophysics. Introduction to radiation therapy and oncology. Prerequisites: BSCI 11000 and BADT 14004.

24010 Clinical Education V (1)
Continuation of Clinical Education IV, with emphasis on clinical practice. Begin participation in procedures covered in RADT 24020. Competency testing continues. Assigned to a clinical education center 24 hours per week. Prerequisite: RADT 14013. Corequisite: RADT 24020.

24011 Clinical Education VI (1)
Continuation of Clinical Education V, emphasis on advanced clinical practice. Independent performance on radiographic examinations, participation in specialized radiographic areas covered in RADT 24020. Assigned to a clinical education center 24 hours per week. Prerequisites: RADT 14004, 24011, 24010, 24020. Corequisite: RADT 24022.

24020 Radiographic Procedures III (3)
Advanced radiographic procedures of the nervous, circulatory, urinary, reproductive and digestive systems. Pediatric and geriatric radiography and specialized procedures and equipment. Prerequisite: RADT 14021.

24022 Radiographic Exposure and Imaging III (3) Evaluation of radiographic systems to assure consistency in the production of quality images. Two hours lecture, two hours laboratory weekly. Prerequisite: RADT 14022.

24048 Radiographic Techniques (3)
Course integrates concepts in radiologic technology for preparation of the radiography certification exam. Persequisités: 8SCI 11000, RADT 14002, 14004, 14022, 24002, 24010, 24020 or program special approval.

24058 Diversified Employment (3)
Course features multiple topics in medical imaging to prepare graduates for employment in healthcare. Prerequisite: program admission or graduate of medical imaging program.

24096 Individual Investigation in Radiologic Technology (1)*

Directed research of special interest or need in the student's program. A research paper will be written on an assigned topic in radiologic technology. Pre-requisite: RADT 14000

24196 Individual Investigation in Advanced Readings in RADT (3)*
Course permits scholarly activities for research, study and summary of medical journal articles. Information aids in understanding recent advance-

ments in medical imaging. Prerequisite: program

admission or graduate of medical imaging program.

RADIOLOGIC AND IMAGING SCIENCES (RIS)**

34003 Radiation Therapy Principles/ Practice I (3)

An overview of cancer, radiation therapy and its physical and technical aspects. Includes the roles/ responsibilities of the therapist, treatment parameters, documentation and delivery of patient care, education and procedures. IP grade permissible. Prerequisite: program admission.

34004 Radiation Therapy Patient Management (3)

Provides the basic concepts in patient assessment and evaluation. Includes communication skills, infection control, nutrition, medications, exams, emergencies, patient transfer techniques, medical ethics and law as applied to radiation therapy. IP grade permissible. Prerequisite: program admission.

34008 Radiation Therapy Physics 1 (3) Introduction to radiation therapy physics, including the fundamentals of atomic structure, radiation properties, radiation production, radiation quality, interactions of radiation with matter and principles of radiation detectors. IP grade permissible. Prerequisite: program admission.

34030 Radiation Therapy Clinical Education I (1)
Observation and supervised clinical education with
emphasis on administering radiation therapy treatments, simulation, block formation and patient care.
Students are assigned to a clinical education site for
approximately 16 hours per week. IP grade permissible, Preregulsite: program admission.

34042 Abdominal Sonography I (3)
Anatomy, physiology and pathology of the abdomen; instrumentation and scanning techniques; normal and abnormal sonographic appearances of abdominal structures will be presented.

Prerequisite: program admission.

2007-2008 Kent State University Undergraduate Catalog

*Course ineligible to be repeated for GPA recalculation—effective spring 2008.

**Courses offered only at Regional Campuses.

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course Descriptions

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34044 Ultrasound Physics and Instrumentation (3)

Ultrasound principles to include interaction of sound with matter, propagation of sound in tissue, physical units, transducer parameters, image storage and display, quality assurance, bioeffects, image artifacts and physical principles of Doppler. Prerequisite: program admission.

34045 Ultrasound Clinical Education I (2)
Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. IP grade permissible. Prerequisite: program admission.

34052 Abdominal Sonography II (3)
Continuation of RIS 34042; anatomy, physiology, and pathology of the abdomen; instrumentation and scanning techniques; normal and abnormal sonographic appearance of abdominal structures will be presented. Prerequisites: RIS 34042, 34044, 34045, 34083, Corequisite: RIS 44083.

34055 Ultrasound Clinical Education II (3)
Provides clinical education and experience at clinical
sites to allow students the opportunity to practice
skills necessary to obtain high quality sonographic
images, to alter protocols based on patients and to
identify image quality problems. IP grade permissible. Prerequisite: RIS 34045. Corequisite: RIS
34062.

34062 Obstetrics and Gynecology Sonography I (3)

Anatomy and pathophysiology of the nonpregnant female pelvis; instrumentation and scanning techniques; normal and abnormal sonographic appearances; and findings of the uterus, fallopian tubes and ovaries will be covered. Prerequisites: RIS 34044, 34045, 34052 and 34083. Corequisites: RIS 34055, 44083.

34065 Ultrasound Clinical Education III (2)
Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. IP grade permissible, Prerequisite: special-approval Corequisite: RIS 44072.

34082 Small Parts Sonography (1)
Anatomy and pathophysiology of superficial structures; instrumentation and scanning techniques; normal and abnormal sonographic appearances of small structures; correlation with laboratory findings and other imaging modalities will be presented. Prerequisites: RIS 34044, 34083, 44083. Corequisite: RIS 34075.

34083 Sectional Anatomy in Medical Imaging (3)
Presentation of sectional anatomy of the body in the
transverse (axial), sagittal and coronal planes as
seen in medical images in CT, MRI and diagnostic
medical sonography. Prerequisites: program admission and BSCi 11000 or 20020.

41095 Special Topics in Radiologic and Imaging Sciences (1-3)

Courses will consist of various topics in medical imaging designed to enhance learning outcomes. Prerequisites: special approval. Enrollment in Rts concentration: CT, MRI, diagnostic medical sonography or nuclear medicine.

44001 Patient Management in Nuclear Medicine (2)

Provides a working knowledge of a health care facility's function, basic patient care skills, emergency care, patient communications and professionalism. Includes Interactions and care of diverse populations. Prerequisite: program admission.

44002 Nuclear Medicine Procedures I (3)
An introduction to imaging "in vivo" nuclear medicine procedures, Course focuses on the biological, anatomical and physiological aspects involving the skeletal, cardiovascular, Jespiratory, genitourinary and gastrointestinal organ systems. Prerequisite: program admission.

44005 Nuclear Medicine Clinical Education 1 (3)
Provides clinical experience at assigned clinical site.
Includes orientation to program and policies, observation of procedures, patient management, radiation safety, equipment orientation and the competency procedure. IP grade permissible. Prerequisite: program admitsion.

44006 Nuclear Medicine Physics and Instrumentation I (4)

Presents concepts and physical principles of nuclear medicine physics including interactions with matter. Also presents information on radiation detectors and their applications, functions and limitations. Prerequisite: program admission. Corequisite: RIS 44010.

44010 Nuclear Medicine Clinical Education

Continuation of RIS 44005. Students apply principles of patient care, structure and function, physics, instrumentation, radiation safety and protection, imaging techniques and radiopharmacy to clinical education, students begin performing clinical competency exams. IP grade permissible. Prerequisite: RIS 44005.

44011 Nuclear Medicine Radiopharmacy (3) Includes methodologies, calculations and basic properties of radionuclides. Radiopharmaceutical chemistry is applied and localized and quality control is examined. Includes radiopharmacy management and governing rules and regulations. Prerequisites: RIS 44001, 44002, 44005, 44006, 44010. Corequisites: RIS 44012, 44014, 44015, 44017.

44012 Nuclear Medicine Procedures II (3)
Emphasis on the biological, anatomical and physiological aspects of nuclear medicine procedures involving the endecrine and central nervous systems, as well as inflammatory, tumor, miscellaneous and pediatrio studies. Prerequisites: RIS 44001, 44002, 44005, 44006, 44010. Corequisites: RIS 44011, 44014, 44015, 44017.

44013 Radiation Therapy Principles/Practice II (3)

Examines the multidisciplinary treatment approaches. Consists of advanced topics in therapy, chemotherapy, immunotherapy and surgical interventions for combined modalities, for benign conditions and for managing side effects and emergencies. IP grade permissible. Prerequisite: RIS 34003.

44014 Nuclear Medicine Physics and Instrumentation II (2) Physics and instrumentation of Jimaging devices is presented to include basic functions, application of principles, quality perforl and computer applications. Prerequisites; RIS 44002-44005, 44006, 44010.

Corequisites: RIS 44011, 44012, 44015, 44017.

44015 Nuclear Medicine Clinical Education III (2)
Continuation of RIS 44010 with emphasis on clinical procedures covered in RIS 44012 and equipment in RIS 44014-Competency testing continues.

IP grade permissible. Precoulsites: RIS 44001, 44002, 44005; 44006 and 44010. Corequisites: RIS 44011, 44012, 44014 and 44017.

44016 Nuclear Medicine Procedures III (3) Emphasis on In vitro procedures, immunology, radionuclide therapy. SPECT and PET scanning. Also includes a 460ey of all nuclear medicine procedures. Prerequisites: RIS 44011, 44012, 44014, 44015, 44017. Corequisites RIS 44020.

44017 Nuclear Medicine Radiation Safety (3)
Presents the units of radiation measurement, dose limits, Safety and monitoring devices, safe handling of radioactive materials, licensing requirements, therapeutic doses and the effects of radiation on the body. Prerequisites: RIS 44001, 44002, 44005, 44016, 44016. Corequisites: RIS 44011, 44012, 44015.

^{*}Course ineligible to be repeated for GPA recalculation—effective spring 2008.

[&]quot;*Courses offered only at Regional Campuses.

44018 Radiation Therapy Physics II (3)
Continuation of the principles of radiation therapy physics and the study of photon beam dosimetry, electron beam dosimetry and treatment planning. IP grade permissible. Prerequisite: RIS 34008.

44020 Nuclear Medicine Clinical Education IV (2) Continuation of RIS 44015 with emphasis on advanced procedures, SPECT and PET scanning, advanced and emerging technologies, teleradiology and PACS and oritical thinking skills for the clinical site. IP grade/permissible. Prerequisite: RIS 44015. Corequisite: RIS 44016.

44021 Patient Management in Computed Tomography (CT) (3)

Provides knowledge about care-giving skills for patients undergoing CT exams, Information includes effective communication, problem-solving techniques, patient safety/comfort, patient preparation, monitoring, contrast agents and venipuncture. Prerequisite: admission to program.

44022 Computed Tomography (CT) Imaging Procedures (3)

Presentation of information about CT scanning techniques related to each part of the body as well as special studies. Positioning criteria, protocols and variations from routine exams will be included. Image quality evaluation criteria will be discussed. Prerequisite: program admission.

44024 Physical Principles of Computed Tomography (CT) (3)

Information presented about data acquisition and processing. The components in the image acquisition system are outlined. The software and technical parameters used in the acquisition of images is discussed. Problem-solving methodologies discussed. Prerequisites: program admission, RADT 14004 or equivalent; COMT 11000 or equivalent.

44025 Computed Tomography (CT) Clinical Education I (3)

Provides clinical education at a clinical site so students can observe and become familiar with CT equipment and procedures, and apply knowledge of physics and patient care. Students begin to perform some CT procedures under direct supervision of technologists. Competency exams required. IP grade permissible. Prerequisite: program admission.

44026 Radiation Therapy Pathology (3)
General overview of various disease processes with emphasis on cancer types. Includes epidemiology, etiology, symptoms, metastases, histology, tumor grading, staging, detection, screening and diagnosis, treatment, side effects and prognosis. IP grade permissible. Prerequisities: RIS 34003 and 34083

44027 Computed Tomography (CT) Clinical Education II (3)

Continuation of RIS 44025. Students apply knowledge of physics, patient care, sectional anatomy and pathology in the performance of CT clinical competency exams. Students act more independently using critical thinking skills. IP grade permissible. Prerequisite: RIS 44025.

44028 Radiation Therapy Radiobiology (3)
Establishes a foundation in radiation biology for radiation therapy. Cell biology and its response to radiation are reviewed as well as the effect of radiation on pathology and body systems. IP grade permissible. Prerequisite: RIS 44018.

44031 Patient Management in MRI (3)
Provides Information on the role of the MRI technologist in maintaining patient safety and comfort as well as personal and coworker safety. MR contrast agents and venipuncture will be studied. Includes problem solving with diverse patient types. Prerequisite: program admission.

44032 Magnetic Resonance Imaging Procedures (3)

Provides the imaging techniques related to the body, special clinical applications, coil selection, scan sequences, protocols, positioning criteria, normal and abnormal anatomical and pathological structures and signal characteristics. Prerequisite: program admission.

44034 Magnetic Resonance Equipment and Image Acquisition (3)

Develops an understanding of MR image acquisition and the equipment used. Provides information in the use and manipulation of the hardware and technical parameters used in image generation, as well as safety and special applications. Prerequisite: program admission.

44035 MRI Clinical Education I (3)
Students observe and become familiar with MRI equipment and procedures and apply knowledge of physics, MIRI safety and patient care. Students begin to perform some procedures under direct supervision of technologists. IP grade permissible. Prerequisite: program admission.

44036 MRI Clinical Education II (3)
Continuation of RIS 44035. Students apply knowledge of physics, patient care, anatomy and pathology when performing clinical competency exams as well as quality assurance procedures. Some applications to special procedure exams. IP grade permissible. Prerequisite: RIS 44035.

44037 MRI Clinical Education III (3)
Continuation of RIS 44036. Students use critical thinking skills in performing MRI exams in the clinical setting and solve problems in a more independent manner. Students complete all required clinical competency exams. IP grade permissible. Prerequisite: RIS 44036.

44038 Radiation Therapy Physics III (3) Includes determination of radiation intensity, use of high-energy beams, linear accelerators, other high energy machines, geometry of photon beams, clinical application in treatment planning and safety. IP grade permissible. Prerequisite: RIS 44018.

44040 Radiation Therapy Clinical Education II (1)

Continuation of RIS 34030 with emphasis on clinical practice of treatment techniques and planning. Students are assigned to clinical education site for approximately 24 hours per week. IP grade permissible. Prerequisite: RIS 34030.

44041 Radiation Therapy Quality Management (2)

Provides overview of quality management programs and continuing quality improvement in radiation therapy. Topics include validity of quality assurance checks, chart checks, image checks, testing on simulators, linear accelerators and brachytherapy sources. IP grade permissible. Prerequisite: RIS 44018.

44043 Radiation Therapy Principles/ Practice III (2)

Content examines the health care market with emphasis on current trends in radiation therapy. Focuses on operational issues such as human resource regulations, accreditation agencies, billing and reimbursement and Medicare. IP grade permissible. Prerequisite: RIS 44013.

44050 Radiation Therapy Clinical Education III (1)

Continuation of RIS 44040 with added emphasis on critical thinking, problem solving and clinical competency. Students are assigned to clinical education site for approximately 24 hours per week. IP grade permissible. Prerequisite: RIS 44040.

44060 Radiation Therapy Clinical Education IV (1)

Continuation of RIS 44050 with added emphasis on critical thinking, problem solving and clinical competency. Students are assigned to clinical education site for approximately 24 hours per week. IP grade permissible. Prerequisite: RIS 44050.

^{*}Course ineligible to be repeated for GPA recalculation—effective spring 2008.

^{**}Courses offered only at Regional Campuses.

44070 Radiation Therapy Clinical Education V(1)

Continuation of RIS 44060 with added emphasis on clinical practice, treatment procedures, simulation and treatment planning. Students are assigned to clinical education site for approximately 24 hours per week. IP grade permissible. Prerequisite: RIS 44060.

44072 Obstetrics and Gynecology Sonography

Embryonic and fetal development throughout gestation; fetal measurements, normal fetal anatomy and physiology; and abnormal sonographic appearances of the fetus will be covered as well as invasive obstetric procedures and antepartum testing. Prerequisite: RIS 34062.

44074 Vascular Sonography (2) Anatomy, physiology and hemodynamics of the cerebrovascular and peripheral venous systems; normal and abnormal sonographic vascular appearances: Doppler instrumentation and scanning techniques will be covered. Prerequisites: RIS 34044, 34083, 44075, 44083. Corequisite: RIS 44085.

44075 Ultrasound Clinical Education IV (3) Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. IP grade permissible. Prerequisite: special approval, Corequisites: RIS 34082 and 44084.

44078 Sonographic Techniques (3) Course integrates diagnostic medical sonography concepts in preparation for certification exams. Prerequisite: DMS program admission or graduate of a medical imaging program with special approval of program director

44083 Pathophysiology for Medical Imaging (3) Provides students with basic information on the causes of diseases and the body's response to disease, as well as the medical imaging modalities that will demonstrate them. Prerequisite: special approval.

44084 Ultrasound Image Evaluation (1) Presentation of sonographic findings in specific disease processes, with evaluation of image quality and emphasis on diagnostic features of pathologic entities. Prerequisites: RIS 34083, 34044, 34052, 44072, 44083. Corequisite: RIS 44075.

44085 Ultrasound Clinical Education V (3) Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. IP grade permissible. Prerequisite: special approval. Corequisite: RIS

Individual Investigation in Medical Imaging Directed Readings (3) Student selects prescribed number of medical imaging journal articles, completes questions, paper and presentation. Prerequisite: RIS program admission or graduate of a medical imaging program.

44098 Research in Medical Imaging (3) Fundamental concepts and procedures for systematic collection, analysis, critique and application of qualitative and quantitative data in medical imaging. Prerequisites: majors only: senior standing.

REAL ESTATE AND RELATED TECHNOLOGIES (RERT)*

11000 Real Estate Principles and Practices (3) Introduction to listing, selling, real estate math, legal descriptions of property and contracts. Prereguisite: none.

11001 Real Estate Law (3)

Review of basic Ohio laws covering the functions of an agency and the legal aspects of real estate transactions. Prerequisite: RERT 11000.

11003 Real Estate Financing (2)

Covers types of institutions, instruments and procedures involved in financing real estate transactions. Covers nature and characteristics of mortgage loans and nature of mortgage market. Prerequisite: RERT

21000 Real Estate Appraisal (2) Emphasizes methodology of appraising urban real property and appraisal techniques. Presents market approach to residential appraisal. Prerequisite: RERT 11000.

21003 Special Topics in Real Estate (2) Seminar involving discussion of current issues and solutions to special problems in real estate investment, management and brokerage operations. Prerequisites: RERT 11000, 11001, 11003, 21000.

RECREATION, PARK AND TOURISM MANAGEMENT (RPTM)

16000 Foundations of Recreation and Leisure (3) Historical examination of the park and recreation movement; sociological, economic, psychological and political considerations for the delivery of leisure and recreation services in contemporary society. Prerequisite: none.

26000 Computer Applications in Recreation and

This course focuses on the personal computer and its general function and uses in a recreation and sport environment. Students learn a wide variety of applications and programs pertinent to the recreation and sport industry. Prerequisite: junior stand-

Community Development in Recreation

Explores the contemporary and historical roles, organization and services of public and nonprofit telsure service providers. Includes various theoretical perspectives on community organization and development, as well as methods available to the recreation practitioner to facilitate the development of recreation services in communities. Prerequisite: RPTM 16000.

26030 Recreation Group Leadership (3) Group leadership concepts, methods and techniques. Practical experience in planning and conducting recreational activities for a variety of populations. Prerequisite: RPTM 16000. Special fee: \$4/credit hour-subject to change.

26060 Introduction to Global Tourism (3) (Cross-listed with GEOG 22040) Introduction to travel and tourism around the world, including tourism technologies, cultural and natural environments as attractions, benefits of travel, travel ethics and sustainable development. Prerequisite: none.

26080 Introduction to Therapeutic Recreation (3)

Introduction to the profession of therapeutic recreation. Includes history, philosophy, settings and populations served and an overview of therapeutic recreation process. Prerequisite: RPTM 16000.

26081 Principles of Outdoor Recreation (3) Introduction to outdoor recreation, including the history, economics, resources, management, education and environmental aspects. Prerequisite: RPTM 16000.

36010 Recreation, Leisure and Aging (3) Knowledge and understanding of leisure and aging. Planning and implementing recreational programs and activities for enriching the lives of older persons. Prerequisite: RPTM 26030.

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CATALOG COPY CHANGES

RADIOLOGIC TECHNOLOGY (RADT)**

14000 Introduction to Radiologic Technology (3)

Introduction to: radiologic technology, radiographic anatomy and physiology, imaging equipment, radiographic procedures, radiation protection, radiographic terminology, X-ray tube and production, and X-ray film. Two-hour lecture, three-hour laboratory weekly. Prerequisite: admission to program.

Introduction to radiologic technology program, general anatomy, introduction to radiologic procedures and positioning, imaging equipment, radiographic exposure, radiation protection, professional organizations and clinical education. Lecture and lab plus clinical hours based on program requirements. Prerequisite: program admission.

14001 Orientation to Clinical Radiography (2)

Radiographic positioning of the chest and abdomen. Darkroom chemistry, beam restriction devices and introduction to contrast mediums. One hour lecture, three hours laboratory weekly. Prerequisite: RADT 14000 and HED 14020.

14002 Introduction to Patient Care (3)

Medicolegal aspects of patient care, ethics, nursing procedures for radiographic examinations, techniques, radiography and taking and recording vital signs. Introduction to venipuncture and clinical pharmacology. Prerequisite: RADT 14000 and HED 14020.

14004 Radiologic Physics (4)

Introduction to concepts of physics. Study of the Xray machine circuit and components, the production of X-rays and their interaction with matter. Prerequisite: admission to program.

Introduction to general physics, units and measurement, atomic structure, electricity, magnetism, electromagnetism, x-ray circuitry equipment, x-ray production. Prerequisite: RADT 14019. Corequisite RADT 24024.

14010 Clinical Education I (1)

Supervised experience and observation with emphasis on basic radiological examinations, patient care, professionalism and the procedures covered in RADT 14020. Competency testing begins. Assigned to a clinical education center 16-20 hours per week. Prerequisite: RADT 14001. Corequisites: RADT 14020 and BSCI 11000. Supervised experience and observation with emphasis on clinical practice of basic skills of radiologic technology and the exams covered in Radiographic Procedures I. Competency testing begins. Students assigned to clinical education setting 24 hours per week. Prerequisite RADT 14001. Corequisite RADT 14020.

14011 Clinical Education II (1)

Continuation of Clinical Education I, with emphasis on clinical practice of basic skills of radiologic technology and the examinations covered in RADT 14021. Competency testing continues. Assigned to a clinical education center 16-20 hours per week. Prerequisite: RADT 14010, 14019, 14020; BSCI 11000. Corequisite: RADT 14021.

14012 Clinical Education III (1)

Continuation of Clinical Education II, with more emphasis on independent clinical practice of procedures previously mastered and problem solving. Competency testing continues. Assigned to a clinical education center for 40 hours per week for five weeks. Prerequisite: RADT 14011, 14021, 14022.

14013 Clinical Education IV (1)

Continuation of Clinical Education III, with emphasis on individual performance and instruction of radiographic procedures and the ability to adapt to unusual situations. Competency testing continues. Assigned to a clinical education center for 40 hours per week for five weeks. Prerequisite: RADT 14012.

14019 Radiographic Exposure and Imaging I (2)

Brems and characteristic radiation, Planck's Quantum Theory, radiographic artifacts, silver recovery, intensifying screens, radiographic grids, preparation of exposure charts and introduction to radiographic quality. Two-hour lecture weekly. Prerequisite: RADT 14001. Corequisite: RADT 14020.

Equipment used in medical imaging including radiographic x-ray tubes, filtration, beam restrictors, grids, imaging detectors used in intensifying screens and digital imaging, radiographic film and automatic processing. Prerequisite: RADT 14000. Corequisite: RADT 14010

14020 Radiographic Procedures I (5)

Radiographic anatomy and positioning of the upper and lower extremities, pelvic and pectoral girdles, skull, facial bones, sinuses, vertebral column and bony thorax. Four hours lecture, two hours laboratory weekly. Prerequisite: RADT 14002. Corequisite: BSCI 11000.

14021 Radiographic Procedures II (4)

Radiographic anatomy and positioning of the gastrointestinal system, urinary and biliary systems, and trauma patients. Three hours lecture, two hours laboratory weekly. Prerequisite: RADT 14020 and BSCI 11000.

14022 Radiographic Exposure and Imaging II (3)

Aspects of radiographic quality, fluoroscopic equipment, X-ray timers and tomography. Experiments involving the factors that influence radiographic quality. Two hours lecture, two hours laboratory weekly. Prerequisite: RADT 14019.

14096 Individual Investigation in Directed Readings in RADT (3)*

Student selects prescribed number of medical journals, completes questions, paper and presentation. Prerequisite: program admission or graduate of medical imaging program.

21095 Special Topics in Radiologic Technology (2-4)*

(Repeated registration permissible) Student participation course on topics pertinent to radiologic technology. Topics are chosen by the instructor. Students may enroll in course more than once. Prerequisite: special approval of instructor.

INACTIVATE 24000 Medical Terminology (2)

Method of construction and recognition of medical terms from Greek and Latin prefixes, suffixes, word roots and combining forms. Radiologic terminology is emphasized. Prerequisite: admission to the program.

24001 Radiologic Pathology (3)

Introduction to disease and injury states and their application to radiologic technology. Each anatomical system is discussed and appropriate imaging modalities demonstrated. Prerequisites: BSCI 11000; HED 14020; RADT 14002, 24010 and 24020.

Introduction to disease and injury states and their application to radiologic imaging. Each anatomical system and radiologic imaging modality is discussed. Prerequisites: BSCI 11010, 11020, HED 14020, RADT 24024. Corequisite RADT 24011.

24002 Radiation Protection (3)

Fundamentals of radiation safety. Introduction to state and federal regulations. Radiation biology. A brief survey of biophysics. Introduction to radiation therapy and oncology. Prerequisites: BSCI 11000 and RADT 14004.

24010 Clinical Education V (1)

Continuation of Clinical Education IV, with emphasis on clinical practice. Begin participation in procedures covered in RADT 24020. Competency testing continues. Assigned to a clinical education center 24 hours per week. Prerequisite: RADT 14013. Corequisite: RADT 24020.

24011 Clinical Education VI (1)

Continuation of Clinical Education V, emphasis on advanced clinical practice. Independent performance on radiographic examinations, participation in specialized radiographic areas covered in RADT 24020. Assigned to a clinical education center 24 hours per week. Prerequisites: RADT 14004, 24001, 24010, 24020. Corequisite: RADT 24022.

24020 Radiographic Procedures III (3)

Advanced radiographic procedures of the nervous, circulatory, urinary, reproductive and digestive systems. Pediatric and geriatric radiography and specialized procedures and equipment. Prerequisite: RADT 14021.

24022 Radiographic Exposure and Imaging III (3)

Evaluation of radiographic systems to assure consistency in the production of quality images. Two hours lecture, two hours laboratory weekly. Prerequisite: RADT 14022.

24048 Radiographic Techniques (3)

Course integrates concepts in radiologic technology for preparation of the radiography certification exam. Prerequisites: BSCI 11000, RADT 14002, 14004, 14022, 24002, 24010, 24020 or program special approval.

Review of radiologic technology to include patient care, anatomy and physiology, radiologic procedures, equipment and image production, radiologic physics, and radiation protection in preparation for the radiography certification exam. Prerequisite courses: BSCI 11020, RADT 14002, 14004, 14022, 24002, 24020.

24058 Diversified Employment (3)

Course features multiple topics in medical imaging to prepare graduates for employment in healthcare. Prerequisite: program admission or graduate of medical imaging program.

24096 Individual Investigation in Radiologic Technology (1)*

Directed research of special interest or need in the student's program. A research paper will be written on an assigned topic in radiologic technology. Prerequisite: RADT 14000.

24196 Individual Investigation in Advanced Readings in RADT (3)*

Course permits scholarly activities for research, study and summary of medical journal articles. Information aids in understanding recent advancements in medical imaging. Prerequisite: program admission or graduate of medical imaging program.

RADIOLOGIC AND IMAGING SCIENCES (RIS)**

34003 Radiation Therapy Principles/Practice I (3)

An overview of cancer, radiation therapy and its physical and technical aspects. ncludes the roles/responsibilities of the therapist, treatment parameters, documentation and delivery of patient care, education and procedures. IP grade permissible. Prerequisite: program admission.

34004 Radiation Therapy Patient Management (3)

Provides the basic concepts in patient assessment and evaluation. Includes communication skills, infection control, nutrition, medications, exams, emergencies, patient transfer techniques, medical ethics and law as applied to radiation therapy. IP grade permissible. Prerequisite: program admission.

34008 Radiation Therapy Physics I (3)

Introduction to radiation therapy physics, including the fundamentals of atomic structure, radiation properties, radiation production, radiation quality, interactions of radiation with matter and principles of radiation detectors. IP grade permissible. Prerequisite: program admission.

34030 Radiation Therapy Clinical Education I (1)

Observation and supervised clinical education with emphasis on administering radiation therapy treatments, simulation, block formation and patient care. Students are assigned to a clinical education site for approximately 16 hours per week. IP grade permissible. Prerequisite: program admission.

34042 Abdominal Sonography I (3)

Anatomy, physiology and pathology of the abdomen; instrumentation and scanning techniques; normal and abnormal sonographic appearances of abdominal structures will be presented. Prerequisite: program admission.

34044 Ultrasound Physics and Instrumentation (3)

Ultrasound principles to include interaction of sound with matter, propagation of sound in tissue, physical units, transducer parameters, image storage and display, quality assurance, bioeffects, image artifacts and physical principles of Doppler. Prerequisite: program admission.

34045 Ultrasound Clinical Education I (2)

Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. IP grade permissible. Prerequisite: program admission.

34052 Abdominal Sonography II (3)

Continuation of RIS 34042; anatomy, physiology, and pathology of the abdomen; instrumentation and scanning techniques; normal and abnormal sonographic appearance of abdominal structures will be presented. Prerequisites: RIS 34042, 34044, 34045, 34083. Corequisite: RIS 44083.

34055 Ultrasound Clinical Education II (3)

Provides clinical education and experience at clinical sites to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. IP grade permissible. Prerequisite: RIS 34045. Corequisite: RIS 34062.

34062 Obstetrics and Gynecology Sonography I (3)

Anatomy and pathophysiology of the nonpregnant female pelvis; instrumentation and scanning techniques; normal and abnormal sonographic appearances; and findings of the uterus, fallopian tubes and ovaries will be covered. Prerequisites: RIS 34044, 34045, 34052 and 34083. Corequisites: RIS 34055, 44083.

34065 Ultrasound Clinical Education III (2)

Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. IP grade permissible. Prerequisite: special approval. RIS 34055 Corequisite: RIS 44072.

34082 Small Parts Sonography (1)

Anatomy and pathophysiology of superficial structures; instrumentation and scanning techniques; normal and abnormal sonographic appearances of small structures; correlation with laboratory findings and other imaging modalities will be presented. Prerequisites: RIS 34044, 34083, 44083. Corequisite: RIS 44075.

34083 Sectional Anatomy in Medical Imaging (3)

Presentation of sectional anatomy of the body in the transverse (axial), sagittal and coronal planes as seen in medical images in CT, MRI and diagnostic medical sonography. Prerequisites: program admission and BSCI 11000 or 20020.

41095 Special Topics in Radiologic and Imaging Sciences (1-3)

Courses will consist of various topics in medical imaging designed to enhance learning outcomes. Prerequisites: special approval. Enrollment in RIS concentration: CT, MRI, diagnostic medical Sonography or nuclear medicine.

44001 Patient Management in Nuclear Medicine (3)

Provides a working knowledge of a health care facility's function, basic patient care skills, emergency care, patient communications and professionalism. Includes interactions and care of diverse populations. Prerequisite: program admission.

44002 Nuclear Medicine Procedures I (3)

An introduction to imaging "in vivo" nuclear medicine procedures. Course focuses on the biological, anatomical and physiological aspects involving the skeletal, cardiovascular, respiratory, genitourinary and gastrointestinal organ systems. Prerequisite: program admission.

An anatomical and physiological review of the skeletal, cardiovascular, gastrointestinal endocrine, genitourinary, respiratory, lymphatic and central nervous organ systems is covered. Prerequisite: RIS major. Corequisite: RIS 44001, 44005, 44006, 44011.

44005 Nuclear Medicine Clinical Education I (3)

Provides clinical experience at assigned clinical site. Includes orientation to program and policies, observation of procedures, patient management, radiation safety, equipment orientation and the competency procedure. IP grade permissible. Prerequisite: program admission.

The student will acquire clinical experience in nuclear medicine procedures and patient care at the assigned clinical education site. The course includes an orientation to the program and policies, observations of procedures, patient management, radiopharmacy, radiation safety, quality control, and equipment orientation.

Competency testing begins. Prerequisite: RIS major. Corequisite RIS 44001, 44002, 44006, 44011.

44006 Nuclear Medicine Physics and Instrumentation I (4)

Presents concepts and physical principles of nuclear medicine physics including interactions with matter. Also presents information on radiation detectors and their applications, functions and limitations. Prerequisite: program admission. Corequisite: RIS 44010.

Explores the concepts of the physical principles of nuclear medicine physics including interactions with matter. Radiation detectors and laboratory equipment and their applications, functions and limitations is included. Prerequisite: RIS major. Corequisite RIS 44001, 44002, 44005, 44011.

44010 Nuclear Medicine Clinical Education II (3)

Continuation of RIS 44005. Students apply principles of patient care, structure and function, physics, instrumentation, radiation safety and protection, imaging techniques and radiopharmacy to clinical education. Students begin performing clinical competency exams. IP grade permissible. Prerequisite: RIS 44005.

Continuation of RIS 44005 Clinical Education I will be instructed at both the clinical education sites and Salem Campus, with particular emphasis on clinical procedures covered in RIS 44002 (NM Procedures I) and RIS 44012 (Procedures II). Clinical correlation for Radiopharmacy rotations and RIS 44014 (NM Physics and Instrumentation II) is included. Competency testing continues; proficiency testing begins. Prerequisite: RIS 44005. Corequisite RIS 44012, 44014, 44017.

44011 Nuclear Medicine Radiopharmacy (4)

Includes methodologies, calculations and basic properties of radionuclides. Radiopharmaceutical chemistry is applied and localized and quality control is examined. Includes radiopharmacy management and governing rules and regulations. Prerequisites: RIS 44001, 44002, 44005, 44006, 44010. Corequisite: RIS 44012, 44014, 44015, 44017.

Includes the methodologies, calculations and basic properties of radiopharmaceuticals. Radiopharmaceutical chemistry is applied. Localization methods, quality control, and radiation safety issues are examined. Non-radioactive interventional drugs, radiopharmacy management and governing rules and regulations are also explored.

44012 Nuclear Medicine Procedures II (3)

Emphasis on the biological, anatomical and physiological aspects of nuclear medicine procedures involving the endocrine and central nervous systems, as well as inflammatory, tumor, miscellaneous and pediatric studies. Prerequisites: RIS 44001, 44002, 44005, 44006, 44010. Corequisite: RIS 44011, 44014, 44015, 44017. Biological, anatomical, physiological and procedural aspects of nuclear medicine as related to the cardiovascular system, the endocrine system, the genitourinary system, inflammatory and tumor imaging, the central nervous system, the gastrointestinal system, the respiratory system and the skeletal system. Prerequisite: RIS 44002. Corequisite RIS 44010.

44013 Radiation Therapy Principles/Practice II (3)

Examines the multidisciplinary treatment approaches. Consists of advanced topics in therapy, chemotherapy, immunotherapy and surgical interventions for combined modalities, for benign conditions and for managing side effects and emergencies. IP grade permissible. Prerequisite: RIS 34003.

44014 Nuclear Medicine Physics and Instrumentation II (3)

Physics and instrumentation of imaging devices is presented to include basic functions, application of principles, quality control and computer applications. Prerequisites: RIS 44002, 44005, 44006, 44010. Corequisite: RIS 44011, 44012, 44015, 44017. Explores the use and quality control of all nuclear medicine instrumentation, the function of radiation detection devices to include counting and imaging equipment, SPECT and PET instrumentation. Computer applications as related to nuclear medicine is addressed. Prerequisite: RIS 44006. Corequisite RIS 44010.

44015 Nuclear Medicine Clinical Education III (2)

Continuation of RIS 44010 with emphasis on clinical procedures covered in RIS 44012 and equipment in RIS 44014. Competency testing continues. IP grade permissible. Prerequisites: RIS 44001, 44002, 44005, 44006 and 44010. Corequisite: RIS 44011, 44012, 44014 and 44017.

Clinical Education III will be instructed at both the clinical education sites and Salem Campus. Clinical III will emphasize clinical procedures covered in RIS 44012 (NM Procedures II) and RIS 44014 (NM Physics and Instrumentation II). Competency testing and proficiency testing continues. Prerequisite: RIS 44010. Corequisite RIS 44016.

44016 Nuclear Medicine Procedures III (3)

Emphasis on in vitro procedures, immunology, radionuclide therapy, SPECT and PET scanning. Also includes a review of all nuclear medicine procedures. Prerequisites: RIS 44011, 44012, 44014, 44015, 44017. Corequisite: RIS 44020.

Nuclear Medicine hematology and immunology, radionuclide therapy, pediatric imaging, and emerging technologies, including PET oncology imaging. Includes a review of all nuclear medicine procedures covered in RIS 44002 and RIS 44012. Prerequisite: RIS 44012. Corequisite RIS 44015.

44017 Nuclear Medicine Radiation Safety (3)

Presents the units of radiation measurement, dose limits, safety and monitoring devices, safe handling of radioactive materials, licensing requirements, therapeutic doses and the effects of radiation on the body. Prerequisites: RIS 44001, 44002, 44005, 44010. Corequisite: RIS 44011, 44012, 44014, 44015.

Includes the units of radiation measurement, radiation exposure dose limits, radiation safety regulations and monitoring devices, safe handling and contamination control of

radioactive materials. Also presented are biologic effects of radiation, patient dosimetry, NRC/ODH licensing requirements, rules and regulations, including Title 10CFR Parts 19, 20, and 35. Prerequisite: RIS 44006. Corequisite RIS 44014.

44018 Radiation Therapy Physics II (3)

Continuation of the principles of radiation therapy physics and the study of photon beam dosimetry, electron beam dosimetry and treatment planning. IP grade permissible. Prerequisite: RIS 34008.

44020 Nuclear Medicine Clinical Education IV (2)

Continuation of RIS 44015 with emphasis on advanced procedures, SPECT and PET scanning, advanced and emerging technologies, teleradiology and PACS and critical thinking skills for the clinical site. IP grade permissible. Prerequisite: RIS 44015. Corequisite: RIS 44016.

Clinical Education IV will be instructed at both the clinical education sites and Salem Campus. The course will emphasize advanced procedures, SPECT and PET scanning, advanced and emerging technologies, teleradiology and PACS, and critical thinking skills for the clinical site. Competency testing will be completed. Graduate competency evaluations will be performed. There will be a comprehensive review of all nuclear medicine procedures, physics and instrumentation, radiopharmacy, and radiation health safety. Prerequisite RIS 44015 NM Clinical Education III.

44021 Patient Management in Computed Tomography (CT) (3)

Provides knowledge about care-giving skills for patients undergoing CT exams. Information includes effective communication, problem-solving techniques, patient safety/comfort, patient preparation, monitoring, contrast agents and venipuncture. Prerequisite: admission to program.

44022 Computed Tomography (CT) Imaging Procedures (3)

Presentation of information about CT scanning techniques related to each part of the body as well as special studies. Positioning criteria, protocols and variations from routine exams will be included. Image quality evaluation criteria will be discussed. Prerequisite: program admission.

44024 Physical Principles of Computed Tomography (CT) (3)

Information presented about data acquisition and processing. The components in the image acquisition system are outlined. The software and technical parameters used in the acquisition of images is discussed. Problem-solving methodologies discussed. Prerequisites: program admission, RADT 14004 or equivalent; COMT 11000 or equivalent.

Memo

To: Jan Gibson

From: Jackie Hammonds

Date: 5/1/2008

Re: Changes to RADT

I have reviewed and support the changes to the Radiologic Technology curriculum.

Jackie Hammonds

Program Director

Radiologic Technology

Kent State University Ashtabula