

# **RADIOLOGIC TECHNOLOGY PROGRAM**

## **Information Guide 2009 - 2010**



**YORK TECHNICAL COLLEGE** 

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ROCK HILL, SOUTH CAROLINA 29730

Visit our web site at [www.yorktech.com](http://www.yorktech.com)

## TABLE OF CONTENTS

<i>Program Mission Statement</i> .....	3
<i>Radiologic Technology Department Goals</i> .....	3
<i>About the Program</i> .....	4
<i>Admission &amp; Academic Guidelines</i> .....	5
<i>Clinical Education</i> .....	6
<i>Clinical Schedule</i> .....	8
<i>General Information</i> .....	9
<i>Graduation Requirements</i> .....	11
<i>Curriculum Requirements</i> .....	11
<i>Program Expenses</i> .....	13
<i>Course Display</i> .....	14
<i>Course Descriptions</i> .....	15
<i>First Year Schedule</i> .....	17
<i>Second Year Schedule</i> .....	18
<i>Book List</i> .....	19
<i>Technical Standards</i> .....	22



### *Radiologic Technology Program Mission Statement*

The Radiologic Technology Program at York Technical College is an accredited, associate degree program which provides accessible, relevant and high quality education. Through various delivery methods, the Program prepares qualified students to apply radiation to humans in a healthcare setting in order to produce diagnostic images using radiographic equipment and imaging systems under the direction of a physician. By providing a comprehensive program of competency-based instruction in Radiologic Technology, the Program promotes an atmosphere of life-long learning for the purpose of graduating competent radiographers able to function as radiologic science professionals in the healthcare community.

#### YORK TECHNICAL COLLEGE RADIOLOGIC TECHNOLOGY DEPARTMENT GOALS

1. The graduate will be able to display ethical behavior and sound professional judgment in clinical practice.
2. The graduate will be able to practice effective written and oral communication skills in the clinical setting.
3. The graduate will demonstrate problem-solving and critical thinking skills in the clinical setting.
4. The graduate will participate in professional activities which promote professional development and life long learning.
5. The graduate demonstrates competence as an entry-level radiographer who produces radiographic films of diagnostic quality and meets the needs of the healthcare community.
6. The program will graduate competent, employable, entry-level radiographers who meet the needs of the healthcare community.

The Associate Degree program in Radiologic Technology is a 90 semester hour degree that spans two years/six semesters time. Up to 24 semester hours of general education coursework may be completed prior to entering the core courses of the program if the student chooses, however, accommodations can be made during the program to allow for completion of these courses as well.

## ***ABOUT THE PROGRAM:***

### ***PHILOSOPHY***

Our role as educators in Radiologic Technology is to prepare students to serve the total needs of the patient during clinical practice. To meet the patient's needs, the total person is educated; therefore, we strive to enrich the student's mind, body, and spirit. This is necessary for him/her to reach professional maturity. A Radiologic Technologist is a certified member of the healthcare team by the American Registry of Radiologic Technologists, who meet strict educational requirements to be eligible for this national board examination.

We feel the cognitive objectives of the program are achieved best through a strong academic background; good affective behavior is effectively learned by integrating classroom instruction with the exemplary attitudes and ethical behavior of the clinical staff and instructors. The psychomotor skills, which are the most distinguishing characteristics of a skilled Radiologic Technologist, are best learned through varied and sufficient clinical practice. This natural learning experience incorporates every aspect of technology needed to develop expertise. It is the only technical learning experience involving the patient. We also feel that clinical practice by students should not be used as a substitute for qualified technologists performing examinations. Clinical practice properly used, as a learning experience requires professional staff to supervise the student through the following phases:

- (1) Explanation
- (2) Demonstration
- (3) Participation and
- (4) Evaluation.

We are committed to providing the highest level of radiologic technology education. We are willing to give our best efforts for the patient's and the student's benefit. In return, we expect all students to perform at their peak efficiency.

We believe the clinical facilities and the Radiologic Technology Program must be smoothly blended if the department is to furnish an unexcelled laboratory for learning radiologic technology. The clinical staff must feel a responsibility for teaching students, for it is from the radiographic room that a skilled technologist emerges. When the Program and the clinical facilities work together to reach high goals, both may reach and maintain them.

We are committed to rigid discipline. We are flexible when it proves progressive, but rigidly retain proven principles and practices, which produce highly skilled professional technologists.

Our graduate technologists serve as the best gauge of the worth of our philosophy. It is never easy for us to maintain our philosophy through changing social and educational changes. Neither is it easy for students to fulfill the role they play in our philosophy; however, their positive attitude and their successful practice as professional technologists are proof that our thoughts and beliefs are good, though demanding.

## **ADMISSIONS REQUIREMENTS**

There are 3 pathways, called “tracts” to qualify for the Radiologic Technology program. The first step is either the COMPASS placement test, (or high school administered ASSET) given here on campus in the Assessment Center. You would first register for admission to the college and then pay a small fee at the business office located in the Student Services building for the test. Once that is done, you may take your receipt to the Assessment Center in B building M-S (hours vary by semester and date) and complete the test which evaluates the student in Writing, Math and Reading abilities. You do not need an appointment to take the COMPASS test but you must arrive within the hours of operation for the Assessment Center, these can be located on the York Technical College website at [www.yorktech.com](http://www.yorktech.com). The second tract is through ACT & SAT scores which can also be used to qualify for the Radiology program along with a Reading score from the COMPASS test. If using these tests to qualify, you are only required to take the Reading portion of the COMPASS. Each area of these tests have a required score that is needed to qualify. ALL of the required scores must be achieved to qualify using this method. A third method is the Health Science Certificate tract which is outlined in the York Technical College catalog and is composed of up to 13 courses which requires a 2.5 GPA or higher when completed to qualify for the Radiologic Technology Program. Please contact the Program Director at 803-981-7036 for more information.

## **ACADEMIC GUIDELINES**

Due to the discipline of studies in Radiologic Technology, some of the academic guidelines are stricter than any other programs offered at York Technical College. Please be advised of the following guidelines:

1. Classes are not to be missed without prior notification and/or approval of the instructor. This includes all RAD TECH classes as well as your clinical assignments. It is the student’s responsibility to call the instructor prior to the expected time for reporting to class or clinical assignment in the event of an absence.
2. If a test is missed, it must be made up within 1 week after the originally scheduled testing day. Make-up tests must be scheduled with your instructor. The instructor must be notified of the completion. Being allowed to make up a scheduled test is a privilege which may be withdrawn if the privilege is abused. A maximum of two tests per semester may be rescheduled.
3. Tests will always be announced, however pop quizzes may be unannounced. Any student missing an unannounced quiz may not be allowed to make it up and will receive a grade of 0. Unannounced quizzes are normally averaged together in a semester to count as 1 test grade.
4. Except in exceptional circumstances, days missed in excess of 10% of the number of class meetings will result in an unsatisfactory grade which will result in dismissal from the program. If it is necessary to miss a day of class, it is the student’s responsibility to get the notes and material missed from your classmates.

5. A syllabus with course outline, objectives, and instructor lecture notes for each course will be available for purchase at the YTC Bookstore. Instructor lecture notes can also be accessed by using the computers in the CAI Lab.
6. All homework and reading assignments are listed in the course syllabus. It is the student's responsibility to refer to these syllabi for his/her assignments.
7. If "extra help" is needed with a RAD course, the student should approach the instructor prior to the day of a test. Waiting until the night before a test to study is not a good idea. Each instructor has her office hours posted on the office door. Students can refer to the schedule to determine the availability of the instructor during designated office hours.
8. The following grading scale will be the one used for didactic and clinical performance:

93 – 100	-	A
86 - 92	-	B
80 - 85	-	C
70 - 79	-	D
below 70	-	F

A student **MUST** maintain a **MINIMUM** of an 80% average in all RAD courses in order to remain in the program. A minimum of 80 is required in all clinical courses. Below 80 is considered unacceptable clinical performance. In other words, any grade below a "C" in any RAD course will result in withdrawal from the program, since all sequential courses are prerequisite to the courses in the following term. In some cases arrangements may be made to "stop out" and re-enter the program the following year at the point at which the student stopped, contingent upon the status of the student capacity at the time of intended re-entry. (See Reinstatement Guidelines and Procedures.) A student may re-enter the program only once.

9. A G.P.R. of 2.0 **MUST** be maintained to remain in the program.
10. Acceptance and continuation in this program are contingent upon acceptance by the clinical facilities for practicum training. If a student does not appear to be in good physical and mental health, as evidenced by his or her performance or behavior in the clinical practicum, a physical examination and a written report from a physician can be requested by faculty.

### ***CLINICAL EDUCATION***

The process of becoming a radiographer is a complex one involving a combination of mastery of patient care and technical skills and the development of professional decorum and attitudes. To facilitate this adjustment, the student radiographer must develop an awareness of the expectations of the educational program.

Clinical facilities require drug screens before allowing students to participate in clinical rotations. Students participating in clinical may also be required to have a drug screen at any time during their enrollment. Criminal background checks are also required for participation in clinical education activities. The results of this criminal background check are shared with each clinical site for their determination in the student's eligibility to perform patient care at their site. A pre-application process is available to all

potential students interested in attending an allied health program in Radiologic Technology on the ARRT website. This process can clarify for any student if they will be eligible to sit for the registry in the future based upon any previous criminal violations. We urge all students who may fall into this category to log onto [www.ARRT.org](http://www.ARRT.org) and complete the screening process prior to entering the program. There are legal limitations for national certification with American Registry of Radiologic Technologists (ARRT) for graduates with prior convictions or disciplinary action. Applicants for examination for the ARRT certification examination must declare any felony or misdemeanor convictions. Individuals with convictions or charges resulting in any of the following must also be reported and may prevent the applicant from being able to pursue certification in the field:

- Plea of guilty
- Plea of nolo contendere
- Withheld adjudication
- Suspended sentence
- Military court-martial

Misdemeanor speeding convictions are not required to be reported unless they are related to alcohol or drug use. For applicants who are not sure if they may be affected by these regulations, it is recommended that s/he considers the pre-application process to ascertain whether or not the applicant is eligible. The ARRT website can be found at [www.arrt.org](http://www.arrt.org).

Graduates of the associate degree Radiologic technology program are eligible to take the national certification examination administered by the American Registry of Radiologic Technologists (ARRT). Graduates who successfully pass the ARRT examination may use the initials RT(R) behind his/her name and are eligible for employment in all but a few a states without additional licensing examination requirements.

The Imaging Departments of Piedmont Medical Center (Rock Hill), Springs Memorial Hospital (Lancaster, SC), Chester County Hospital (Chester, SC) and Union Regional Medical Center (Monroe, NC) offer the necessary clinical education. The following offices are also used as clinical sites for the program: Carolina Orthopedic Clinic (Rock Hill, Lancaster & Fort Mill locations), Carolina Urology Clinic, Lowry's Family Medicine and Lancaster Diagnostic Center. During the two years of training, the program provides approximately 1528 hours of clinical education. It is planned to include routine and emergency radiographic procedures and is scheduled during weekdays on first and evening shifts during both years. The student will, on a regular schedule, rotate through all diagnostic and record keeping areas of the department and CT Scanning in the second-year. In addition, the student will have the opportunity to observe in Ultrasound, Nuclear Medicine, MR Imaging, Cardiac Catheterization Laboratory and Radiation Therapy departments. The classroom work at York Technical College along with the clinical education comprise approximately no more than 40 hours each week.



**RADIOLOGIC TECHNOLOGY  
ASSOCIATE IN HEALTH SCIENCE**

**GENERAL INFORMATION**

**BEGINNING SEMESTER:** 10 WK Summer Term

**LENGTH OF PROGRAM:** Two years (6 Semesters)

**ENTRANCE QUALIFICATIONS:**

There are 3 alternate tracts of qualifying for entry into the Rad Tech Program. All applicants must have a high school diploma or GED and qualify by one of the following tracts:

**1. Tract 1 – Asset or COMPASS Scores**

ASSET Score

41 Wri/43 Num and ElemAlg 31-42 or IntAlg 23-33/46 Reading

or

COMPASS Scores

70-100 Wri/54-100 PreAlg or 0-45 Alg/88 Reading

**2. Tract 2 – SAT or ACT Scores**

Either:

SAT: 400V/350M/800 Total (before 4/1/95)

or

SAT: 480V/400M/920 Total (after 4/1/95)

or

ACT 21E/16M/20 Comp

and 46 ASSET Reading or 88 COMPASS Reading

and 46 ASSET Reading or 88 COMPASS Reading

and 46 ASSET Reading or 88 COMPASS Reading

**3. Tract 3 – Health Science Certificate (30 Semester Credit Hours)**

This tract of program admission requires completion of the health science certificate with a 2.5 GPA. Suggested course of study is listed below:

Fall

AHS 101

AHS 102

BIO 210

COL 101

ENG 101

MAT 155

Spring

AHS 120

CPT 170

HSS 205

PSY 201

SPC 205

BIO 211

NOTE: Applicants must qualify by one tract only. Test scores cannot be mixed (ie. SAT V/ ASSET M). Any application who lacks a minimum ASSET reading score or COMPASS reading score will be required to take the appropriate Reading course for completion of RDG 101.

Upon qualifying and prior to having the name placed on the list, the applicant must:

1. Complete the computer-based program orientation
2. Sign the "technical standards" form
3. Schedule and complete the 4-hour hospital observation at Piedmont Medical Center (The applicant is responsible for scheduling this appointment with the Rad Tech Department faculty. Failure to keep the appointment without prior notification may result in loss of position on the list.)

After completing the observation/orientation requirement, the applicant must pay a \$50 nonrefundable, nontransferable fee to have his/her name placed on the list.

Qualified applicants are accepted into the program in the order in which they qualify. The applicant will receive a formal letter of acceptance into the program from Student Services. This letter will request

payment of the \$100 nonrefundable, nontransferable deposit for confirmation of intent to enroll. The deposit will later be applied towards the program tuition for the summer term.

The following items must be completed and turned into the department upon entering the Program in the first summer semester:

- (1) **Physical examination** completed with documentation turned in within first month of entering the program. This will include blood tests for immunization.
- (2) **Record of immunizations or immunity** (dates of vaccinations &/or dates of titer) for:
  - Measles, Mumps, (from shot record) **Rubella is documented by titer blood test only and results must be submitted to program director. You will request a titer for Rubella at the time you are having your physical from your physician. This is a requirement of hospitals in the state of South Carolina and North Carolina.**
  - Varicella (Chicken Pox) date of infection or vaccination. If neither are known, a titer blood test must be drawn on this as well and results submitted to program director.
  - **Tetanus**, must be up to date within last 5 years.
  - HBV (Hepatitis B Vaccination) -either proof of 3 shot-series was begun or a declination form signed from program manager.
- (3) Documentation of **Two-step Mantoux TB test-dates and results signed. Two tests must be Completed to confirm negative result unless proof of previous two step TB test can be provided. If you have proof of a previous two-step Mantoux signed by a physician, then a copy of that plus one new TB test with negative result will be sufficient.**
- (4) Copy of **current CPR certification card (American Heart Association 8-hour healthcare provider course only)**
- (5) Copy of **health insurance card** (The student must provide evidence that he/she is covered by a Health Insurance Policy in order to be allowed into the clinical facility, **or a policy can be purchased through York Technical College that will provide the necessary coverage. The student must also purchase liability insurance through York Tech when registering for classes for each year of the program.**)
- (6) Copy of **Social Security Card**
- (7) Copy of Valid **Driver's License or State ID** card
- (8) Payment of the **criminal background check** fee through the YTC business office. Receipt to Radiography Program Manager.
- (9) Required to submit to Drug Screens at Clinical sites **during orientation in the summer** beginning program. **These will be done at the clinical sites, program faculty will schedule for you during first semester.**
- (10) Signed copy of **OSHA questionnaire (orange form sent with physical form)** by physician at the time of physical exam.

**Failure to submit required documentation by the deadline may result in losing a slot in the program.**

Once enrolled in the program, the student must submit for any required drug screenings as determined by the clinical facilities and a criminal background check. Acceptance or refusal of a student's eligibility to participate in clinical is at the discretion of the clinical facility.

Acceptance and continuation in this program are contingent upon acceptance by the clinical facility for practicum training. If a student does not appear to be in good physical or mental health, as evidenced by his or her performance or behavior in the clinical practicum, a physical examination and a written report from a physician can be requested by the faculty.

Upon completion of this program, the graduate may seek employment in hospital radiology departments, minor emergency facilities, clinics, private doctor's offices, industries, and colleges. The current demand for qualified radiographers exceeds the supply.

## **GUIDELINES FOR CONSIDERATION OF ACCEPTING TRANSFER CREDIT FOR JRC ACCREDITED RADIOLOGIC TECHNOLOGY PROGRAMS**

Purpose: The purpose of this procedure is to identify guidelines for acceptable transfer credit for coursework completed at either hospital or college-sponsored, accredited Radiologic Technology Programs that is recognized by the Joint Review Committee on Education in Radiologic Technology.

Applicants requesting transfer into the Radiologic Technology Program at York Technical College must follow the Transfer and Advanced Placement Guidelines as stated in the Radiologic Technology Student Manual. Only coursework and/or credits that have been completed at an accredited college or at an accredited hospital-sponsored program (recognized by the Joint Review Committee on Education in Radiologic Technology) will be considered in the evaluation of submitted official transcripts. Acceptance of credit will be at the discretion of the Registrar, Division Dean, Vice President for Academic Affairs and the Department Manager. Requests for transfer/advanced placement into the Radiologic Technology Program are considered individually, and on a space-available basis.

### **GRADUATION REQUIREMENTS**

Students must complete 90 Semester credits with a minimum grade of "C" in all Radiology Technology courses and general education courses, and must complete all clinical competency requirements including final written and performance tests. An overall GPR of 2.0 must be maintained each semester.

### **CURRICULUM REQUIREMENTS**

#### **GENERAL EDUCATION COURSES**

These courses may be taken prior to entry into the Radiologic Technology Program:

- \*BIO 210 Anatomy and Physiology I
- \*BIO 211 Anatomy and Physiology II
- \*COL 101 College Orientation
- \*ENG 101 English Composition I
- \*HSS 205 Technology and Society
- \*MAT 155 Contemporary Mathematics
- \*PSY 201 General Psychology
- \*ELECTIVE (1 at a minimum of 3 hrs) suggested: AHS 102 Medical Terminology

#### **RADIOLOGIC TECHNOLOGY COURSES**

##### **SUMMER TERM:**

- \*RAD 102 Patient Care Procedures
- \*RAD 101 Introduction to Radiography
- \*RAD 152 Applied Radiography I

##### **FALL SEMESTER:**

- \*RAD 105 Radiographic Anatomy
- \*RAD 110 Radiographic Imaging I
- \*RAD 130 Radiographic Procedures I
- \*RAD 165 Applied Radiography II

##### **SPRING SEMESTER:**

- \*RAD 136 Radiographic Procedures II
- \*RAD 115 Radiographic Imaging II
- \*RAD 175 Applied Radiography III

##### **SUMMER SESSION:**

- \*RAD 121 Radiographic Physics
- \*RAD 230 Radiographic Procedures III
- \*RAD 256 Advanced Radiography I



FALL SEMESTER:

- \*RAD 210 Radiographic Imaging III
- \*RAD 201 Radiation Biology
- \*RAD 268 Advanced Radiography II

SPRING SEMESTER:

- \*RAD 278 Advanced Radiography III

LIST OF APPROVED ELECTIVES

COURSE		CREDIT HOURS	MINIMUM GRADE
**AHS	101 Intro to Health Professions	2.0	C
**AHS	<b>102 Medical Terminology</b> (recommended)	3.0	C
**AHS	120 Responding to Emergencies	2.0	C
**AHS	121 Pharmacology	2.0	C
**AHS	125 Allied Health Sciences	4.0	C
**CHM	101 General Chemistry I	4.0	C
**CPT	101 Introduction to Computers	3.0	C
**CPT	170 Microcomputer Applications	3.0	C
**ENG	102 English Composition	3.0	C
**ENG	160 Technical Communications	3.0	C
**PSY	201 General Psychology	3.0	C
**PSY	203 Human Growth & Development	3.0	C
**RDG	101 College Reading	3.0	C
**SOC	101 Intro to Sociology	3.0	C
**SOC	230 Intro to Gerontology	3.0	C
**SPC	205 Public Speaking	3.0	C

\*Courses in this program which require a minimum grade of "C."

**YORK TECHNICAL COLLEGE  
APPROXIMATE RAD PROGRAM EXPENSES**

<b>ITEMS</b>	<b>SUMMER</b>	<b>FALL</b>	<b>SPRING</b>	<b>TOTAL</b>
Non-refundable \$100 deposit paid to York Tech			\$ 100.00	\$ 100.00
Tuition (York County)*				
First Year	\$1608.00	\$1608.00	\$1608.00	\$4824.00
Second Year	\$1608.00	\$1608.00	\$1608.00	\$4824.00
Out-of-County - \$17644 (less than 12 credits per semester multiply credits times \$147.00)				
Out-of-State - \$3,696 (less than 12 credits per semester multiply credits times \$308.00)				
Textbooks & Course Syllabi	*See Booklist Included			
First Year & Second Year				\$1373.95 **
Film badges	\$43.00/sem. x 5 sem.			\$215.00
Uniforms, shoes, hose	\$200.00			\$ 200.00
Lead markers (recommend 2 sets)	\$28.50/set			\$ 57.00
Nametags	\$16.00			\$16.00
Liability Insurance				
First Year			\$ 15.00	
Second Year			\$ 15.00	\$ 30.00
Criminal Background check	\$54.50			\$54.50
Hepatitis B Vaccine (recommended)				\$ 225.00
Health Insurance (if not covered under another policy)	<i>Prices varies:</i>			
First Year	<i>Under 30 - \$386</i>			\$ 386.00
Second Year	<i>Over 30 - \$463</i>			\$ 386.00
				\$ 772.00
Registry Exam Fee				
Second Year			\$ 200.00	\$ 200.00
Graduation Fees				
Second Year		\$ 30.00		\$ 30.00
Physical Exam (varies)				
First Year/with Blood tests		\$ 175.00		\$ 175.00

The student is responsible for transportation between clinical and classroom locations and all expenses associated with this travel.

**TOTAL COST** Approx. \$ 12,881.45

Does not include purchasing health insurance policy through YTC

**\*\*\*\* COST SUBJECT TO VARY EACH YEAR \*\*\*\***

Additional miscellaneous expenses such as professional membership dues and out-of-town seminars and transportation that are required as a part of the student's professional adjustment will be encountered during the two-year program. An attempt is made to inform the student in advance so this will not be burdensome.

\*Does not include General Education or Electives

\*\*Cost of text books subject to change.

**RADIOLOGIC TECHNOLOGY**  
Suggested Sequence of Courses  
**Semester Curriculum Display**

<b>Summer Session (10 weeks)</b>		<b>CLASS</b>	<b>LAB</b>	<b>CREDIT</b>
COL 101	College Orientation	1.0	0	1.0
BIO 210	Anatomy and Physiology I	3.0	3.0	4.0
RAD 101	Introduction to Radiologic Technology	2.0	0	2.0
RAD 102	Patient Care Procedures	1.0	3.0	2.0
RAD 152	Applied Radiography I	2.0	0	2.0
Elective	(minimum of 3 credit hours)	<u>3.0</u>	<u>0</u>	<u>3.0</u>
(AHS 102 recommended)		12.0	6.0	14.0

**Fall Semester**

BIO 211	Anatomy and Physiology II	3.0	3.0	4.0
RAD 105	Radiographic Anatomy	4.0	0	4.0
RAD 130	Radiographic Procedures I	2.0	3.0	3.0
RAD 110	Radiographic Imaging I	2.0	3.0	3.0
RAD 165	Applied Radiography II	<u>0</u>	<u>15.0</u>	<u>5.0</u>
		10.0	27.0	19.0

**Spring Semester**

MAT 155	Contemporary Mathematics	3.0	0	3.0
ENG 101	English Composition I	3.0	0	3.0
RAD 136	Radiographic Procedures II	2.0	3.0	3.0
RAD 115	Radiographic Imaging II	2.0	3.0	3.0
RAD 175	Applied Radiography III	<u>0</u>	<u>15.0</u>	<u>5.0</u>
		10.0	21.0	17.0

**Summer Session**

RAD 230	Radiographic Procedures III	3.0	0	3.0
RAD 121	Radiation Physics	4.0	0	4.0
RAD 256	Advanced Radiography I	<u>0</u>	<u>18.0</u>	<u>6.0</u>
		7.0	18.0	13.0

**Fall Semester**

RAD 201	Radiation Biology	1.0	3.0	2.0
RAD 210	Radiographic Imaging III	3.0	0	3.0
RAD 268	Advanced Radiography II	<u>0</u>	<u>24.0</u>	<u>8.0</u>
		4.0	27.0	13.0

**Spring Semester**

HSS 205	Technology and Society	3.0	0	3.0
PSY 201	General Psychology	3.0	0	3.0
RAD 278	Advanced Radiography III	<u>0</u>	<u>24.0</u>	<u>8.0</u>
		6.0	24.0	14.0

**TOTAL CREDIT HOURS: 90.0**

**RADIOLOGIC TECHNOLOGY  
COURSE DESCRIPTIONS**

<b>RAD 101</b>	<b>INTRODUCTION TO RADIOGRAPHY</b>	<b>2 CR.</b>
	This course provides an introduction to radiologic technology with emphasis on orientation to the radiology department, ethics, and basic radiation protection.	
<b>RAD 102</b>	<b>PATIENT CARE PROCEDURES</b>	<b>2 CR.</b>
	This course provides a study of procedures and techniques used in the general care of the patient.	
<b>RAD 105</b>	<b>RADIOGRAPHY ANATOMY</b>	<b>4 CR.</b>
	This course includes the study of the structures of the human body and the normal function of its systems. Special emphasis is placed on radiographic anatomy.	
<b>RAD 110</b>	<b>RADIOGRAPHIC IMAGING I</b>	<b>3 CR.</b>
	This course provides detailed study of the parameters controlling radiation quality and quantity for radiographic tube operation and image production.	
<b>RAD 115</b>	<b>RADIOGRAPHIC IMAGING II</b>	<b>3 CR.</b>
	This course continues a detailed study of primary & secondary influencing factors and accessory equipment related to imaging.	
<b>RAD 121</b>	<b>RADIOGRAPHIC PHYSICS</b>	<b>4 CR.</b>
	This course introduces the principles of Radiographic Physics, incorporation theory and application of basic principles underlying the operation and maintenance of x-ray equipment.	
<b>RAD 130</b>	<b>RADIOGRAPHIC PROCEDURES I</b>	<b>3 CR.</b>
	This course provides an introduction to radiographic procedures. Positioning of the chest, abdomen, and extremities will be included.	
<b>RAD 136</b>	<b>RADIOGRAPHIC PROCEDURES II</b>	<b>3 CR.</b>
	This course provides instruction in radiographic procedures for visualization of the structures of the body.	
<b>RAD 152</b>	<b>APPLIED RADIOGRAPHY I</b>	<b>2 CR.</b>
	This course introduces the student to the clinical environment of the hospital by providing basic instruction in the use of radiographic equipment and routine radiographic procedures.	
<b>RAD 165</b>	<b>APPLIED RADIOGRAPHY II</b>	<b>5 CR.</b>
	This course provides an environment which allows the student to continue to receive instruction in the use of radiographic equipment and performance of radiographic procedures within the clinical environment of the hospital.	
<b>RAD 175</b>	<b>APPLIED RADIOGRAPHY III</b>	<b>5 CR.</b>
	This course provides the student with the clinical education needed for building competence in performing radiographic procedures within the clinical environment.	
<b>RAD 201</b>	<b>RADIATION BIOLOGY</b>	<b>2 CR.</b>
	This course provides instruction in the principles of radiobiology and protection. It emphasizes procedures that keep radiation exposure to patients, personnel, and the population at large to a minimum.	
<b>RAD 210</b>	<b>RADIOGRAPHIC IMAGING III</b>	<b>3 CR.</b>

This course provides a detailed study of advanced methods and concepts of imaging.

**RAD 230      RADIOGRAPHIC PROCEDURES III      3 CR.**

This course provides instruction in special radiographic procedures.

**RAD 256      ADVANCED CLINICAL RADIOGRAPHY I      6 CR.**

This course provides an environment for the student to function more independently while performing routine procedures in a working Radiology Department while also being more involved in advanced radiographic procedures.

**RAD 268      ADVANCED CLINICAL RADIOGRAPHY II      8 CR.**

This course provides an environment which allows the student to improve competence in the routine radiographic examinations, as well as advanced procedures, while continuing to build self-confidence in the clinical atmosphere.

**RAD 278      ADVANCED CLINICAL RADIOGRAPHY III      8 CR.**

This course provides an environment which allows the student to gain the self-confidence and competence necessary in routine and advanced radiographic procedures in the clinical environment.



## RADIOLOGIC TECHNOLOGY SECOND YEAR SCHEDULE

DEPARTMENT MANAGER: Michele Wells, BS. HCM, RT (R), (M), RDMS CLINICAL COORDINATOR: Kim Ford RT(R) I

	SUMMER SEMESTER (10 wks)					FALL SEMESTER					SPRING SEMESTER									
TIMES	MON	TUE	WED	THU	FRI	MON	TUE	WED	THU	FRI	MON	TUE	WED	THU	FRI					
8:00-9:00	RAD 256		RAD 256	RAD 256	RAD 256	RAD 268		RAD 268		RAD 268	RAD 278	HSS 205	RAD 278	HSS 205	RAD 278					
9:00-10:00	"	RAD 121	"	"	"	"	RAD	"	RAD	"	"	PSY	"	PSY	"					
10:00-11:00	"	"	"	"	"	"	201	"	201	"	"	201	"	201	"					
11:00-12:00	"	"	"	"	"	"	RAD	"	RAD	"	"		"		"					
12:00-1:00	"	LUNCH	"	LUNCH	"	"	210	"	210	"	"		"		"					
1:00-2:00	"	RAD 121	"	RAD 230	"	"		"		"	"		"		"					
2:00-3:00	"	"	"	"	"	"		"		"	"		"		"					
3:00-4:00	"	"	"	"	"	"		"		"	"		"		"					
4:00-5:00	"		"	"	"	"		"		"	"		"		"					
COURSE NUMBER	TITLE OF COURSE				CR/CON	INSTR	COURSE NUMBER	TITLE OF COURSE				CR/CON	INSTR	COURSE NUMBER	TITLE OF COURSE				CR/CON	INSTR
RAD 230	RADIOGRAPHIC PROCEDURES III				3/3 (4.8)	WELLS	RAD 201	RADIATION BIOLOGY				2/4	FORD	HSS 205	TECHNOLOGY AND SOCIETY				3/3	TBA
RAD 121	RADIATION PHYSICS				4/4 (6.4)	FORD	RAD 210	RADIOGRAPHIC IMAGING III				3/3	WELLS	PSY 201	GENERAL PSYCHOLOGY				3/3	TBA
RAD 256	ADVANCED RADIOGRAPHY I (off site – clinical)				6/18 (28.8)	FORD/WELLS	RAD 268	ADVANCED RADIOGRAPHY II (off site-clinical)				8/24	FORD/WELLS	RAD 278	ADVANCED RADIOGRAPHY III (off site – clinical)				8/24	WELL S/FORD
<b>TOTAL</b>					<b>13/25 (38)</b>		<b>TOTAL</b>					<b>13/31</b>		<b>TOTAL</b>					<b>14/30</b>	



RADIOLOGIC TECHNOLOGY  
BOOKLIST

COURSE	SUMMER TERM (10 WKS) (1)	COST
BIO 210	Anatomy and Physiology – TBA	
RAD 102	Patient Care Procedures Torres/Morrill, <u>Basic Medical Techniques and Patient Care in Imaging Technology</u> , Lippincott, 6 <sup>th</sup> Ed. #0-39755398-6	43.25
	Introduction to Radiologic Sciences and patient care, Adler and Carlton, Saunders, #0721697828	35.00
	Syllabus & CD rom	5.25
RAD 101	Introduction to Radiologic Technology Gurley/Callaway, <u>Introduction to Radiologic Technology</u> . Multimedia Publishing Co., 4th ed., #0815139845	40.00
	Ethical and Legal Issues for Imaging Professionals, Cook & Young, Mosby, #10-323045995	38.75
	Syllabus & CD rom	10.00
RAD 152	Applied Radiography I <u>Radiologic Technology Student Manual</u> <u>Clinical Competency Practice Log</u> , Printed by Print Shop. (RAD 165, 176, 257, 268, 278) Adler and Carlton-Introduction to Radiographic Imaging Syllabus CD	6.75 6.00 .00 10.00 3.00
ELECTIVE	TBA	
	<b>TOTAL COST</b>	<b>198.00</b>
	FALL SEMESTER (1)	
BIO 211	Anatomy and Physiology part II – TBA	
RAD 110	Radiographic Imaging I Papp, <u>Quality Management in the Imaging Sciences</u> , Mosby, ISBN #0-8151-2968-8	55.00
	Carlton & Adler, Principles of Radiographic Imagin, Delmar, ISBN# 1401871941 .	125.00
	Carlton & Adler, Wrkbook for above	55.00
	Radiographic Image Production, Shephard, McGraw Hill, ISBN # 0071375775	85.00
	DeAngelis, Integrated Radiography Workbook Syllabus CD	55.00  8.00
RAD 130	Radiographic Procedures I <u>Merrill's Atlas of Radiography, Vol 1, 2, &amp; 3</u> Merrill's Radiography Workbook-Hayes	200.00 42.95
	Workbook Vol 1 & 2	(42.95)
	Syllabus CD	7.15 3.00
RAD 165	Applied Radiography II Pocket Manual for Radiographic Anatomy and Positioning, ISBN # 8383-8237-0	26.00
	Clinical Competency practice logbook (Same as RAD 152)	6.00
	Syllabus	4.00
RAD 105	Radiographic Anatomy (same as RAD 130 and 136)	

	Eisenbert/Johnson, <u>Comprehensive Radiographic Pathology</u>	75.00
	Mosby pub., ISBN# 0-323-01625-1	
	Syllabus	7.40
	CD	3.00
	<b>TOTAL COST</b>	<b>757.50</b>
	<b>SPRING SEMESTER (1)</b>	
RAD 136	Radiographic Procedures II Same as RAD 130	
	Syllabus	8.00
	CD	3.00
RAD 115	Radiographic Imaging II Syllabus	5.00
RAD 175	Applied Radiography III Same as RAD 152 and RAD 165	
	Syllabus	5.00
MA I 155	I BA	
ENG 101	TBA	
	<b>TOTAL COST</b>	<b>21.00</b>
	<b>SUMMER SEMESTER (2)</b>	
RAD 121	Same as RAD 110	
	Syllabus	6.50
	CD	3.00
RAD 230	Radiographic Procedures III Drake, Michael, <u>Trauma and Mobile Radiography</u> , F.A. Davis Co., ISBN# 0-8036-2805-6, also same as RAD 130, 136, 210	35.00
	Syllabus	8.00
	CD	3.00
RAD 256	Advanced Radiography I Same as RAD 152, 165, 175	
	Syllabus	3.75
	<b>TOTAL COST</b>	<b>59.25</b>
	<b>FALL SEMESTER (2)</b>	
RAD 210	Radiographic Imaging III Same as RAD 110, 115, 230	55.00
	Digital Radiography & PACS, Mosby, ISBN#9780323044448	
	Syllabus	18.00
	CD	3.00

RAD 201	Radiation Biology Statkiewicz Sherer, Mosby, ISBN #0-323-01452-6	48.95
	Syllabus	12.00
	CD	3.00
RAD 268	Advanced Radiographic II Same as RAD 152, 165, 176, 257	
	Syllabus	3.00
TOTAL COST		<b>142.95</b>

SPRING SEMESTER (2)

RAD 278	Advanced Radiography III Same as RAD 152, 165, 175, 256, 268	
	Syllabus	
	Cummings, <u>Comprehensive Set of Review Questions for Radiography</u> , Correctec	48.00
	Carlton, <u>Radiography Exam Review</u> , Lippincott ISBN #0397-54899-0	43.25
	Saia, <u>Radiography Examination</u> , Appleton and Lange, 7th ed., ISBN #0838502806	50.00
	Callaway, <u>Mosby's Comprehensive Review of Radiography</u> , ISBN #0815113897	50.00
	Syllabus	4.00
PSY 201	General Psychology - TBA	
HSS 205	Technology and Society - TBA	
TOTAL COST		<b>195.25</b>
TOTAL PROGRAM TEXTBOOK COST		<b>1373.95</b>

Books for general education courses are not included in total cost.  
All costs are subject to change without notice.  
Prices as of 7-02-09

**YORK TECHNICAL COLLEGE  
TECHNICAL STANDARDS FOR ADMISSION INTO RADIOLOGIC TECHNOLOGY PROGRAM**

**ESSENTIAL FUNCTIONS OF A RADIOGRAPHER:**

1. Perform Radiologic examinations including:
  - A. Obtain and document patient history
  - B. Explain procedure to patient and address patient concerns
  - C. Position patient properly using immobilization or support devices as necessary
  - D. Assess patient condition
  - E. Produce film using accepted technique.
  - F. Report any unusual occurrences or changes in patient condition to appropriate staff
2. Clean and maintain equipment and room
3. Assist in maintenance of room supplies
4. Prepare and administer contrast agents and other chemical mixtures
5. Implement emergency procedures and administer first aid including CPR.

**MINIMUM QUALIFICATIONS NECESSARY TO PERFORM ESSENTIAL FUNCTIONS OF A RADIOGRAPHER**

Physical Requirements: The position of Radiologic Technologist has been given a strength rating of **Light Work** by the US Dictionary of Occupational Titles (exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or a negligible amount of force to move objects in activities or conditions existing two-thirds of the work shift.) Included in the physical requirements are the positioning and moving of patients manually and by stretcher or wheelchair. When performing these functions with large patients, strength necessary may exceed the DOT rating. Position also includes intermittent sitting, standing, walking, frequent reaching, occasional twisting and bending, and exposure to fumes. Both hands are used for power grip, speed and precision work. Use of both feet is required.

I am capable of meeting these requirements  
I am not capable of meeting these requirements  
I am capable of meeting these requirements with the following accommodations:

Data Conception: Requires the ability to gather, collate or classify information about data, people or things. Reporting and/or carrying out a prescribed action in relation to the information are frequently involved.

I am capable of meeting these requirements  
I am not capable of meeting these requirements  
I am capable of meeting these requirements with the following accommodations:

Color Discrimination: Requires the ability to differentiate colors and shades of color.

I am capable of meeting these requirements  
I am not capable of meeting these requirements  
I am capable of meeting these requirements with the following accommodations:

Manual Dexterity/Motor Coordination: Requires the ability to use body members to start, stop, control and adjust the progress of machines or equipment. Operating machines involves setting up and adjusting the machine or material as the work progresses. Controlling involves observing gauges, dials, etc. and turning switches and other devices. Must have good eye/hand/foot coordination.

I am capable of meeting these requirements  
I am not capable of meeting these requirements  
I am capable of meeting these requirements with the following accommodations:

Interpersonal Communication: Requires the ability to apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions. Interpret an extensive variety of technical instructions in mathematical or diagrammatic form. Deal with several abstract and concrete variables.

I am capable of meeting these requirements  
I am not capable of meeting these requirements  
I am capable of meeting these requirements with the following accommodations:

Physical Communication: Requires the ability to speak and/or hear (express self by spoken words and perceive sounds by ear.)

I am capable of meeting these requirements  
I am not capable of meeting these requirements  
I am capable of meeting these requirements with the following accommodations:

Reasoning Development: Requires the ability to apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions. Interpret an extensive variety of technical instructions in mathematical or diagrammatic form. Deal with several abstract and concrete variables.

- I am capable of meeting these requirements
- I am not capable of meeting these requirements
- I am capable of meeting these requirements with the following accommodations:

Language Development: Requires the ability to read and understand complex information from scientific and/or technical journals, papers, etc. Requires the ability to communicate the same types of complex information and data through speech and in writing using proper format, punctuation, spelling, grammar and using all parts of speech.

- I am capable of meeting these requirements
- I am not capable of meeting these requirements
- I am capable of meeting these requirements with the following accommodations:

Numerical Ability: Requires the ability to determine time, weight and to perform practical applications of fractions, percentages, ratio and proportion as well as basic addition, subtraction, multiplication, and division operations.

- I am capable of meeting these requirements
- I am not capable of meeting these requirements
- I am capable of meeting these requirements with the following accommodations:

Form/Spatial Ability: Requires the ability to inspect dimensions of items and to visually read information and data.

- I am capable of meeting these requirements
- I am not capable of meeting these requirements
- I am capable of meeting these requirements with the following accommodations:

Personal Temperament: Requires the ability to deal effectively with stress produced by work and guest interaction situations that may be of critical or emergency situation.

- I am capable of meeting these requirements
- I am not capable of meeting these requirements
- I am capable of meeting these requirements with the following accommodations:

STUDENT'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

STUDENT'S **PRINTED** SIGNATURE \_\_\_\_\_