Radiologic Sciences

Department Information

<table>
<thead>
<tr>
<th>Department of Radiologic Sciences Administrative Staff</th>
<th>(251) 445-9346</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Dale Smith, Interim</td>
</tr>
<tr>
<td>Medical Advisor</td>
<td>Maria S. Figarola M.D.</td>
</tr>
<tr>
<td>Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Instructors</td>
<td>Brewer, Cleveland, Cooper, Jalkh, Pohlmann, Smith</td>
</tr>
<tr>
<td>Teaching Technologists</td>
<td>Davis, Blow</td>
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Department of Radiologic Sciences web site
http://www.southalabama.edu/colleges/alliedhealth/radiologicsciences

Programs Offered:

Bachelor Of Science In Radiologic Sciences

Since its inception in 1976, the Department of Radiologic Sciences has provided a quality educational program with a sustained emphasis upon graduating competent and compassionate healthcare professionals. In so doing, our graduates are prepared to practice their profession in the often complex and global society of the 21st century.

The baccalaureate program is designed to provide graduates with enhanced career opportunities in radiology as administrators, educators, and advanced imaging specialists. The curriculum provides a broad education in liberal arts and basic sciences and an in-depth study in radiologic sciences.

Educational opportunities in diagnostic imaging and advanced imaging modalities such as mammography, magnetic resonance imaging, vascular radiography, computed tomography, radiology administration, ultrasound, and radiation therapy are offered. Following completion of the pre-professional component and admission to the professional component of the program, students will study general radiography for three semesters. At the end of this first year in the professional component, students will select one of the following tracks to complete: general radiography to include one advanced imaging modality, ultrasound, or radiation therapy.

The general radiography track curriculum includes diagnostic radiology and either mammography, computed tomography, magnetic resonance imaging, vascular radiography, and/or radiology administration. Students completing didactic and clinical requirements in these tracks will be eligible to seek certification through the American Registry of Radiologic Technologists (ARRT) in radiography and the advanced modality studied (excluding radiology administration).

The other two baccalaureate tracks allow students completing the first year of general radiography curriculum to select either ultrasound or radiation therapy during their senior year. Those who choose one of these tracks will not be eligible to seek ARRT certification in radiography, but will be eligible for ARRT certification in radiation therapy or ARRT and American Registry of Diagnostic Medical Sonographers (ARDMS) certification as an ultrasonographer upon completion of didactic and clinical requirements.

Pre-professional Component

Degree seeking students must complete the 53-63 semester hour pre-professional component prior to enrolling in professional component courses.

Professional Component

The professional component (junior and senior years) consists of two years of academic and clinical study in Radiologic Sciences. The program is six semesters in length, including two summer terms. All candidates must have satisfied the pre-professional
component to qualify for the degree-seeking professional component, but completion of that component does not guarantee admission to the professional component. Enrollment in the professional component is limited by the number of clinical positions available, which is equally true for the advanced modalities. During the professional component, students must be prepared to travel up to 90 miles from campus in order to participate in the clinical education component of the curriculum.

Program Accreditation

The radiography and radiation therapy programs are accredited by the Joint Review Committee on Education in Radiologic Technology, 20 North Wacker Drive, Suite 2850, Chicago, Illinois, 60706-3182. For more information go to www.jrcert.org.

ADMISSION REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN RADIOLOGIC SCIENCES PROGRAM

1. Completion of all required pre-professional courses by the end of the summer semester prior to desired admission for Fall semester. Students are admitted to the professional component in the Fall semester only.
3. Acceptance to the University of South Alabama.
4. Submit official college transcripts for all coursework not completed at the University of South Alabama. Transcripts are not required if the coursework has already been transferred to USA.
5. Application deadline is May 1.
6. Submit official ACT or SAT scores, regardless of previous educational background. If individual scores for Math, English and Natural Sciences on the ACT are below 18, it is strongly advised that the test be retaken. ACT or SAT scores must be submitted by the application deadline of May 1.
7. Submission of three (3) completed personal reference forms by the application deadline. Reference forms are available at http://www.southalabama.edu/colleges/alliedhealth/radiologicsciences.
8. Have a minimum cumulative GPA of 2.0 ("C" average) on previously completed college-level courses. Transcripts must be submitted by the application deadline. For students who are attending or have attended USA, the USA GPA will be used. GPA's from outside courses are not averaged into the USA GPA.
9. Students applying for admission to the professional component must complete four (4) hours of observation in a hospital Radiology department prior to reporting for the admission interview. Following submission of the departmental application, applicants may call the Department of Radiologic Sciences at (251) 445-9346 any time after January 10th during the year in which they plan to apply, and schedule a hospital observation appointment. Observation form and instructions are available at http://www.southalabama.edu/colleges/alliedhealth/radiologicsciences.
10. Meet program technical/core performance standards. Core performance standards are fundamental tasks and skills that are required for successful completion of the program. They have been outlined and are available upon request and on the department web site under Frequently Asked Questions (FAQ).
11. Complete a brief writing assignment conducted on the day of interview.
12. Complete a personal interview with members of the Radiologic Sciences Admissions Committee.
13. Applicants will be screened on the basis of past educational performance and the potential for the number of openings available. Therefore, acceptance into the University does not guarantee admission into the program. Likewise, admission into the program does not guarantee a position in a particular track/modality for one's senior year.
14. Student acceptance into the program is provisional pending completion of a drug screen and background check requirements as specified in the acceptance letter. Refusal to submit will result in nullification of acceptance into the program.
15. Proof of medical insurance must be provided following official notification of acceptance into the program. Due date will be specified in the acceptance letter.
16. ARRT certified radiographers who have completed the pre-professional component and are seeking the baccalaureate degree may apply for admission into the second year (senior year) of the professional component.
17. International students must score a minimum of 76 on the TOEFL exam to include the following minimum sub-scores on the IBT:

   Listening 20   Speaking 20   Reading 18   Writing 18

The IELT exam will not be used as an admission requirement to the Radiologic Sciences Program
Special Fees

Special lab fees are assessed for the following courses:
- RAD 304 - $130
- RAD 307 - $15
- RAD 308 - $15
- RAD 309 - $15
- RAD 417 - $15
- RAD 418 - $15
- RAD 460 - $130
- Trajecsys computer fee - $150.00

Areas Of Study

Radiologic Sciences (BS)

Courses

Radiologic Sciences (RAD)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>RAD 300</td>
<td>Clinical Education I</td>
<td>2 cr</td>
<td>Hospital-based laboratory allowing the student additional clinical experience in RAD 312 and RAD 304.</td>
</tr>
<tr>
<td>RAD 301</td>
<td>Clinical Education II</td>
<td>4 cr</td>
<td>Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 307. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)</td>
</tr>
<tr>
<td>RAD 302</td>
<td>Clinical Ed III</td>
<td>3 cr</td>
<td>Hospital-based laboratory allowing the student additional clinical experience.</td>
</tr>
<tr>
<td>RAD 304</td>
<td>Patient Care &amp; Ethics</td>
<td>3 cr</td>
<td>Basic knowledge concerning patient care and ethical situations with which the radiologic technologist must be familiar. Class time is allotted for the student to practice certain techniques pertinent to obtaining vital signs, handling of patients, sterile technique, tray setup, first-aid measures, and general operating room and bedside radiography procedures.</td>
</tr>
<tr>
<td>RAD 306</td>
<td>Clinical Education VI</td>
<td>5 cr</td>
<td>Hospital-based laboratory allowing the student to gain increased clinical experience in general radiographic procedures.</td>
</tr>
<tr>
<td>RAD 307</td>
<td>Osseous I</td>
<td>4 cr</td>
<td>This course includes the demonstration and practice in positioning and phantom radiography of the chest, general abdomino-pelvic viscera, and the upper and lower extremities to include shoulder and pelvic girdles. Special Fee.</td>
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<tr>
<td>RAD 308</td>
<td>Osseous II</td>
<td>4 cr</td>
<td>Continuation of RAD 307 to include the axial skeleton, sternum, sternoclavicular joints and introductory topics relating to special radiographic procedures. Special Fee. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)</td>
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<tr>
<td>RAD 309</td>
<td>Osseous III</td>
<td>3 cr</td>
<td>Continuation of RAD 308 to include demonstration and practice in positioning and phantom radiography of the cranium, facial bones, optic foramina, TMJs, orbits, overview of mastoids, stereoscopy, tomography, long bone measurements, foreign body localization and fetal imaging.</td>
</tr>
<tr>
<td>RAD 310</td>
<td>Radiation Biology</td>
<td>2 cr</td>
<td>A study of health physics and methods used to reduce exposure to personnel and patients in diagnostic and therapeutic radiology. The biological effects of ionizing radiation are stressed along with applied mathematical principles.</td>
</tr>
<tr>
<td>RAD 312</td>
<td>Princ of Radiographic Exposure</td>
<td>4 cr</td>
<td>A beginning study of the principles involved in image formation including exposure factors affecting image quality.</td>
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</table>
RAD 315  Contrast Media  2 cr  
A detailed study of contrast media, preparation and administration, radiographic positions, technique, and anatomy and physiology of the organs studied.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)  

RAD 318  Radiologic Physics  4 cr  
A study of the fundamentals of magnetism, basic electricity, x-ray machine circuitry, x-ray protection, and radiation physics, to give the student a basic understanding of the principles underlying the production of x-rays and their interaction with matter.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)  

RAD 320  Cross-Sectional Anatomy  2 cr  
A study of cross-sectional anatomy as imaged in MRI and CT.  

RAD 335  Pediatric-Geriatric Rad  1 cr  
A detailed study of specialized equipment, accessories and positioning techniques used in pediatric and geriatric radiography.  

RAD 403  Clinical Education IV  4 cr  
Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 308 and RAD 310.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)  

RAD 404  Clinical Education V  4 cr  
Hospital-based laboratory allowing the student to obtain clinical experience.  
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 107 Minimum Grade of C) and (RAD 411 Minimum Grade of C) and RAD 415 Minimum Grade of C  

RAD 405  Clinical Education VI  4 cr  
Hospital-based laboratory allowing the student to obtain clinical experience.  
Pre-requisite: RAD 404 Minimum Grade of C  

RAD 407  Clinical Education I - PPC  6 cr  
This is a hospital based laboratory allowing the student to gain additional clinical experience in general radiographic procedures. This course is designed for students who have previously completed the Radiologic Sciences program in Ultrasound or Radiation Therapy.  

RAD 408  Clinical Education II - PPC  6 cr  
This is a hospital based laboratory allowing the student to gain additional clinical experience in general radiographic procedures. This course is designed for students who have previously completed the Radiologic Sciences program in Ultrasound or Radiation Therapy. This course is a continuation of RAD 407.  
Pre-requisite: RAD 407 Minimum Grade of C  

RAD 411  Survey of Pathology  4 cr  
A general survey of diseases designed to acquaint the student with certain changes that occur in disease and their application to radiologic sciences.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)  

RAD 415  Diagnostic Imaging II  4 cr  
This course will be a continuation course of RAD 324 to include principles and clinical applications of image intensification, computer applications in radiology, CR, DR, IDDR, PACS, AEC function, magnification radiography, thermography, diaphanography and bone densitometry.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)  

RAD 417  Ultrasound Anatomy & Scanning  4 cr  
This course is designed to provide the student with anatomy, pathology and scanning techniques of the abdomen, retroperitoneum and superficial structures. It includes clinical and laboratory demonstrations. Special Fee.  

RAD 418  Ultras Anat-Scan Tech-OB-GYN-W  3 cr  
This course is a continuation of RAD 417 and is designed to provide the student with anatomy, pathology and scanning techniques of obstetrics and gynecology. It includes clinical and laboratory demonstrations. Special fee.  
Pre-requisite: RAD 417 Minimum Grade of C  

RAD 421  Ultras Physics-Instrumentation  3 cr  
A study of the basic physical principles and instrumentation of diagnostic ultrasound.
RAD 423 Ultrasound Clinical Educ I 5 cr
Hospital-based laboratory allowing the student to gain clinical experience in ultrasound procedures, with emphasis on abdominal exams.

RAD 424 Ultrasound Clinical Educ II 5 cr
Continuation of RAD 423 allowing the student to gain clinical experience in ultrasound procedures, with emphasis on OB/GYN exams.
Pre-requisite: RAD 423 Minimum Grade of C

RAD 425 Ultrasound Clinical Educ III 5 cr
A continuation of RAD 424 allowing the student to gain clinical experience in ultrasound procedures, with emphasis on superficial structures, pediatric scans, and ultrasound guided procedures.
Pre-requisite: RAD 424 Minimum Grade of C

RAD 427 Proced Guide - Ultrasound - W 3 cr
This course will include a review of guidelines for ultrasound exams, ethics in ultrasound and preparation for the ultrasound registry. Assigned student papers and oral presentations addressing ultrasound topics are required.

RAD 430 Healthcare Communication 3 cr
This course will provide knowledge of information technology and applications of IT in the healthcare setting. Topics of discussion will include how to foster interdisciplinary communication, development of action plans for areas that are compliant/non-compliant with organizational objectives, and utilization of electronic or manual systems.
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

RAD 432 Healthcare Human Resource Mgmt 3 cr
This course will enable students to develop an effective recruitment and staffing program, implement a retention program, conduct staff performance evaluations, establish and develop processes to expand employee competence, implement a leadership development program, develop a succession plan and create an employee recognition program.
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

RAD 433 Health Care Financial Mgmt 3 cr
Course provides students with knowledge of both fiscal and asset management health care organization with tools and techniques to include health care accounting and financial statement, making major capital investments, determining cost and using cost information in decision making, and budgeting performance management.

RAD 435 Health Care Operations Mgt - W 3 cr
Provide knowledge to use surveys, focus groups, and interviews, use quality improvement methods, develop industry partnerships and develop new opportunities, develop marketing and public relations plans, develop policies and procedures to follow federal, state, and other regulatory guidelines, enforce policies and procedures with monitoring techniques, and develop a quality management program.

RAD 437 Image Analysis 3 cr
Student radiographs taken during the clinical periods will be viewed and critiqued within the classroom.
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 411 Minimum Grade of C or RAD 311 Minimum Grade of C) and RAD 415 Minimum Grade of C

RAD 440 Radiology Management Preceptor 1 cr
To achieve the aims of the Radiology Management program, students require experience in a variety of settings, in addition to learning theory content in their management courses. This course will provide a valuable component of student development by providing an opportunity to work with professional radiology managers/supervisors/administrators in the field of Radiology.
Pre-requisite: RAD 430 Minimum Grade of C and RAD 432 Minimum Grade of C and RAD 433 Minimum Grade of C and RAD 435 Minimum Grade of C

RAD 441 Clinical Education I 5 cr
Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy.

RAD 442 Clinical Education II 6 cr
A continuation of RAD 441. Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy.

RAD 443 Clinical Education III 7 cr
A continuation of RAD 442. Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy.
RAD 446 Orientation to Oncology - W 3 cr
Examines Oncology terminology, concepts of diagnosis and treatment, orientation to equipment and procedures and the role of the radiation therapist. Ethical, legal and quality assurance concerns will also be discussed.

RAD 448 Radiation Therapy Physics 3 cr
Processes in radiation production, interactions, detection, and measurement, units, calibration, are presented. Routine and emergency protection procedures for radiation-producing devices and radioactive sources are emphasized. Includes discussions on quality assurance methods, treatment unit calibration, dose monitoring, beam verification, and radiation protection for the patient, healthcare worker, and the public.

RAD 450 Patient Care in Oncology 1 cr
Fundamentals of oncology patient care with emphasis on physical and psycho-social needs assessment, treatment and disease side-effect management, nutritional care and pain management.

RAD 452 Prin Pract of Rad Oncology I 3 cr
A study of techniques used for simulation and treatment delivery. Includes general and site-specific instruction, with attention given to technical details aimed at optimizing the dose delivery planned during simulation and accomplished during treatment. Time will be dedicated to demonstration of techniques.

RAD 453 Prin Prac of Rad Oncology II 3 cr
A study of techniques used for simulation and treatment delivery. Includes general and site-specific instruction, with attention given to technical details aimed at optimizing the dose delivery planned during simulation and accomplished during treatment. Time will be dedicated to demonstration of techniques.

RAD 454 Quality Mgt In Rad Oncology 1 cr
Components of quality management in Radiation Oncology will be studied, to include quality control and assurance checks for the clinical aspects of patient care, medical records, treatment delivery and localization equipment and treatment planning equipment. The role of various team members in continuous quality improvement will be discussed as well as legal and regulatory implications. Pre-requisite: RAD 441 Minimum Grade of C and RAD 448 Minimum Grade of C and RAD 446 Minimum Grade of C and RAD 450 Minimum Grade of C and RAD 452 Minimum Grade of C

RAD 455 Dosimetry and Tx Planning I 3 cr
Content designed to examine those factors that influence and govern clinical planning treatment. Encompasses isodose characteristics, contouring of relevant structures, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized.

RAD 456 Dosimetry and Tx Planning II 2 cr
A continuation of RAD 455. Content designed to examine factors that influence and govern clinical planning of patient treatment. Encompasses isodose characteristics, contouring of relevant structures, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized.

RAD 458 Cancer Mgt in Oncology - W 3 cr
This course examines special topics in Radiation Oncology and places emphasis on current literature related to various aspects of practice.

RAD 460 Vascular Radiograph I 4 cr
Advanced practice in, and in-depth study of, the principles of vascular radiography. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

RAD 461 Vascular Radiography II 4 cr
Advanced practice in, and in-depth study of, the principles of vascular radiography. Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 411 Minimum Grade of C or RAD 311 Minimum Grade of C) and RAD 415 Minimum Grade of C and (RAD 460 Minimum Grade of C or RAD 401 Minimum Grade of C)

RAD 462 Vascular Radiography III-W 4 cr
Advanced practice in, and in-depth study of, the principles of vascular radiography. Pre-requisite: RAD 461 Minimum Grade of C

RAD 464 Computerized Tomography I 4 cr
Advanced practice in, and in depth study of, computerized tomography. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

RAD 465 Computerized Tomography II 4 cr
Advanced practice in, and in-depth study of, computerized tomography. Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 411 Minimum Grade of C or RAD 311 Minimum Grade of C) and RAD 415 Minimum Grade of C and (RAD 460 Minimum Grade of C or RAD 401 Minimum Grade of C)
RAD 466  Computerized Tomog III-W  4 cr
Advanced practice in, and in-depth study of, computerized
tomography.
Pre-requisite: RAD 464 Minimum Grade of C and RAD 465
Minimum Grade of C

RAD 468  Magnetic Resonance Imaging I  4 cr
An in-depth study of the principles and clinical applications
of MRI.
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107
Minimum Grade of C) and (RAD 304 Minimum Grade of C
or RAD 104 Minimum Grade of C) and (RAD 307 Minimum
Grade of C or RAD 131 Minimum Grade of C) and (RAD
310 Minimum Grade of C or RAD 265 Minimum Grade of C)
and (RAD 312 Minimum Grade of C or RAD 101 Minimum
Grade of C)

RAD 469  Magnetic Res Imaging II  4 cr
An in-depth study of the principles and clinical applications
of MRI.
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204
Minimum Grade of C) and (RAD 411 Minimum Grade of C
or RAD 311 Minimum Grade of C) and RAD 415 Minimum
Grade of C and (RAD 468 Minimum Grade of C or RAD 409
Minimum Grade of C)

RAD 470  Magnetic Resonance Img III-W  4 cr
An in-depth study of the principles and clinical applications
of MRI.
Pre-requisite: RAD 468 Minimum Grade of C and RAD 469
Minimum Grade of C

RAD 472  Mammography I  4 cr
Advanced practice and in-depth study of breast imaging
techniques.
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107
Minimum Grade of C) and (RAD 304 Minimum Grade of C
or RAD 104 Minimum Grade of C) and (RAD 307 Minimum
Grade of C or RAD 131 Minimum Grade of C) and (RAD
310 Minimum Grade of C or RAD 265 Minimum Grade of C)
and (RAD 312 Minimum Grade of C or RAD 101 Minimum
Grade of C)

RAD 473  Mammography II  4 cr
Advanced practice and in-depth study of breast imaging
techniques.
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204
Minimum Grade of C) and (RAD 411 Minimum Grade of C
or RAD 311 Minimum Grade of C) and RAD 415 Minimum
Grade of C and (RAD 472 Minimum Grade of C or RAD 413
Minimum Grade of C)

RAD 474  Mammography III-W  4 cr
Advanced practice and in-depth study, of breast imaging
techniques.
Pre-requisite: RAD 472 Minimum Grade of C and RAD 473
Minimum Grade of C

RAD 490  Special Topics -  1 TO 3 cr
Selected topics in Radiological Sciences. Students can
increase knowledge in specific areas of radiological
sciences, and also use this course to gain extra credit hours
to complete their baccalaureate degree.

RAD 491  Prof. Radiological Practice  6 cr
A bridge course for certified radiographers to transition from
Radiographer to BS program.

RAD 494  Directed Independent Study-W  2 cr
A comprehensive registry review to include written
assignments and a presentation.

RAD 496  Radiologic Science Research I  1 cr
Prepare students to perform a research project in one of the
imaging modalities.
Pre-requisite: RAD 403 Minimum Grade of C or RAD 423
Minimum Grade of C or RAD 441 Minimum Grade of C or
RAD 450 Minimum Grade of C or RAD 460 Minimum Grade of C
or RAD 468 Minimum Grade of C or RAD 472 Minimum
Grade of C

RAD 497  Rad Science Research II  1 cr
Continuation of RAD 496. Students will design and perform
a research project.
Pre-requisite: RAD 496 Minimum Grade of C

RAD 499  Senior Honors Project - H - W  3 TO 6 cr
Under the advice and guidance of a faculty mentor, honors
students will identify and carry out a research project
relevant to the field of Radiologic Sciences study that will
lead to a formal presentation at the annual Honors Student
Colloquium. The senior project will be judged and graded
by three faculty members chaired by the honors mentor.
This course is required for Honors recognition and may be
repeated for up to 6 credit hours. Prerequisite: Permission of
the department chair and completion of an approved project
prospectus.
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204
Minimum Grade of C) or RAD 423 Minimum Grade of C
or RAD 441 Minimum Grade of C or RAD 450 Minimum Grade of C
or RAD 460 Minimum Grade of C or RAD 401 Minimum Grade of C
or RAD 464 Minimum Grade of C or RAD 405 Minimum Grade of C
or (RAD 468 Minimum Grade of C or RAD 409 Minimum
Grade of C) or (RAD 472 Minimum Grade of C or RAD 413
Minimum Grade of C)

Faculty
BREWER, PATRICIA A.
Senior Instructor
BS, University of St Francis
MPA, University of South Alabama

CLEVELAND, DONNA G.
Instructor
BS, University of South Alabama
MED, University of South Alabama

COOPER, CATHERINE M.
Senior Instructor
BSRS, University of South Alabama
MS, University of South Alabama

JALKH, CHUCRI M.
Senior Instructor
BS, University of South Alabama
MS, University of South Alabama

POHLMANN, CHERIE L.
Senior Instructor
AS, Mississippi Gulf Coast CC
BS, William Carey College
MS, University of South Alabama

SMITH, MELTON D.
Instructor
BS, University of South Alabama
MHAi, University of Phoenix