

PRE-MEDICAL IMAGING ADVISEMENT WORKSHEET - OUHSC 2018-2019

University of Central Oklahoma

Health Professions Advisor
Department of Biology
200 Howell Hall
(405) 974-5955

OU REQUIREMENTS

CORE AREA 1: Symbolic and Oral Communication

				<u>UCO Equivalent</u>	Course at Another Institution	Grade	Hours
<input type="checkbox"/>	ENGL	1113	Prin. of English Comp. I	ENG 1113	_____	_____	_____
<input type="checkbox"/>	ENGL	1213	Prin. of English Comp. II	ENG 1213	_____	_____	_____
<input type="checkbox"/>	Foreign Lang. [] H.S. (2 yrs) or [] College (2 courses)			_____	_____	_____	_____
<input type="checkbox"/>	MATH	1503	College Algebra	MATH 1513	_____	_____	_____
<input type="checkbox"/>	CLC	2413	Medical Vocabulary	BIO 2102	_____	_____	_____
<input type="checkbox"/>	ENGL	1913	Technical Writing	ENG 4023	_____	_____	_____

CORE AREA 2: Natural Sciences

<input type="checkbox"/>	CHEM	1315	General Chemistry	CHEM 1103 + 1112	_____	_____	_____
<input type="checkbox"/>	PHYS	2414	Physics-Life Science Major	PHYS 1114**	_____	_____	_____
<input type="checkbox"/>	BIO	1114	Introduction to Zoology w/lab	BIO1114 or 1204	_____	_____	_____
<input type="checkbox"/>	BIO	2255	Human Anatomy	BIO 2504 or FNRL 2214	_____	_____	_____
<input type="checkbox"/>	BIO	2124	Human Physiology	BIO 2604**	_____	_____	_____

****At UCO, prerequisites for the courses above will include MATH 1593; and BIO 2203 or 2314**

CORE AREA 3: Social Sciences

<input type="checkbox"/>	PSC	1113	Government of the U.S.	POL 1113	_____	_____	_____
<input type="checkbox"/>	PSY	1113	Elements of Psychology	PSY 1103	_____	_____	_____
<input type="checkbox"/>	SOC	1113	Intro to Sociology	SOC 2103	_____	_____	_____

CORE AREA 4: Humanities

<input type="checkbox"/>	HIST	1483	U.S. History 1492-1865 or	HIST 1483 or 1493	_____	_____	_____
<input type="checkbox"/>	HIST	1493	U.S. History 1865-Present		_____	_____	_____
<input type="checkbox"/>	*Understanding Artistic Forms (3 hours)			_____	_____	_____	_____
<input type="checkbox"/>	*Western Civilization & Culture (3 hours)			_____	_____	_____	_____
<input type="checkbox"/>	*Non-Western Culture (3 hours)			_____	_____	_____	_____

ELECTIVES: Make up the balance of hours needed to equal **64 hours**.

• Students must take at least one upper division General Education course

Beginning in 2017, all courses except Physics, American Government, and Understanding Artistic Forms must be completed prior to the March 1 application deadline.

KEY:* Use the OU Transfer course finder: <http://www.ah.ouhsc.edu/main/transferequival transcripteval.asp>

NOTE: This document is an unofficial evaluation of credentials based upon available information and/or documentation provided by the potential applicant. The potential applicant must contact the department of interest to secure formal approval of the evaluation.

Pre-Medical Imaging

The Department of Medical Imaging and Radiation Sciences at OU offers four-year baccalaureate degrees in Radiography, Nuclear Medicine, Radiation Therapy, and Sonography (Ultrasound). Students apply to the professional phase of the program after first completing a freshman and sophomore year (or 64 hours) of general education inclusive of the prerequisites for the programs. The four-year program culminates with a Bachelor of Science Degree in Medical Imaging and Radiation Sciences (BSMIRS)

RADIOGRAPHY: The radiographer positions the patient and translates a high tech imaging process into a humane experience for the patient so as to obtain satisfactory radiographs which are then interpreted by the physician to diagnose disease. Radiographers may operate a wide variety of photographic and electronic imaging equipment and computers. Radiographers also make images in highly specialized studies in which internal organs are made visible in moving and stationary images used for medical diagnosis. The U.S. mean salary for this profession is \$55,910.

RADIATION THERAPY: The therapist is in daily contact with the cancer patient. Radiations are directed at diseased tissues in strictly controlled circumstances to cure or to palliate the disease. The therapist positions the patient for treatment, performs mathematical calculations of radiation dosage and operates a variety of ionizing radiation producing equipment. The U.S. mean salary for this profession is \$77,560.

NUCLEAR MEDICINE: Nuclear medicine is a specialty which uses radiopharmaceuticals, cameras and computers to image and quantify various physiological processes in any organ system in the body. The nuclear medicine technologist administers radiopharmaceuticals to patients, positions them for images and operates the cameras and computers. The images and data technologists obtain from studies provide physicians with information on disease processes affecting organ function. The program includes instruction in general and cardiac nuclear imaging along with radiopharmacy and radioimmunoassay. The U.S. mean salary for this profession is \$70,180.

SONOGRAPHY (ULTRASOUND): The sonographer uses equipment which generates high frequency sound waves to produce images of the human body. Using these procedures the sonographer gathers data for interpretation and evaluation by the physician. Areas include diagnostic abdominal sonography, neurosonography, echocardiography, obstetrical and pelvic sonography, vascular doppler evaluation, and others. In each of these areas, the sonographer must be knowledgeable of expected pathology, applicable instrumentation and results. The U.S. mean salary for this profession is \$60,350.

OPPORTUNITIES: Employment in the field of medical imaging is expected to grow much faster than the average for all occupations because of the importance of these technologies in the diagnosis and treatment of disease. Radiology is a dynamic field with clinical potential. New uses of imaging equipment are certain to increase demand for medical imaging professionals in all categories. In the treatment area, radiation therapy will continue to be used alone or in combination with surgery or chemotherapy to treat cancer. New advance modalities promise to change the way some diseases are managed. Positron Emission Tomography (PET) images the function of the brain, and Magnetic Resonance Imaging (MRI), which utilizes high frequency radio waves and magnetic fields, are two examples. Radiographers, Nuclear Medicine Technologists, Radiation Therapists, and Sonographers will continue to be at the growing edge of medicine and health care.

SALARY AND RECOGNITION: In all four professions salary and other professional rewards are dependent upon the site of practice, area of the country, etc. All fields pay very well as there is a shortage nationwide of these professionals. Annual salaries for these professions range from \$60,000-\$80,000/ year.

APPLICATION REQUIREMENTS: Admission to the program requires completion of prerequisite course work and submission of all application materials. The Department Admissions Committee will review application materials, and requires a written interview. To be considered for admission an applicant must:

1. have successfully completed, or be in the process of completing a minimum of sixty-four (64) semester hours of course work, from any accredited college or university, prior to matriculation to the program;
2. be in good standing with the college or university last or currently attending;
3. submit a completed University of Oklahoma Health Sciences Center College of Allied Health application with application fees, official transcripts from all colleges or universities attended and other specified departmental materials by March 1 of the year in which admission is sought;
4. have a minimum grade point average of 2.5 on a 4.0 scale of all college work attempted; and
5. have successfully completed, or be in the process of completing, the courses listed on the front of this form. These prerequisites are the same for all departmental programs. At the time of application to the Health Sciences Center, students indicate the program of their choice. Any exceptions or substitutions must be approved by the program director, department chairman and college dean.

A recently admitted class had the following average GPA's: Nuclear Medicine: 3.33; Radiation Therapy: 3.38; Radiography: 3.21; Sonography: 3.6. Applicants are urged to investigate radiological technology as a career prior to application in such ways as observation or working with a medical imaging professional on a typical day. To get started, call a facility that employs these professionals and ask if they will allow you to job shadow or contact one of the professionals identified on the OUHSC College of Allied Health Shadowing Map: <http://www.ah.ouhsc.edu/main/observation/map.asp>

Contents of this publication are subject to revision without notice. The provisions of this publication do not constitute a contract, expressed or implied between any applicant, student, or faculty member of the College of Allied Health.

For more information about Medical Imaging and Medical Imaging educational programs: <http://www.asrt.org/>

For the latest information about these programs and how to apply: <http://www.ah.ouhsc.edu>

OU Medical Imaging and Radiation Sciences Site: <http://www.ah.ouhsc.edu/mirs>

For medical imaging information and assistance with application materials ,contact:

Ms. Paije Fauser (405) 271-6588, paije-fauser@ouhsc.edu. University of Oklahoma Health Sciences Center, College of Allied Health P.O. Box 26901, Oklahoma City, Oklahoma 73190.