RADIOGRAPHIC IMAGING (RADIOGRAPHY)

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Radiographers are certified professionals that produce images through the use of x-rays. These images are an essential diagnostic tool that has played an important role in medicine for over a hundred years. The science of radiographic imaging is technology-driven with the use of computerized equipment common to every patient exam. Radiographers (X-ray technologists) work closely with other health care professionals in meeting the needs of patients with a compassionate approach.

The Radiographic Imaging Program provides students with the technical skills and knowledge to safely use radiation to produce diagnostic images. Courses in the curriculum focus on patient care, radiographic procedures, the science and technology behind the imaging process, radiobiology, and other general education courses. A diverse clinical education experience in a variety of clinical settings and with a range of patient populations supplements the campus lectures and labs with a strong emphasis on hands-on participation by all students.

A minimum of six semesters is required to successfully complete the Associate in Applied Science degree in Radiographic Imaging. Graduates are eligible to take the certifying examination in radiography by the American Registry of Radiologic Technologists (ARRT). Once ARRT certified, graduates are eligible to apply for a state license that is required to practice most states. Graduate radiographers have ample career opportunities that may include computed tomography, mammography, vascular interventional procedures, equipment sales, and with additional degree work, imaging education, and healthcare administration.

The Radiographic Imaging program is a partner in the Northwest Ohio Allied Health Consortium.

Mission Statement

The Radiographic Imaging Program prepares competent, professional radiographers.

Program Learning Outcomes

Upon completion, the student will be able to:

- 1. Demonstrate clinical competence.
- 2. Demonstrate effective communication skills.
- 3. Utilize critical thinking.
- 4. Demonstrate professionalism.

Notice to Prospective or Current Radiographic Imaging Students

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. You may not be able to participate in clinical education experiences at some hospitals or other clinical sites, thereby preventing you from completing the program. A criminal record may also prevent you from obtaining a license or certification in your chosen healthcare profession.

Technical Standards

See here for details.

Tech Prep Partner

See here for details.

"C" grade policy

- · A minimum 2.0 GPA is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science (BHS) courses as well as in selected general education and basic/ related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate. The five year limit may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.

| Code | Title | Hours |
|----------|---------------------------------------|-------|
| BIO 1000 | Basic Human Structure and Function | 3 |
| BIO 1110 | Anatomy and Physiology I | 4 |
| BIO 1120 | Anatomy and Physiology II | 4 |
| BIO 1400 | Microbiology | 4 |
| BHS 1390 | Medical Terminology | 2 |
| BHS 2110 | Growth and Development: Lifespan | 2 |
| CHM 1120 | Introductory Organic and Biochemistry | 4 |
| DTN 1220 | Principles of Nutrition | 2 |
| NSG 1721 | Pharmacology for Nursing | 2 |

Criminal Background Checks and Drug Screening

To meet the expanding requirements of our clinical affiliates, both a criminal background check and a drug screen will be mandatory prior to clinical experiences for most students within the Division of Health Sciences and Public Service. Some program exceptions may apply. You are at risk if you have been convicted of a prior felony and/or some misdemeanors. Students with certain felony, misdemeanor, or drug-related convictions will be ineligible for admission into clinical experiences. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession or to obtain **employment post-graduation.** Students admitted to a program containing off-campus clinical/practicum experiences will be required to submit to drug screening. Positive drug screenings may result in dismissal from all clinical courses. Any student who refuses/fails to cooperate or complete any required drug screening will be considered "positive" and dismissed from the clinical component of their program. All students requiring drug screening may be subject to random drug screens and for cause during the program.

Recommended High School Coursework

Students are encouraged to complete college prep classes in high school. Although not required, the courses provide a better understanding of college-level work. Recommended college prep courses include:

English: 4 units Math: 4 units

Natural Science: 3 units Social Science: 3 units

Health Insurance

The Division of Health Sciences and Public Service is committed to protecting students, faculty, and patients from infectious diseases during clinical practice and taking every reasonable precaution to provide a safe educational and work environment. All new students entering the health-related programs will be informed of the risks of blood-borne and other infectious diseases. Students with a high risk of infectious diseases should be aware of their own health status and risk of exposure to other students, employees, or patients involved in the clinical environment. All students are required to provide their own health insurance coverage for the duration of their program and be able to provide proof of insurance if requested.

Radiation Monitoring

For educational and training purposes, students under the age of 18 are held to the same radiation exposure limits as members of the general public (1mSv/year). This limit is 1/50 that of the occupational exposure limit which is 50mSv/year (National Council on Radiation Protection and Measurements). The occupational radiation exposure of radiologic personnel engaged in general x-ray activity are typically considerably lower exposures than this limit. All students are monitored while in areas of possible radiation exposure.

Radiographic Imaging (Radiography) Associate of Applied Science Degree

Structured Course Sequence (6 Semester Plan)

First Year

| First Year | | |
|-----------------|--------------------------------------|-------|
| Pre-requisite S | Semester | Hours |
| BHS 1390 | Medical Terminology | 2 |
| BIO 1110 | Anatomy and Physiology I | 4 |
| COM 1110 | English Composition | 3 |
| MTH 1370 | College Algebra | 4 |
| SDE 1010 | First Year Experience | 1 |
| | Term Hours | 14 |
| Fall | | |
| BIO 1120 | Anatomy and Physiology II | 4 |
| RAD 1310 | Radiographic Procedures I | 3 |
| RAD 1500 | Introduction to Radiographic Imaging | 3 |
| RAD 1200 | Principles of Imaging I | 2 |
| | Term Hours | 12 |
| Spring | | |
| RAD 1510 | Clinical Education I - Radiography | 3 |
| SOC 1010 | Sociology | 3 |
| RAD 1220 | Principles of Imaging II | 3 |
| RAD 1320 | Radiographic Procedures II | 3 |
| | Term Hours | 12 |
| Summer | | |
| BHS 1160 | Medical Law-Ethics Healthcare | 2 |
| RAD 1520 | Clinical Education II - Radiography | 4 |
| | Term Hours | 6 |
| Second Year | | |
| Fall | | |
| RAD 2510 | Clinical Education III - Radiography | 3 |
| RAD 2210 | Principles of Imaging III | 3 |
| COM 2213 | Verbal Judo | 3 |
| RAD 2310 | Radiographic Procedures III | 3 |
| | Term Hours | 12 |
| Spring | | |
| RAD 2520 | Clinical Education IV - Radiography | 3 |
| RAD 2220 | Radiation Biology | 3 |
| RAD 2320 | Radiographic Patient Analysis | 2 |
| RAD 2490 🞓 | Selected Topics in Radiography | 1 |
| | Term Hours | 9 |
| | Total Hours | 65 |
| | | |

NOTE: A minimum of 13 credit hours of clinical courses is required for graduation (successful completion of RAD 1510, RAD 1520, RAD 2510, and RAD 2520). If additional clinical hours are required, the student must register for RAD 2590.

| Code | Title | Hours |
|-------------|------------------------------------------|-------|
| RAD 2590 | Clinical Education Seminar - Radiography | 1-4 |
| Total Hours | | 1-4 |

<u>Program Qualification Requirements:</u> Completion of the pre-requisite semester with "C" or better in pre-requisite semester courses, with the exception of BHS 1390, which requires a grade of "B" or higher. SDE 1010 is not a qualification requirement.

*Courses in program are sequential. A grade of "C" or better is required for all BHS, BIO and RAD courses for continuation.

Radiographic Imaging students are admitted once per year.

Capstone course

Prerequisites:

Students should check course prerequisites before registering.

Students seeking admission into the Radiographic Imaging Program are encouraged to review the general admission and program requirements early due to the time required to complete the process.

The following qualifications must be completed:

- 1. Attend a mandatory program briefing.
- Complete 16 hours of observation in a clinical setting with a Registered Technologist in Radiography using the Observation Form in the information packet.
- 3. Complete pre-requisite semester courses with the following grades:
 - BIO 1110 Anatomy & Physiology I -'C' or higher
 - MTH 1370 College Algebra 'C' or higher
 - BHS 1390 Medical Terminology 'B' or higher
 - · COM 1110 English Composition 'C' or higher
- 4. The student must be at least 18 years of age by the start of the first clinical experience, which occurs in the Fall semester of the first year.

Prospective students must email the Radiographic Imaging Program Coordinator once all program qualification requirements are met. The Program Coordinator will verify completion and inform the student of their potential start date. The Radiographic Imaging Program is a limited-enrollment program that accepts up to 30 qualified students each year. Students will be ranked based on their qualification date and, if necessary, by the date the Program Coordinator received their email confirming the completion of all requirements.

The Radiographic Imaging Program is accredited by the:

Joint Review Committee on Education in Radiologic Technology 20 North Wacker Drive, Suite 2850 Chicago, IL 60606-3182 (312) 704-5300 e-mail: mail@jrcert.org

The program has held this accreditation status since inception in 1976.