

TABLE OF CONTENTS

Updated 1/12/2019

Letter to Students	2
Overview	3
Mission and Philosophy	4
Program Goals	4
Program Admission Requirements	5
Selection Criteria Worksheet (2018 changes)	6-7
Application Procedure	8
Associate Degree Program/Curriculum	9
Course Descriptions	10-11
Program Expenses	12
Radiology Program Application (available on website)	

Dear Potential Student:

Thank you for your interest in the GBC Radiology Technology Program.

Becoming a Registered Technologist in Radiology (R.T.) is a wonderful career goal. This career is one of the fastest growing in health care today. The RT is a very valuable member of the health care professional team. The employment outcome for a radiologic technologist is good, however, you may need to relocate to find a job. Approximately 70 new RT positions are available in Nevada each year. GBC is excited to offer a post associate degree certificate in ultrasound/sonography starting this year, 2019. If you would like more information, please contact Reme Huttman at reme.huttman@gbcnv.edu

The JRCERT accredited program at GBC is approximately five semesters long. This will consist of didactic and clinical education. This is a 75-credit program and will consist of approximately 1250 hours of clinical education in affiliated sites throughout Nevada. Please note the clinical sites are chosen by a random draw at the beginning of the program for a clinical start date in the third semester (June of the 2nd year).

Graduates of this program will be eligible to apply to take the registry examination from the American Registry of Radiologic Technologists (ARRT). Successfully passing this examination will certify the individual as a Registered Technologist in Radiology. One of the main goals of our program is to provide you the means to pass the registry for the ARRT and to allow our students to become some of the best entry-level radiology technologist upon completion of this course of studies for the profession and the patients you will serve. The program will supply the student with the tools to pass the registry, but it is up to the student to provide the dedication and hard work. The program will require a lot of student time to complete successfully. It is the expectation for every credit hour the home study time should be a minimum of 3 hours.

This application guide should answer all your questions. However, if you have any additional questions or I can help you in any way, please contact me by email at mary.doucette@gbcnv.edu or by phone at (775)753-2463. I strongly encourage all students to contact a radiology instructor for an advisement. Email is the quickest way to communicate with me at mary.doucette@gbcnv.edu. Respectfully,

Mary Doucette, M.S., RRA, R.T.(R)(M)(MR)(QM)(CT)-ARRT
Program Director/Radiology Technology

GREAT BASIN COLLEGE
ASSOCIATE OF APPLIED SCIENCE RADIOLOGY TECHNOLOGY PROGRAM

OVERVIEW

The Great Basin College Associate of Applied Science Radiology Technology Program is a combination of general education and radiology technology courses that prepare the student for entry level radiology technology practice in a variety of health care settings. In support of this, the radiology technology faculty provides experiences that assist the student to acquire the knowledge, skills, and attitudes needed to achieve the identified student learning outcomes.

The practice of radiology technology is continually responding to changes brought about by financial, structural, and regulatory requirements in the health care delivery system. The change necessitates adaptation on the part of the program of radiology technology to meet both the educational needs of students and the health care needs of individuals, families, or groups in a manner that addresses both quality and cost.

The radiology technology faculty is committed to mobility in radiology technology education. Educational mobility provides learners with opportunities to meet their individual educational needs and goals.

Teaching. The role of the teacher is to facilitate the learner in the learning process. Teachers are responsible and accountable for creating an environment that stimulates curiosity, creativity, problem solving, critical thinking, and growth while fostering each student's feelings of respect, worth, and dignity.

The faculty believes that the teaching-learning process is a shared responsibility between students and instructor. The teacher uses methods that encourage the student to assume responsibility for his own learning.

Learning is a goal-directed, lifelong process that changes behavior. Learning is most effective when the learner clearly understands the relationship between the learning requirements and the identified learning goals.

Learning takes place more readily in an accepting and stimulation environment where students are encouraged to freely express themselves. The student/faculty interaction is enhanced by the sharing of ideas and experiences between faculty and students. Learning is facilitated by activities that proceed from simple to complex, provide opportunity for practice, and provide satisfaction from the experience.

The uniqueness and diversity of students is reflected in the various rates and styles that characterize learning. The faculty strives to understand individual differences in learning and to adjust instruction through curriculum planning, learning strategies, and teaching methods. The instructor is a facilitator of learning.

MISSION AND PHILOSOPHY

The mission of Great Basin College's Associate of Applied Science in Radiology Technology is to provide quality education that prepares the undergraduate radiology technology student for beginning practice in a variety of health care settings.

RADIOLOGY TECHNOLOGY PROGRAM PHILOSOPHY

The faculty of the Radiologic Technology Program at Great Basin College believes and accepts the following department philosophies:

1. The radiologic technologist is a viable member of the health care team. As a provider of care, the student will demonstrate caring and critical thinking skills by assisting the individual, family or group to identify and meet basic health needs in a wide variety of settings in the continuum of care. The student will assist in the coordination of cost-effective quality care using a culturally competent, collaborative and interdisciplinary approach.
2. Through the development of sound radiologic technology curriculum, the student will develop entry level skills and knowledge in basic radiology technology. Upon completion of the program the student will be eligible to apply to take the American Registry of Radiologic Technologists Examination for Radiographers and will be prepared to function as an entry level Radiologic Technologist.
3. It is the responsibility of the faculty to recognize the individuality of the student and help develop his/her potentiality. **We also believe the student is responsible for his/her own learning and that the faculty serves as a facilitator and resource person.**
4. The planning, implementation and evaluation of the radiologic technology curriculum is the responsibility of the faculty.

PROGRAM GOALS

1. Students will be clinically competent.
2. Students will communicate effectively.
3. Students will utilize critical thinking and problem solving skills.
4. Students will be able to discuss professional pathways available.
5. Students will practice professionalism.

STUDENT LEARNING OUTCOMES

The Radiology Technology Program graduate will be able to demonstrate the following learner outcomes.

1. Students will be able to demonstrate clinical competency.
2. Students will be able to position patients for diagnostic quality images.
3. Students will be able to integrate ALARA practices for self, patients and others.
4. Students will be able to evaluate the final radiology image for essential criteria.
5. Students will be able to communicate effectively.
6. Students will be able to manipulate techniques to accommodate for patient's condition.
7. Students will be able to demonstrate critical thinking skills.

8. Students will be able to describe professional avenues available to them.
9. Students will be able to discuss ASRT, JRCERT, licensure and different modalities.
10. Students will exhibit professionalism in a clinical setting.
11. Students will demonstrate professional interaction with patients.

ACCREDITATION

Great Basin College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). The program has been recognized by the American Registry of Radiology Technology (ARRT) and NWCCU. As of July of 2011, the GBC Program is accredited by JRCERT (Joint Review Committee on Education in Radiology Technology). You may review our Program Effectiveness data online at <https://www.gbcnv.edu/programs/show.cgi?AAS-RT> or visit the JRCERT website to receive more information or review the JRCERT standards.

Contact information for JRCERT:
20 N. Wacker Dr., Ste 2850
Chicago, IL 60606-2850
Phone: (312)704-5300
Fax: (312)704-5304
E-mail: mail@jrcert.org
Website: www.jrcert.org

PROGRAM ADMISSION REQUIREMENTS

(It is up to the student to make sure the application is complete and turned in prior to May 1. Please make one copy for the program and one for yourself)

1. Completed GBC application online, if you are not already a GBC student.
2. Be 18 years or older by the starting fall semester.
3. **Please compile two copies of the following list of items in order. Mail one in a packet to the program and keep one for yourself.** This packet should be mailed to the Radiology Technology Program.

In the packet should be:

- a. A brief resume'. Make sure you list any healthcare work experience. Please list your contact email.
 - b. College transcripts (if not a current GBC student). Official transcripts must be sent to admissions at GBC to ensure that these credits will transfer to GBC.
 - c. Up to three letters of recommendation. These should be sent directly to the Program Director by the person writing them. It would be beneficial to you to supply the person writing the letter with an addressed stamped envelope for them to mail the letter in.
 - i. Address: Great Basin College
Attn: Mary Doucette
Radiology Technology Program
1500 College Parkway
Elko, NV 89815
 - d. A completed radiology program application. Must have your birth date on it. This is for age verification along with a copy of an official ID, such as, a driver's license.
 - e. Any current certifications or licensures as a health care professional, such as a RN, CNA, CPR, etc.
 - f. Health Care Professional proof of work history. Letter from your employer will work for this.
 - g. Copy of your driver's license or ID.
 - h. High school transcripts to document completion of Health Science I and II, if this pertains to you.
 - i. Please submit documentation you are a Veteran, if needed.
4. We accept approximately 12 students for a fall start date each year. Students are selected on a point system using the following selection criteria checklist located within this application guide.
 5. The program director reviews all applications and point summary. The final point summary and applications are reviewed by the Health Sciences and Human Services Admission and Progression Board for final approval.

**Great Basin College
Associate of Applied Science**

Selection Criteria/Point System Worksheet/Updated 1/16/18

Qualified applicants must have a minimum C or 2.5 GPA for all program prerequisites above in all program prerequisites. The students will be selected through a point system.

Students ID#: _____ **Students Cumulative GPA:** _____
(Overall GPA is used as a tiebreaker)

I. Completion of Pre-requisite Courses:
(Points only given for grades C or better)

	C=2 points	B=3 points	A=4 points
MATH120			
BIOL223			
NURS130			
RAD101			
Total Points Awarded			

II. Completion of General Education and other program requirements:
(Points only given for grades of C or better).

	C=1 points	B=2 points	A=3 points
PSC 101			
ENG 101			
ENG 102			
HMS 200			
PHIL102(Recommended)			
BIOL 190			
BIOL 224 (Co-requisite)			
Below are not required course:			
Medical Terminology			
Introductory Physics			
Human Relations(PSY208)			

III. Work Experience: 1-5 points
Points will be given for Health Care related work experience upon the approval of the program director. Please submit proof of employment and job description.
One point will be given for each full year of employment, up to five years. If the experience is less than 1 year, no points will be given.

IV. Health Care Certifications: 1 points
Points will be awarded for students who have a current Health Care Credentialing, such as an EMT, LPN and others, upon approval of the program director.) Extra points will not be given for CNA or CPR.

- V. **Proof of Nevada residency:** 1 point
- VI. **Located within GBC service area:** 1 point
- VII. **Veteran:** 1 point.
- VIII. Completion of **Health Science I and II** will receive 1 point.
Must submit high school transcripts for documentation.
- IX. **References:** 1 points for each positive reference with no more than 3 points total available.

Total Points Worksheet	
Criteria	Points
Pre-requisite Courses (0-16)	
General Education Courses (0-30)	
Work Experience (0-5)	
Health Care Certification (0-1)	
Proof of Nevada Residency (0-1)	
GBC Service Area (0-1)	
Veteran (0-1)	
Health Science I and II (0-1)	
References (0-3)	
Total Points Received (Possible Point Range 1-59)	

APPLICATION PROCEDURE

1. Compile the previous list of information.
2. Assemble into two sets, one for the program and one for yourself. Please submit the items in the order listed previously under program admission requirements.
3. Submit the original to the GBC prior to May first deadline.
4. Mail to:
 - a. Great Basin College
Radiology Technology Program Attn:
Mary Doucette
Health Sciences and Human Services-Rm 133
1500 College Parkway
Elko, NV 89801

CHECKLIST:

- _____ 1. Current Resume.
- _____ 2. College Transcripts – not needed if you are a GBC student with no other college history.
(Official transcripts must be sent to the GBC admissions office.)
- _____ 3. Letters of Recommendations to be sent to:
Great Basin College
Attn: Mary Doucette Radiology
Technology Program 1500 College
Parkway
Elko, NV 89801
- _____ 4 High school transcripts if you are claiming a point for Health Science I and II
- _____ 5. Radiology Application (found on website)
- _____ 6. GBC Application (if not a student currently or already completed)
This should be completed online at www.gbcnv.edu
- _____ 7. Copy of Driver's License or proof of Nevada residency.
- _____ 8. Copy of documentation of any work related experience.
- _____ 9. Copy of any health care certifications.
- _____ 10. Copy of documentation of CNA education. Completion of the course is required. It is not a requirement to take the State test for CNA certification.
- _____ 11. Documentation of Veteran's status.

NOTIFICATION:

Notification of acceptance or denial will be mailed prior to June 30.

**GREAT BASIN COLLEGE
ASSOCIATE OF APPLIED SCIENCE DEGREE
RADIOLOGY TECHNOLOGY PROGRAM**

Great Basin College offers a two-year Associate of Applied Science (AAS) degree in Radiology Technology. Admission to the AAS degree in Radiology Technology Program is a separate process from admission to Great Basin College. Enrollment to the program is limited. Students will be admitted only in the fall semester to begin the five-semester program of courses. Qualified applicants are selected first from the Great Basin College service area. If there are still positions opened, residents from Nevada and then out-of-state applicants will be considered. Students who have applied for and been accepted into the radiology program are designated radiology technology students. Only radiology technology students can enroll in courses with the RAD designation, except for RAD 101.

PROGRAM CURRICULUM

Prerequisites		Fourth Semester-Fall	
BIOL 223	Human Anatomy and Physiology I (4 Credits)	HMS 200	Human Services Ethics (online) (3 Credits)
RAD 101	Exploration of Radiology (online course) (.5 Credits)	RAD 243	Imaging Pathology (online course) (1 Credit)
NURS 130	CNA Class State license is not required (6 credits at GBC)	RAD 226	Clinical Radiology II (450 hrs) (10 Credits)
MATH 120 Or higher	Fundamentals of College Mathematics (3 Credits)	Fifth Semester-Spring	
First Semester-Fall		RAD 227	Clinical Radiology III (630 hrs) (14 Credits)
BIOL224	Human Anatomy and Physiology II (4 Credits)	Credit Totals: Gen Ed 18 Credits Radiology(includes Biology) 28.5 Credits Clinical Experiences(1260 hrs) 28 Credits Total Course Credits 74.5 Credits	
ENG 101	Composition I (3 Credits)		
RAD 112B	Patient Care (2 Credits)		
RAD 116B	Radiology I (3 Credits)		
RAD 118B	Radiology Physics and Circuitry (3 Credits)		
RAD 238B	Radiation Protection (online course.) (2 Credits)		
Second Semester-Spring			
ENG 102	Composition II (3 Credits)		
PHIL102	Critical Thinking (Recommended, not required) (3 Credits)		
PSC101	Introduction to American Politics (3 Credits)		
RAD 126B	Radiology Procedures II (3 Credits)	To schedule an advisement appointment: Contact- Mary Doucette Radiology Technology Program 775.753.2463 mary.doucette@gbcnv.edu	
RAD 128B	Imaging Equipment (3 Credits)		
RAD 124B	Radiographic Photography and Techniques (3 Credits)		
Summer Session			
RAD 225	Clinical Radiology I (180 hrs) (4 Credits)		

1. You must place into English 101 at the start of the program.
2. You must have a minimum C or above in all classes to continue enrollment in the program.
To graduate all courses being applied to the AAS Radiology Program must be at a C or higher, including general education.
3. All radiology courses are internet enhanced or online.

GBC RADIOLOGY TECHNOLOGY PROGRAM COURSE DESCRIPTIONS

RAD 101 – Exploration of Radiology (0.5 Credits) (online course)

This course is for students who are interested in becoming a radiological technologist. This course is designed to give the student a basic knowledge of what a radiological technologist does and what careers are available in this field. The learning outcome for this course is to help the student determine if this is the right career choice for them. (Was previously RAD090B)

RAD 116- Radiology I (3 credits) (Internet Enhanced)

This course will cover radiology positioning and anatomy. This will include the identity of the anatomic structures that will be on an x-ray examination, pathology noted and radiation safety measures that should be used. Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester program courses.

RAD 118 Radiation Physics and Circuitry (3 credits) (Internet Enhanced)

This course will provide knowledge of x-ray terminology and structure of x-ray circuitry, radiation production, radiation characteristics and the photon interactions. Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester program courses.

RAD 124-Radiographic Photo and Techniques (3 credits) (Internet Enhanced)

This course will cover processing of the radiographic image, from darkroom to computerized radiography. The principles and practices with manipulation of exposure factors to obtain acceptable image quality will be discussed at length. Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester program courses.

RAD 126-Radiology Procedures II (3 Credits) (Internet Enhanced)

This is a continuation of RAD 116. This will cover advanced radiology procedures, pathology noted on images, radio-pharmacology and film critique. Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester program courses.

RAD 128-Imaging Equipment (3 credits) (Internet Enhanced)

This course will review all the radiographic equipment utilized in imaging departments and how the equipment works. Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester II program courses.

RAD 225-Clinical Radiology I (4 credits) (Internet Enhanced)

This will be a planned clinical experience. This will give the student the opportunity to apply didactic education to work related examinations under the supervision of a registered technologist. The student must demonstrate clinical competency to continue in the program. Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester II program courses.

RAD 226-Clinical Radiology II (10credits)(Internet Enhanced)

This is a continuation of RAD 225. The student will continue to apply knowledge gained in the classroom to work experience. Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester II program courses.

RAD 227-Clinical Radiology III (14 credits) (Internet Enhanced)

This is a continuation of clinical experience to achieve required competency. Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester program courses.

RAD 238- Radiation Safety and Protection (2 credits) (online course)

This course will cover the ALARA (as low as reasonably achievable) concept. It will also include the definitions and significance of radiation protection and the biological effects of radiation. National and state requirements will be discussed.

Prerequisite: Admission to the Radiology Technology Program and enrollment into all the concurrent semester program courses.

RAD 243- Medical Imaging Pathology-New Fall 2019 (1 credit) (online course)

This online course will cover medical imaging pathology. The student will study disease utilizing medical imaging processes. It is critical for medical imaging professionals to understand the basic pathologic processes, therefore, this course will review pathological terms, etiology of disease, disease manifestation, and the role of the medical imaging plays in the diagnosis of disease.

PROGRAM EXPENSES

GBC current tuition rate will be in effect for the reflected curriculum courses. Housing is the responsibility of the student and should be considered. There will be two semesters for clinical that will probably be out of the Elko area. Clinical sites will be chosen at a random draw held in the first semester of the program.

Other expenses to considered are:

1. **Books.** Books will be purchased the first semester. They have been bundled for the program so that the student can receive a 10% discount. These need to be purchased at the bookstore. Approximately a total of \$1500 for both years.
2. **Uniforms.** These will be ordered in the Fall semester of the first year. Approximately \$200.
3. **Travel. To and from clinical sites. The possible assigned clinical sites may be located in Elko, Winnemucca, Ely, Fallon, Battle Mountain, Carson City and Pahrump.**
4. **Background check and drug screen** is needed to work in the clinical sites. Approximately \$150, depending on how many places you have lived.
5. **Lab fees.** Approximately \$800 over 2 years. (Additional fees may be accessed on certain courses due to the use of extra materials.) Lab fees for radiology are spent on: Correctec (board review), equipment and radiation monitors, student attendance at national conference, and clinical visits.
6. **Immunization fees.** Current TB, Hepatitis vaccination, MMR and flu shots. These cost vary depending on the provider.
7. **Physical Fee.** You will need a general physical for clinical rotation proving you are in good physical health. This is a very physical job. You will be lifting every day.
8. Need current **health insurance** during clinical rotation.
9. **Liability insurance.** Available through the ASRT-Approximately \$50.
10. **Tuition** will be approximately \$8,000.

Scholarships and financial aid opportunities are available to all eligible GBC students. Please contact the GBC financial aid office.

DISCLOSURE:

If you have been convicted of a felony, be aware you may not be able to sit for the American Registry of Radiologic Technologist examination at the end of the program. Please contact the ARRT for more information at www.arrt.org. Contact the ARRT prior to beginning the program.

If you have any questions, please feel free to contact Mary Doucette:
(775)753-2463 or email her at mary.doucette@gbcnv.edu