Associate of Applied Science in Radiographic Technology

PROGRAM DESCRIPTION

1. Briefly describe the proposed new program. Please indicate if it is (a) an expansion of an existing program or a new program; (b) a cooperative effort with another institution, business, or industry; or (c) an on-campus or off-campus program. Attach any formal agreements established for cooperative efforts.

The proposed program in Radiologic Technology at MSU-Great Falls is a two year Associate of Applied Science program. It is designed to provide the didactic and clinical training necessary for a graduate to pass the American Society of Radiologic Technologists national certification examination as well as provide the skills necessary to enter the work force as a Registered Radiologic Technologist (RT). The proposed Radiologic Technology program requires 23 credits of prerequisite work designed to be taken over the course of an academic year. Students who complete all of the prerequisite courses with a grade of C- or better may submit an application for entry into the program itself. The program advisory board meets each April to review applications and select the incoming class for the following fall semester. The Radiologic program is made up of a total of 65 credits distributed over four semesters and one summer session.

(b) The program will be offered as a partnership with Benefis Hospital and the Great Falls Clinic. MSU-Great Falls will fund a program director and provide instruction in all pre-requisite courses and some non-clinical instruction. Benefis hospital will fund a full-time instructor and clinical supervisor while the Great Falls Clinic will fund a half-time (.5 fte) clinical supervisor.

(c) All pre-requisite courses and some radiology courses will be delivered at MSU-Great Falls, the remaining didactic, procedural (lab) courses, and clinicals will be delivered at Benefis and the Great Falls Clinic. Specific rotation will be determined by academic requirements.

2. Summarize the needs assessment conducted to justify the proposal.

Benefis hospital and its predecessor institutions have offered a very successful hospital based radiology program since 1954 however, the profession is moving away from hospital based programming towards programs accredited through institutions of higher education. Similar changes have already taken place in Billings and Kalispell, Montana. In March of 2005 the staff of the Radiologic program at Benefis hospital approached MSU-Great Falls about taking over management of the program. The hospital based program has produced a minimum of six graduates a year throughout its operation all of its graduates have found employment.

The need for trained radiologic technicians will only increase as the number of imaging exams performed per year rises, retirement from the field will also create an increasing demand over the next ten years. Available and well trained healthcare workers are vital for maintaining the health of Montana's population. For a number of years the healthcare facilities within this region have had significant problems filling vacant positions for technologists. The American Hospital Association reported the current hospital vacancy rate of radiologic technologists at 15.3% (17% in the west). The U.S. Department of Labor reported the United States will need 55,000 more technologists by 2008. This program is designed to provide high quality, certified radiologic technologists to meet this current and projected shortage.

3. Explain how the program relates to Role and Scope of the institution as established by the Board of Regents.

MSU-Great Falls is charged by the Montana Board of Regents with responding to regional workforce needs by training students for high skills jobs that will contribute to the economy. This proposal fits these criteria perfectly as industry is no longer able to offer Radiologic training as a hospital based program.

4. State (a) what effect, if any, the proposed program will have on the administrative structure of the institution. Also indicate (b) the potential involvement of other departments, divisions, colleges, or schools.

The Radiologic program will be administered as a part of the Health Sciences department at MSU-Great Falls and will have its own Advisory Board drawn from industry.

5. Describe the extent to which similar programs are offered in Montana, the Pacific Northwest, and states bordering Montana. How similar are these programs to the one proposed?

Four AAS degrees in Radiological Technology are currently offered in Montana, At MSU-Billings, Montana Tech, Flathead Valley Community College, and UM-COT at Missoula, the programs serve the needs of widely scattered geographic regions. The proposed program is modeled on the program delivered at Flathead Valley Community College.

6. Please name any accrediting agency (ies) or learned society (ies) that would be concerned with particular program herein proposed. How has this program been developed in accordance with criteria developed by said accrediting body (ies) or learned society (ies)?

The program conforms to the requirements of the Northwest Commission on Colleges and Universities. A request for substantial change will be submitted to NWCCU upon approval by the Board of Regents. The American Registry of Radiologic Technologists (ARRT) recognizes the Northwest Commission on Colleges and Universities as an approved accrediting body, students graduating form the program will be qualified to take the ARRT licensing exam.

7. Prepare an outline of the proposed curriculum showing course titles and credits. Please include any plans for expansion of the program during its first three years.

MSU-Great Falls' Radiologic Technology program spans five semesters (four regular semesters plus one summer semester). Students average 40 hours per week in classroom, lab, and clinical work in fulfilling the 65 credits leading to an Associate of Applied Science degree. After graduation, students are eligible to take the American Registry examination for credentialing as a Registered Radologic Technologist. The program will be delivered at three separate sites, MSU-Great Falls, Benefis Hospital and the Great Falls Clinic.

To be considered for admission into the program, applicants are required to submit documentation showing completion of the following courses with a grade of C- or better.

Current capacity of the hospital based program is 6 students per year. With the addition of clinical sites at the Great Falls Clinic this will increase to 8 and to 10 students per year (20 at any one time) by the third year. One final intake of students into the current hospital based program will take place in fall of 2006. Students intending to enroll in the proposed program will be advised into prerequisite classes for the 2006/2007 academic year. The first intake of students into the proposed MSU-Great Falls program will be in fall 2007.

Prerequisite Courses

| ENGL 121 | Composition I | 3 |
|----------|-----------------------------|----------|
| AH 145 | Intro Med Terms | 1 |
| MATH 103 | Introductory Algebra | 4 |
| CHEM 111 | Princ. of Inorganic Chem OR | |
| BIO 107 | Human Biology | 4 |
| BIO 213 | A&PI | 4 |
| BIO 214 | A&PII | 4 |
| | Human Relations | <u>3</u> |
| | | 23 |

Students in the Radiologic Technology Program must earn a "C-" or better in ALL classes in the two-year program. Any grade less than a "C-" in any class will result in the student having to retake that class.

Radiologic Technology

1st Fall Semester

| RAD 235 RAD 105 RAD 110 RAD 115 RAD 140 | Radiation Bio & Protection Intro Radiography Radiographic Proc I Radiographic Princ I Clinical Education I | 4 2 2 <u>8</u> 18 | | | |
|---|--|-------------------------------|--|--|--|
| 1 st Spring Semester | | | | | |
| RAD 111 RAD 116 RAD 130 RAD 141 | Radiographic Proc II Radiographic Princ II Patient Care Clinical Education II | 2 2 <u>6</u> 12 | | | |
| Summer Semester | | | | | |
| RAD 240 | Clinical Education III | <u>9</u> 9 | | | |
| 2 nd Fall Semester | | | | | |
| RAD 106 RAD 210 RAD 220 RAD 241 | Radiation Physics Radiographic Proc III Radiographic Princ III Clinical Education IV | 4 2 2 <u>6</u> 14 | | | |

2nd Spring Semester

| RAD 215 | Radiographic Proc IV | 2 | |
|---------|----------------------|----------|----|
| RAD 242 | Clinical Education V | 8 | |
| RAD 270 | Registry Review | <u>2</u> | |
| | | 12 | |
| | Total Credits | | 65 |

65

FACULTY AND STAFF REQUIREMENTS

1. Please indicate, by name and rank, current faculty who will be involved with the program proposed herein.

Cherie Mckeever, Anatomy and Physiology Instructor, Level 3 Roger Peffer, Biology Instructor, Level 2 Adam Wentz, Chemistry Instructor, Level 1 Colleen Hazen, English Instructor, Level 3 Jana Carter, English Instructor, Level 2 Rebecca Johnson, Mathematics Instructor, Level 2 Mark Plante, Mathematics Instructor, Level 2 Heidi Pasek, Psychology Instructor, Level 3

2. Please project the need and cost for new faculty over the first five years of the program. Include special qualifications or training. If present faculty is to conduct the new program, please explain how they will be relieved from present duties.

Program Director, full-time – to be funded by MSU-Great Falls the program director will provide student advising, oversee admissions into the program, conduct Advisory Board meetings, supervise instructors and clinical supervisors, liaison between partners, handle academic administration. The director must hold a Masters degree and have experience with radiology. Salary - \$50,000

Radiographic instructor and clinical supervisor, full-time – to be funded by Benefis Healthcare - will provide didactic and laboratory instruction as well as clinical supervision for that portion of the course work to be delivered onsite at Benefis hospital.

Radiographic instructor and clinical supervisor, half-time (.5 fte) - to be funded by the Great Falls Clinic - will provide didactic and laboratory instruction as well as clinical supervision for that portion of the course work to be delivered onsite at the Great Falls Clinic.

3. Please explain the need and cost for support personnel or other required personnel expenditures.

None needed.

CAPITAL OUTLAY, OPERATING EXPENSES AND PHYSICAL FACILITIES

1. Please summarize operating expenditure needs.

| Supplies - | 1,000 |
|------------------|--------------|
| Communications - | <u>1,000</u> |
| Total - | 2,000 |

2. Please evaluate library resources. Are they adequate for operation of the proposed program? If not, how will the library need to be strengthened during the next three years?

A substantial amount of library resources are available at Benefis hospital, this material, which is non-circulating, will be supplemented by material purchased by the MSU-Great Falls library out of the library's collection development budget. The Chief Librarian will work closely with the Program Director to develop the collection.

3. Please indicate special clinical, laboratory, and/or computer equipment that will be needed. List those pieces of equipment or computer hardware presently available in the department.

All specialized equipment is currently available at either Benefis or the Great Falls Clinic, classroom and lab facilities required for the pre-requisite courses are currently available at MSU-Great Falls.

4. Please describe facilities and space required for the proposed program. Are current facilities adequate for the program? If not, how does the institution propose to provide new facilities?

No new facilities are required.