



Missouri Department of Higher Education

Building Missouri's future...by degrees

NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): Southern Illinois University Carbondale

Program Title: Radiation Therapy Program

Degree/Certificate: Bachelor of Science

Options: Not Applicable

Delivery Site(s): BJC HealthCare

CIP Classification: 51.0907 (Please provide a CIP code)

Implementation Date: August 2012

Cooperative Partners: BJC HealthCare

AUTHORIZATION:

Thomas H. Beebe, Director of Military Programs

Name/Title of Institutional Officer	Signature	Date
Thomas H. Beebe	618.536.3388	

Person to Contact for More Information	Telephone
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STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full Time	15	15	15	15	15
Part Time	0	0	0	0	0
Total	15	15	15	15	15

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Form SE - Student Enrollment Projections



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COLLABORATIVE PROGRAMS

Sponsoring Institutions: Southern Illinois University Carbondale (SIUC)

Degree program: Bachelor of Science, Radiologic Sciences, Radiation Therapy Specialization

Length of agreement: Southern Illinois University Carbondale has a Memoranda of Agreement (MOA) with each hospital clinical site. Students perform clinical internships at these sites.

(open-ended or limited)

1. Which institution(s) will have degree-granting authority?
SIUC
2. Which institution(s) will have the authority for faculty hiring, course assignment, evaluation, and reappointment decisions?
SIUC
3. What agreements exist to ensure that faculty from all participating institutions will be involved in decisions about the curriculum, admissions standards, exit requirements?
Not Applicable. Agreements do not exist with other institutions because SIUC is the only educational institution involved.
4. Which institution(s) will be responsible for academic and student-support services, e.g., registration, advising, library, academic assistance, financial aid, etc.?
SIUC
5. What agreements exist to ensure that the academic calendars of the participating institutions have been aligned as needed?
Not applicable. SIUC is the only participating educational institution.
6. In addition to the information provided by each participating institution regarding Financial Projections (Form FP), please address the following items:
 1. How will tuition rates be determined if they differ among the institutions?
Not applicable. SIUC is the only participating educational institution.
 2. Has a formal agreement been developed regarding cost-sharing policies? If yes, please include it as part of the proposal. If no, please summarize the current understanding between all parties and the plans for developing a formal agreement.
Not applicable. SIUC is the only participating educational institution.
 3. What arrangements, if any, have been made for exchange of money between participating institutions?

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Not applicable. SIUC is the only participating educational institution.

7. What commitments have been made by all participants to evaluate the program systematically?

An annual assessment plan is reviewed during advisory board meetings. The advisory board meetings consist of representatives from all clinical sites.

8. If one institution wishes to discontinue the program, what agreements exist for terminating the offering?

If any clinical site wishes to discontinue their participation a set amount of notice has to be given and the opportunity for the student to complete their training is present. This information is detailed in each MOA.



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PROGRAM STRUCTURE

A. Total credits required for graduation: 128

B. Residency requirements, if any: Either 90 hours through SIUC or last 30 hours through SIUC

C. General education: Total credits: Total general education with basic radiography course work is 97 credit hours. Radiography makes up 56 of these hours and general education is 41 hours.

Courses (specific courses OR distribution area and credits):

English_101___3_cr. Math___3_cr. Disciplinary Studies___6_cr.

Social Sciences___6_cr. Humanities___6_cr. English_102___3_cr.

Fine Arts___3_cr. Human Health___2_cr. Speech___3_cr.

Multicultural___3_cr. Interdisciplinary___3_cr. _____cr.

_____cr. _____cr. _____cr.

D. Major requirements: Total credits: Radiation Therapy Specialization 31 credits

_RAD 360___2_cr. _RAD 370___3_cr. _RAD 380___3_cr.

_RAD 390___2_cr. _RAD 400___3_cr. _RAD 410___10_cr.

_RAD 420___2_cr. _RAD 430___4_cr. _RAD 440___2_cr.

_____cr. _____cr. _____cr.

_____cr. _____cr. _____cr.

E. Free elective credits: None, basic radiologic sciences courses are listed with general education as the main area is the radiation therapy specialization. (Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

None, internship courses are listed above with major courses.

G. Any unique features such as interdepartmental cooperation:

None



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PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name Southern Illinois University Carbondale
Program Name Radiation Therapy Program
Date August 20, 2012

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.

Preferred candidates are individuals who have graduated from a accredited radiological science program and have passed their ARRT X-ray boards. Overall cumulative GPA must be at least a 2.8 (A=4.0).

- Characteristics of a specific population to be served, if applicable.
The radiation therapy program will serve all student populations who wish to pursue careers in the field of radiation therapy in accordance with the university policy. If a student meets the entrance criteria, they will be considered for admittance.

Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.

All faculty have Master's or Doctorate Degrees. The faculty are credentialed by the American Registry of Radiologic Technologist in radiation therapy. Each individual is qualified to teach the subject matter assigned.

- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.
One hundred percent of the credit hours are assigned to full time faculty.

- Expectations for professional activities, special student contact, teaching/learning innovation.

The faculty at SIUC will teach approximately 192 contact hours per fall and spring semesters and 96 contact hours in the summer and both will supervise each clinical course.

Enrollment Projections

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- Student FTE majoring in program by the end of five years.
Enrollement is expected to be fifteen full time students in the state of Missouri by the end of five years.
- Percent of full time and part time enrollment by the end of five years.
Every student pursuing a career as a radiation therapist will be enrolled full time in the Radiation Therapy program

Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.
It is anticipated that there will be fifteen graduates per year from Missouri.
- Special skills specific to the program.
After successful completion of the Radiation Therapy program, graduates will be able to perform completely as a radiation therapist in the health care setting. They should understand all aspects associated with radiation therapy. These tasks include but are not limited to: treatment QA, treatment delivery, patient care, construction of compensating devices, and recording patient information.
- Proportion of students who will achieve licensing, certification, or registration.
Over the past ten years the Radiation therapy at SIUC has had a first time pass rate of 100% in eight of the ten years. In the other two years only one student failed in their first attempt. On this exam students either pass or fail; scaled results are not released.
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.
The benchmark for the program is a five year average of 80% of the graduates will pass the exam over a five year period on the first attempt
- Placement rates in related fields, in other fields, unemployed.
Each graduate of the program has gained full time employment within six months of graduation. The benchmark for this item is that 50% of the graduates will have employment at time of graduation and that 80% will have employment six months post graduation.
- Transfer rates, continuous study.
Transfer students will not be accepted at this time.

Program Accreditation

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- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide reasons. The Radiation Therapy program is fully accredited through the JRCERT.

Alumni and Employer Survey

- Expected satisfaction rates for alumni, including timing and method of surveys. Each year graduate surveys are performed at the time of graduation and six months post graduation.
- Expected satisfaction rates for employers, including timing and method of surveys. Each year employer surveys are performed six months post graduation.

10.2 Specific Format Required for a Complete Proposal

A complete proposal should contain the following information in this order and numbered this way:

0. New Program Proposal Form: Please complete Form NP.

1. Need:

A. Student Demand:

- i. Estimated enrollment each year for the first five years for full-time and part-time students (Please complete Form SE.)
- ii. Will enrollment be capped in the future?

Currently the program will be capped at 15 students based on the estimated need from BJC HealthCare.

B. Market Demand:

- i. National, state, regional, or local assessment of labor need for citizens with these skills.

At the National level there is need of 1,794 (+18.3%) in radiation therapists. The state of Missouri needs 29 (+13.9%) radiation therapists. The West North Central Region which includes Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota needs 109 (+13.9%) radiation therapists. BJC HealthCare which is in the local St. Louis area is estimated to need an additional 15 radiation therapists annually starting in 2011.

The “CARE Bill” is currently being considered by congress which will limit who can practice radiation therapy and this will increase the need for registered radiation therapists across the country.

C. Societal Need:

- i. General needs which are not directly related to employment.

In the United States there is an increase in cancer incidence which means more cancer patients. Along with more patients there are advances in the technology available for cancer treatment. The increase in cancer patients and advancements in the technology available raised the need for highly trained radiation therapists to perform the daily radiation treatments.

It is also estimated that the patient requiring radiation therapy will increase 22% between 2010 and 2020. This is largely due to the growing number of older adults and minorities.

D. Methodology used to determine "B" and "C" above.

The “Radiation Oncology Workforce Study: performed by the American Society for Therapeutic Radiology and Oncology” was reviewed to determine the labor need of radiation therapists. This was a national survey. For the BJC HealthCare staffing estimate, a letter from JoAnn M. Shaw, Vice President and Chief Learning Officer, was referenced.

To determine societal need, cancer incidence statistics were reviewed from the American Cancer Society. Data are collected from the national cancer registry. Clinical experience and general information was used to determine the increase in technology used in radiation oncology. A study from MD Anderson published in “The Journal of Clinical Oncology” revealed the 22% increase in patients requiring radiation therapy.

2. Duplication and Collaboration:

If similar programs currently exist in Missouri, what makes the proposed program necessary and/or distinct from the others at public institutions, area vocational technical schools, and private career schools?

Currently Saint Louis University offer the only accredited radiation therapy program in Missouri. This program has a capacity of 16 students per year and the cost is \$32,180 per year. Source: www.jrcert.org

Does delivery of the program involve a collaborative effort with any external institution or organization? If yes, please complete Form CL.

Yes, currently SIUC collaborates with the following internship sites in Missouri.

**Barnes-Jewish Hospital
Mail Stop 90-38-635
4921 Parkview Place
St. Louis, MO 63110**

**Southeast Missouri Hospital
789 S. Auburn Rd.
Cape Girardeau, MO 63701**

**St. John’s Mercy Medical Center
607 S. New Ballas Road
Suite 1275
St. Louis, MO 63141**

**St. Luke's Hospital
232 South Woodsmill Road
Chesterfield, MO 63017**

**Cancer Institute of Cape Girardeau
14B Doctors Park
Cape Girardeau, MO 63703**

If this program is approved to be offered in collaboration with BJC HealthCare, affiliations with all BJC HealthCare radiation oncology facilities will be established.

3. Program Structure: Please complete Form PS.

A. Total credits required for graduation

128 Semester Hours (31 within the radiation therapy specialization)

B. Residency requirements, if any

Either 90 hours through SIUC or last 30 hours through SIUC

C. Courses and credits required for general education

Below are the courses a student completes prior to the senior specialization year. There are 41 hours of general education and 56 hours of basic radiography.

FALL		SPRING			
English 101	English Composition	3	English 102	English Composition	3
Math	Math (at SIUC: 108 or 113)	3	UC	Social Science Group	3
Human Health	Anatomy Course	2	UC	Science - Group 1	3
UC	Science - Group 2	3	Speech	Speech	3
RAD 122A	Seminar in Radiologic Sciences	<u>2</u>	RAD 122B	Seminar in Radiologic Sciences	2
		13	UC	Humanities Group	<u>3</u>
					17
FALL		SPRING			
RAD 102	Intro to RAD	3	RAD 222	Radiology Clinic	12
RAD 112	Anatomy & Positioning	4	UC	University Core Elective	<u>3</u>
RAD 202	Radiographic Physics	3			15
UC	University Core Elective	<u>3</u>			
		13			
SUMMER					
RAD 212	Special Procedures	2			
RAD 232	Selected Systems	4			
UC	University Core Elective	<u>3</u>			
		9			

FALL			SPRING		
RAD 332	Radiography Clinic 2	12	RAD 312	Radiographic Pathology	3
UC	University Core Elective	3	RAD 352	Special Imaging Modalities	3
		15	RAD 322	Sec. Anatomy/Pharm	3
			RAD 342	Radiologic Biology	3
			UC	University Core Elective	3
					15

D. Courses and credits required for the major

RAD 360-2 credits, Intro Radiation Oncology
RAD 370-3 credits, Tech & App of Radiation Therapy
RAD 380-3 credits, Physics of Radiation Therapy
RAD 390-2 credits, Oncologic Nursing
RAD 400-3 credits, Radiation Dosimetry
RAD 410-10 credits, Clinical Internship I
RAD 420-2 credits, Special Problems
RAD 430-4 credits, Radiation Therapy Internship II
RAD 440-2 credits, Seminar in Radiation Therapy

Total of 31 Credits within the radiation therapy specialization

E. Number of free elective credits remaining (Sum of C, D, and E should equal A)

Total is 128 semester hours (credits)

F. Requirements for thesis, internship, or other capstone experiences

Not applicable, internship courses are listed above with major courses.

G. Any unique features, for example, interdepartmental cooperation

Not Applicable

4. Financial Projections (for public institutions only): Please complete Form FP. Additional narrative may be added as needed. If more than one institution is providing support, please complete a separate form for each institution.
5. Program Characteristics and Performance Goals: See the recommended format and issues to be addressed (Form PG). For collaborative programs, responsibility for program evaluation and assessment rests with the institution(s) granting the degree(s).

6. Accreditation: If accreditation is not a goal for this program, provide a brief rationale for your decision. If the institution is seeking program accreditation, provide any additional information that supports your program.

The radiation therapy program at SIUC is fully accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). Upon approval to offer this program, paperwork to accredit this portion will be initiated.

7. Institutional Characteristics: Please describe succinctly why your institution is particularly well equipped or well suited to support the proposed program.

SIUC has offered their radiation therapy program since 1999. The program is very well structured and respected within the field. It should also be noted that the faculty are experienced in live video conferencing delivery which will be a modality used in offering a portion of the proposed program.

8. Any Other Relevant Information:

The rationale to pursue this additional location for the program was initiated from an invitation from BJC HealthCare. This is due to their high level of satisfaction with the current program that has been in place for about 10 years. BJC HealthCare also sees this program as an opportunity to provide advancement for their employees.