

Proposed Title:B.S. Nuclear Medicine Technology

Proposed Effective Date: After all internal and external approval processes are completed.

I. Justification

The B.S. Nuclear Medicine Technology degree would be a 3+1 program with an affiliation through Baptist Health Colleges Little Rock. ATU currently has a 3+1 program leading to a B.S. Medical Laboratory Sciences degree with Baptist Health in Little Rock and St. Joseph's in Joplin. This would be an additional option for students who desire a high paying career in the health fields without requiring graduate degrees or professional school. The degree program comprises three years at ATU utilizing already existing courses and schedules, followed by a senior year of study at Baptist Health College in Little Rock. The Baptist Health programs enroll approximately a dozen students per year in each of their programs (Medical Lab Technology, Radiography, Histotechnology, Nuclear Medicine Technology, etc.) and recruit them from around the state. They rely on 2-3 students per affiliated university per year to supply the cohorts each year to their programs.

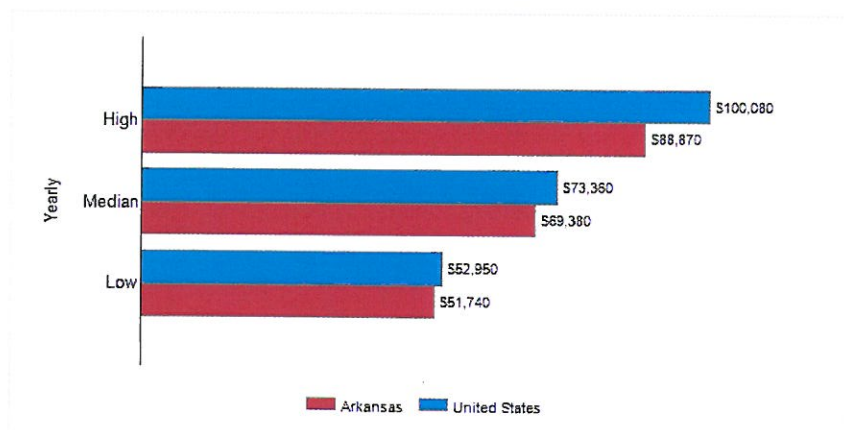
II. Preliminary Needs Assessment

United States	Employment		Percent Change	Projected Annual Job Openings *
	2014	2024		
Nuclear Medicine Technologists	20,700	21,000	+2%	420
Arkansas	Employment		Percent Change	Projected Annual Job Openings ¹
	2014	2024		
Nuclear Medicine Technologists	150	150	+1%	0

*Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

National Data Source: [Bureau of Labor Statistics, Occupational Employment Statistics Survey](#)

State Data Source: [Arkansas Data Analysis](#)



Annual yearly salaries NMT.

III Curriculum: Nuclear Medicine Technology

Semester 1		14 hrs
ENGL 1013- Composition I	3	
BIOL 1011- Orientation to the Biological Sciences	1	
BIOL 1114-Principles of Biological Sciences	4	
Social Science for General Education Elective	3	
<u>MATH 1113- College Algebra</u>	<u>3</u>	
Semester 2		16 hrs
ENGL 1023- Composition II	3	
Social Science for General Education Elective	3	
BIOL 2124-Zoology	4	
COMS (computer science elective)	3	
<u>MATH 1203- Plane Trigonometry</u>	<u>3</u>	
Semester 3		14 hrs
U.S. History & Government	3	
CHEM 2124/2120- General Chemistry I	4	
BIOL 2134-Botany	4	
<u>AHS 2013-Medical Terminology</u>	<u>3</u>	
Semester 4		17 hrs
Fine Arts & Humanities for General Education Elective	6	
CHEM 2134/2130- General Chemistry II	4	
BIOL 2014- Human Anatomy	4	
<u>Speech Communication for General Education Elective</u>	<u>3</u>	
Semester 5		14 hrs
BIOL 3074-Human Physiology	4	
General elective	3	
Statistics (MATH 2163 or PSY 2053)	3	
<u>PHYS 2014-Physical Principles I</u>	<u>4</u>	
Semester 6		16 hrs
BIOL 3114-Ecology	4	
BIOL 4891-Seminar	1	
BIOL 3034-Genetics	4	
Fine Arts & Humanities for General Education Elective	3	
<u>PHYS 2024-Physical Principles II</u>	<u>4</u>	

Senior Year: 12-months at Baptist Health College in Little Rock Arkansas involving the transfer of course credits to ATU in NUMT 4001 (Nuclear Medicine Technology Professional Coursework) 30 hrs. Course work at ATU covers core courses in the biology degree & qualifies for an Associate of Arts in General Education.

IV. Cost

Nominally zero cost. This program utilizes currently existing courses being regularly taught at Arkansas Tech University.

V. Enrollment and Marketing

Student enrollment is likely to be similar to the enrollment in our current affiliated program in Medical Lab Sciences (2-4 students per year). This is the desired number of students because of the competitive nature and availability of admissions to these highly specialized programs. Current marketing would be similar to as is done with the Medical Lab Sciences degree program to pre-medical and allied health professions students.

**ARKANSAS TECH UNIVERSITY
BAPTIST HEALTH COLLEGE LITTLE ROCK
BACHELORS OF SCIENCE IN NUCLEAR MEDICINE TECHNOLOGY
MEMORANDUM OF UNDERSTANDING**

I. STATEMENT OF PURPOSE AND CONTACT INFORMATION

Arkansas Tech University (hereinafter University) and BAPTIST HEALTH College Little Rock-School of Nuclear Medicine Technology Little Rock, Arkansas (hereinafter Affiliate) do agree to affiliate for the purpose of offering a baccalaureate program in Nuclear Medicine. Both institutions share a common objective and responsibility for developing a high quality educational experience. It is recognized that this can best be achieved by providing maximum flexibility for both University and Affiliate in their respective areas of competence, by providing the medium for integrating the general education and professional phases of the Program, and by providing effective channels of communication between the two institutions. Thus, the institutions shall work cooperatively in the education of Technologists, culminating in the baccalaureate degree to be awarded by the University at the successful completion of the combined curricula. General education courses are defined as freshman, sophomore and junior courses offered at the University. Professional courses are didactic and clinical courses in Nuclear Medicine offered at the Affiliate during the senior year of attendance.

Arkansas Tech University Contact:

Dr. Tsunemi Yamashita
College of Natural and Health
Sciences
Arkansas Tech University
215 West O Street
Russellville, AR, 72801
479-968-0327
tyamashita@atu.edu

Baptist Health Schools Little Rock Contact:

Dr. Judy I Pile, Asst. Vice President, Education
11900 Colonel Glenn Road, Suite 1000
Little Rock, AR 72210
501-202-7433
judy.pile@baptist-health.org

II. PARTICIPATION OF THE UNIVERSITY

A) Admissions

Admission to the University is solely the responsibility of the University. Criteria for the admission of new and transfer students are stated in the University Catalog.

B) General Education Curriculum

The University will accept fifty seven (57) semester hours credit from the Affiliate's Nuclear Medicine Program toward the Bachelor of Science in Nuclear Medicine Degree. Candidates must complete a minimum of seventy seven (77) semester hours of general education courses prior to enrollment in the professional program.

Specific program prerequisites (See Appendix A) must be completed as well as the general education requirements of the University.

Transfer students must complete a least thirty (30) hours through the University. All general education course requirements must be completed by the end of the Summer I term prior to enrollment in the Affiliate professional program which begins each July. Students must present a statement of eligibility to apply to the professional program which has been signed by the University advisor.

C) Grading Policies of the University

The class work of the student will be rated according to the following pattern of values:

A=Superior

W=Withdrawal during the third through sixth week

B=Good

WP=Withdrawal after the sixth week with D or above

C=Average

I=Incomplete

D=Poor

F=Failing

(4 Quality Point System)

D) Tuition, Fees and Student Financial Aid

Tuition and fees for the general education curriculum are detailed in the University Catalog and apply to the general education program. Students must pay a graduation fee prior to the awarding of the Nuclear Medicine degree from the University.

For students in the bachelor degree track with the University, financial aid will be handled through the University. The Affiliate financial aid office and the University financial aid office will communicate in order to serve the student in a timely and reasonable manner.

E) Health Services

Through all enrollment, students are eligible for healthcare through the University Student Health Center as described in the University Catalog.

III. PARTICIPATION OF THE AFFILIATE

A) Admissions

Admission to the Affiliate is on a competitive basis and is determined by the Admissions Committee of the Affiliate. Applicants are required to have the results of the American College Test (ACT) with a preferred composite score of 21 or higher, and a preferred score of 21 or higher in Math & Sciences to be eligible for this program.

The Affiliate reserves the right to select applicants based on qualifications. Students or graduates from other affiliated institutions and from non-affiliated institutions may be accepted into the affiliate, in accordance with the Joint Review Committee on Educational Programs in Nuclear Medicine Technology. The minimum and maximum number of students to be accepted from the University will be 0-9.

B) Professional Curriculum

The professional program 1 academic year. Each academic year at the Affiliate commences in July and completes in June and includes 44 weeks of instruction. There is a didactic phase and clinical phase with rotations through the areas of the Baptist Health Medical Center – Little Rock Radiology Department and other affiliated clinical sites. A listing of the professional curriculum is found in Appendix B.

C) Grading Policies of the Affiliate

The work of the student will be rated according to the following pattern of values:

A=94-100%

B=86-93%

C=77-85%

D=70-76%

F=0-69%

I=Incomplete

CR=Credit

NC=No Credit

W=Withdrawal

WX=Administrative Withdrawal

(4 Quality Point System)

Criteria for academic progress and retention are stated in the Affiliate's Student Handbook.

D) Schedule

Dates, holidays and vacation periods are given in the Affiliate's Student Handbook.

E) Tuition, Fees and Student Financial Aid

During the professional curriculum, students are required to pay tuition and fees to the Affiliate and purchase required textbooks and uniforms.

For students in the bachelor degree track with the University, financial aid will be handled through the University. The Affiliate financial aid office and the University financial aid office will communicate in order to serve the student in a timely and reasonable manner.

F) Health Care and Insurance

The Affiliate will procure and maintain such insurance as will protect the Affiliate from all acts, errors or omissions while administering this program of study. The Affiliate shall maintain general and professional liability insurance in the amount of at least \$1,000,000 per occurrence and \$3,000,000 in the aggregate per year. All private physicians and consulting fees are the student's financial responsibility, as well as emergency room costs. The Student assumes cost of hospitalization with no exception.

The Affiliate requires proof of immunization against MMR and TD, and a tuberculin skin test prior to registration. Hepatitis B immunization is recommended.

All students are strongly recommended to have personal health insurance while enrolled as a student at BHCLR.

If a student needs medical treatment during an educational experience, the student is responsible for any expenses related to the treatment. BHMC-LR Occupational Health in BHRI will provide the initial treatment for a student with a needle stick. Any additional medical treatment needed by a student will be at the student's expense. BHCLR may require a medical clearance from a student after an injury or illness to attend learning experiences.

All students are strongly recommended to have personal liability insurance while enrolled as a student at BHCLR. Many affordable options exist for students. For information on some of the options, please visit the following websites.

www.hpsso.com

www.nso.com

www.americanprofessional.com

G) Grade Reports

Grades will be reported to the University at regular grade reporting periods of the University.

H) Role of Student

The student's role during the professional curriculum is that of learner. Students are not expected to render services for patient care beyond those with educational value. Students shall not be used in lieu of professional staff, and they shall be supervised at all times according to JRCNMT standards. When financial circumstances require that a student work during the school year, or when one wishes to work for experience, consideration for voluntary and remunerated work will be made on an individual basis. The number of hours per week that may be worked will be limited by the Program Director so that it does not interfere with satisfactory school performance.

JOINT PARTICIPATION

A) Non-Discrimination

The parties agree to comply with Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Executive Order 11,246 and the related regulations to each. Each party assures that it will not discriminate against any individual including, but not limited to employees or applicants for employment and/or students, because of race, religion, color, sex, age, physical handicap or national origin.

B) Accreditation

Both the University and the Affiliate fulfill the standards required for accreditation by nationally recognized bodies, the North Central Association of Colleges and Schools and the Joint Review Committee on Nuclear Medicine Technology, respectively, and intend to continue meeting these criteria.

C) Right of Appeal and Due Process

Each institution shall make provision for students to have due process and the right to appeal any decision made regarding academic or nonacademic matters. The steps in the appeal process are included in the University Student Handbook and the Affiliate's Student Handbook and Catalog.

D) Library, Reference Materials and Audiovisual Aids

Each institution agrees to meet at least the minimal standards of their respective accrediting bodies in regard to library holdings, reference and audiovisual materials.

E) Certification and Licensure

Upon satisfactory completion of all requirements of the Affiliate's program, the student is qualified for certification examinations given by nationally recognized certification agencies.

F) Courtesy Appointments

The Medical Director and the Program Director of the Affiliate may be granted adjunct faculty appointments in an appropriate department at the University. It is understood that any courtesy appointments to faculty and staff by the University or the Affiliate shall be without entitlement of the individual to compensation or benefits from the appointing agency.

G) Formal Meetings

Meetings between appropriate faculty members of the University and the Affiliate will be held at least annually in order to discuss current curriculum effectiveness and proposed curriculum changes and other matters of concern.

H) The Agreement shall be for a period of three (3) years commencing from the date on the signature page. The contract will renew automatically each year thereafter unless either party gives notice of termination of contract. Notice of termination must be given in writing by either party to the other, with at least a one (1) academic year advance notice. Such termination shall have no effect on students currently enrolled at the Affiliate.

V. CHOICE OF LAW, ASSIGNMENT AND ALL AGREEMENT

This Agreement shall be interpreted according to and enforced under the laws of the State of Arkansas. This Agreement may not be assigned by any party hereto without the expressed written consent of all parties.

This Agreement contains the entire agreement of all parties hereto, and no other oral or written agreement shall be binding on the parties hereto. This Agreement may not be amended or otherwise modified, unless agreed to by all parties, in writing. This Agreement supersedes all other agreements, contracts, understandings, representations, whether written or otherwise, between the parties relating to the subject matter hereof.

VI. NOTICES

All notices required to be sent hereunder shall be deemed sufficient if in writing and if personally delivered or if mailed by United States Mail, postage prepaid to:

BAPTIST HEALTH Office of the President 9601 Interstate 630, Exit 7 Little Rock 72205-7299	ARKANSAS TECH UNIVERSITY Office of the President 1509 N. Boulder Ave Administration Building, Suite 210 Russellville, AR 72801
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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in multiple counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

BAPTIST HEALTH

Signature: _____ Date: _____

Troy R. Wells President & CEO

ARKANSAS TECH UNIVERSITY

Signature: _____ Date: _____

President

APPENDIX A

Nuclear Medicine College of Natural and Health Sciences

Semester 1		Hrs
ENGL 1013- Comp I	3	
BIOL 1011- Orientation to the Biological Sciences	1	
BIOL 1114-Principles of Biological Sciences	4	
Social Science	3	
<u>MATH 1113- College Algebra</u>	<u>3</u>	
		14hrs
Semester 2		
ENGL 1023- Comp II	3	
Social Science	3	
BIOL 2124-Zoology	4	
COMS	3	
<u>MATH 1203- Plane Trigonometry</u>	<u>3</u>	
		16hrs
Semester 3		
U.S. History & Government	3	
CHEM 2124/2120- General Chemistry I	4	
BIOL 2134-Botany	4	
<u>AHS 2013-Medical Terminology</u>	<u>3</u>	
		14hrs
Semester 4		
Fine Arts & Humanities	6	
CHEM 2134/2130- General Chemistry II	4	
BIOL 2014- Human Anatomy	4	
<u>Speech Communication***</u>	<u>3</u>	
		17hrs
Semester 5		
BIOL 3074-Human Physiology	4	
General elective	3	
Statistics (MATH 2163 or PSY 2053)	3	
<u>PHYS 2014-Physical Principles I</u>	<u>4</u>	
		14hrs
Semester 6		
BIOL 3114-Ecology	4	
BIOL 4891-Seminar	1	
BIOL 3034-Genetics	4	
Fine Arts & Humanities	3	
<u>PHYS 2024-Physical Principles II</u>	<u>4</u>	
		16hrs

Senior Year 12months
NUMT 4001 (Nuclear Medicine Technology Professional Coursework) 30hrs

***See appropriate courses in ATU catalog

*** Course work covers core for biology degree & Associates degree conferred in General education (College of Arts and Humanities) after completion of all required coursework and hours.

Human anatomy & human physiology is pre-req
Physical principles 1 & 2 also a pre-req

Both can be one semester courses, but UCA & Henderson show two semester of each.

APPENDIX B

The Curriculum at the Affiliate will consist of the following coursework, 57 hours of which will be transferred to the University.

SEMESTER I	Credits
NM 4108 Clinical Practicum I	8
NM 4101 Medical Terminology	1
NM 4604 Instrumentation I	4
NM 4204 Diagnostic Nuclear Medicine I	4
NM 4404 Nuclear Physics/Radiochemistry	4
NM 4201 Medical Ethics and Law	1
NM 4102 Patient Care	2
NM 4504 Radiopharmacy/Radionuclide Therapy	4
Total Credits	29
SEMESTER II	
NM 4203 Diagnostic Nuclear Medicine II	3
NM 4320 Clinical Practicum II	10
NM 4302 Instrumentation II	2
NM 4202 Computed Tomography (CT, PET/CT)	2
NM 4104 Diagnostic Nuclear Medicine III	4
NM 4303 Diagnostic Nuclear Medicine IV	3
NM 4703 Radiation Health Physics	3
NM 4301 Radiobiology	1
NM 4601 Senior Seminars	1
Total Credits	29
Totals: Courses - 17 Credit Hours- 57	