



## **ACADEMIC PROGRAM PROPOSAL FORM**

**DIRECTIONS:** Use this form when proposing a new major or primary field of study, new emphasis, new degree program, or new certificate of achievement.

**DATE SUBMITTED:**

**INSTITUTION:** Nevada State College

**REQUEST TYPE:**

- New Degree  
 New Major or Primary Field of Study  
 New Emphasis  
 New Certificate of Achievement (AAC approval only)

*Date of AAC Approval:*

April 12, 2016

*Date of Board Approval:*

**DEGREE** (i.e. Bachelor of Science): Bachelor of Applied Science

**MAJOR** (i.e. Animal Science): Allied Health Science

**EMPHASIS** (i.e. Equine Studies): N/A

**CREDITS TO DEGREE:** 120-127

**CERTIFICATE OF ACHIEVEMENT:** N/A

**PROPOSED SEMESTER OF IMPLEMENTATION:** Fall 2016

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**Action requested:**

Establish a Bachelor of Applied Science in Allied Health Science major at NSC.

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**A. Brief description and purpose of proposed program**

The Bachelor of Applied Science (BAS) in Health Science degree is a 3+1 program created by CSN and NSC. The degree would provide an opportunity for students to pursue a 4-year degree in Allied Health Science after completing one of 6 health-related AAS degrees and a 1-year certificate at CSN. After students finished both their AAS and their certificate in Health Science, they would transfer to NSC to finish 30 upper-division credits at NSC, including 21 major credits in communication and the social sciences aimed at preparing students with the soft skills (written and oral communication, conflict management, small-group communication and persuasion, etc.) desired by employers, particularly for those entering management positions. The remaining credits will consist of any courses for any unfulfilled core curriculum areas, and general electives as needed.

The BAS in Allied Health Science will be available to students in 5 AAS degrees at CSN; because of the technical nature of these fields, the number of credits required for the AAS degrees vary from 68

to 93. As a result, students earning one AAS degree (Diagnostic Medical Sonography) will go over 120 credits for the BAS degree:

1. Diagnostic Medical Sonography (AAS = 92-93 credits; BAS = 126-127 credits)
2. Health Information Technology (AAS = 68 credits; BAS = 120 credits)
3. Ophthalmic Technology (AAS = 68 credits; BAS = 120 credits)
4. Physical Therapist Assistant (AAS = 72 credits; BAS = 120 credits)
5. Radiation Therapy Technology (AAS = 82 credits; BAS = 120 credits)

#### **B. Statement of degree or program objectives**

Upon completion of the BAS-Allied Health Science degree, successful students will be able to:

1. Demonstrate proficiency in a specific health science field (medical sonography, nursing, ophthalmology, health information technology, physical therapy assistant, or radiation therapy technology)
2. Explain how to integrate leadership/management and interpersonal communication skills into the workplace.
3. Identify socio-cultural and psychological factors that affect the successful delivery of health care.
4. Explain why employability skills such as communications, teamwork, critical thinking, problem solving, and other "soft skills" are vitally important in the workplace.

#### **C. Plan for assessment of degree or program objectives**

The assessment method for this program will include outcomes assessment of program learning outcomes (see below for detailed discussion). In addition we will continually monitor the growth of the program and make any necessary expansion in course offerings, additional faculty and/or campus resources. Surveys of program alumni will be developed and disseminated to assess job readiness, placement, and promotion. Finally, surveys of student satisfaction with the degree offerings will also be conducted.

#### **D. Plan for assessment of student learning outcomes and the use of this data for program improvement**

The process of Outcomes Assessment occurs on a bi-annual basis for all majors. In October the Dean of the College of Liberal Arts and Sciences, in consultation with area Department Chairs, selects assessment chairs for each program under review, who in turn selects a three-person committee of faculty reviewers. This committee typically consists of three individuals with expertise in the discipline under examination, but often will include a strategically-selected faculty member from outside of the discipline. In broad terms, the committee targets a single learning outcome, randomly selects student "artifacts" (i.e., major assignments) that presumably reflect outcome performance, and then devises a rubric to evaluate the artifacts. The resulting scores and qualitative observations are incorporated into a formal report that describes the strengths and weaknesses of the program and renders suggested revisions. The revisions are implemented and the process begins anew as faculty gauge the extent to which the program has improved.

Several essential methodological elements enhance the quality and consistency of this process:

##### **1. Outcome alignment**

Faculty strive to develop clear, concise learning outcomes that reflect meaningful achievements in the area of study. At the outset of each assessment cycle, faculty also are asked to carefully align these learning outcomes with institutional and school-wide missions and consensus goals of the field. In this fashion, we consistently ensure that each program contributes to larger strategic objectives and maximizes each student's potential for success in his or her respective field.

##### **2. Sound evaluative techniques**

Our assessment process is anchored by several proven methodological techniques. Many of these techniques are general reflections of best practices in research methodology, but they also derive from the Nichols assessment system (Nichols & Nichols, 2005), which undergirds our assessment philosophy.

### 3. Clear rubric

Assessment is most effective if the evaluation of student performance is guided by a rubric that minimizes ambiguity by relying on clear, widely understood definitions and rating scales. A rubric is “a predefined scoring scheme to guide the analysis of student performance or artifacts” (Nicholas & Nichols, 2005, p. 110). It is applied as a set of rules for evaluating student performance, and it establishes a criterion by which the student will be deemed successful (e.g., at least a 3 on a 4-point scale).

To this end, rubrics “set a common understanding among multiple judges about what represents success in student learning” (Nichols & Nichols, 2005, p. 110). The rubric answers fundamental questions about how student performance will be measured, it discriminates between high and low quality student work, and it helps ensure that our judgments are valid and reliable. In general terms, it does this by clearly identifying several criteria by which a student’s performance can be judged (e.g., relied on empirical data, provided a clear thesis statement, etc.) and then by delineating performance levels for each criterion (e.g., unsatisfactory, satisfactory, proficient, & excellent).

### 4. Random Sampling

A random and robust sample of student work (referred to as “artifacts”) in this circumstance is our best chance of taking a representative snapshot of NSC student performance, and thereby is most likely to guide improvements that assist a broad proportion of our student population. Moreover, the artifacts selected for analysis are “key assessments” – culminating assignments that are designed to showcase important student knowledge and skills.

### 5. Interrater Reliability

Evaluating student work is an inherently subjective process that is particularly susceptible to the predilections of an individual evaluator. To minimize this subjectivity, each artifact is assessed by multiple independent raters, and the mean of these ratings is the critical outcome variable that guides recommendations about program changes. Moreover, the ratings from each evaluator are held to a high standard of inter-rater reliability to ensure that there is strong agreement among the different ratings, thereby ensuring that the outcome variable is not unduly influenced by the biases of a single individual.

### 6. Value added

For each outcome we assess a sample of student artifacts from lower division classes and a separate sample from upper division courses. In this fashion we can estimate how much progress students have made over time as a result of the quality of the instruction and curriculum in our law enforcement program.

### 7. Iterative philosophy

Importantly, the act of assessment does not exist in isolation; rather, it is a process that yields recommendations, the implementation of those recommendations, and a follow-up assessment to determine the effectiveness of the changes. At the close of this basic three-stage cycle, the process begins anew, which in many ways is the only response to a constantly evolving discipline and the ever-changing needs of businesses, organizations, and the community.

## **E. Contribution and relationship of program objectives to**

**i. NSHE Master Plan**

The proposed BAS-Allied Health Science program at NSC parallels the NSHE Master Plan in the following ways:

1. A prosperous economy: The proposed BAS-AHS 3+1 agreement between CSN and NSC will provide students with an opportunity to pursue a 4-year degree that is currently unavailable in southern Nevada. This will enhance their employment opportunities and address the need among the health care industry in the area for employees with more skills and knowledge, including the "soft skills" in communication and small-group management that employers nationwide consistently rate highly among lists of desirable skills for new employees. The NSHE Plan for Nevada's College and Universities states that Nevada must "produce more entry-level graduates if the State is to become competitive and more economically prosperous" (p. 6). Given Nevada's interest in becoming a health tourism destination, additional degree options for students in health-related fields will benefit our economy.

2. Student focused: As part of the CSN certificate program, students will take additional health-related courses, as well as classes that fulfill core curriculum areas. They will then transfer to NSC, where they will complete their degree. NSC offers small class sizes and highly-qualified faculty who can prepare students with the skills and knowledge needed to be competitive when entering the workforce.

3. Opportunity and accessible education for all: Nevada State College prides itself on providing open access to students who may not be eligible for admission into research-oriented universities. In this regard we offer educational opportunities to a special niche of students, similar to all of the established majors at NSC. They provide the expanded opportunity and accessibility that the Board desires. Moreover, the courses chosen for the program were selected with an awareness of the need to be accessible to students who will likely already be working part- or full-time in their field. Most courses are available online; face-to-face courses will be offered on a schedule that emphasizes once-a-week and/or evening formats.

4. Quality education: The BAS-AHS program capitalizes on programs that already exist at NSC. The tenure-track faculty members already on staff at NSC have been trained by nationally recognized programs and have relevant practical experience that will allow them to build unique courses that prepare students for the workplace.

**ii. Institutional mission**

The proposed BAS-AHS program would help NSC fulfill its mission of providing high-quality learning experiences that help students acquire and develop the knowledge and skills they will need for lifelong success. It directly addresses the goals stated in both the college and departmental mission statements.

**iii. Campus strategic plan and/or academic master plan**

NSC's 2015-2020 Academic Strategic Plan included the following: "1.14 Expand BAS programs with the community colleges and expand our statewide mission." In addition, the Academic Strategic Plan calls for NSC to introduce 7 new academic majors; a BAS in Allied Health or Health Science is one of these prioritized majors. Majors were carefully selected based on data on career prospects, educational market saturation, and student interest, as well as our mission and core values.

**iv. Department and college plan**

The BAS-AHS will be housed in the Department of Social Sciences and Business Administration. It integrates courses in communication, psychology, counseling, and sociology. The BAS-AHS degree aligns with departmental goals, as it will provide students with both technical knowledge and managerial/communication skills, preparing them to be successful employees with skills that have already been identified as in-demand among employers in Nevada and nationwide.

**v. Other programs in the institution**

Courses required for the BAS-AHS major are all offered as part of other majors or minors on campus. For instance, the BS-Business Administration, BAS-Management, and BAS-Engineering Technology degrees, as well as the proposed BA-Communication major, all require courses that are used as degree requirements for the BAS-AHS. These courses in communication, workplace psychology, and business writing help students learn how to communicate more effectively in the workplace, reduce conflict, and effectively persuade others. These skills are increasingly in demand among employers regardless of field.

As a result, the BAS-AHS capitalizes on existing faculty areas of expertise, as well as the courses that are already offered on campus. Thus, the BAS-AHS fits well with existing coursework, allowing us to offer the degree without requiring a large investment in new tenure-track faculty.

**vi. Other related programs in the System**

The BAS-AHS program provides a 4-year degree option for students in 5 select AAS majors at CSN. Related programs include the BS in Comprehensive Medical Imaging at UNLV. GBC offers an AAS in Radiology Technology, but does not have a 4-year degree option. Similarly, TMCC offers a certificate of achievement in Health Sciences and a degree in Radiologic Technology. However, the BAS-AHS is quite different from these degrees. UNLV's BS in Comprehensive Medical Imaging provides more intensive upper-division training. In fact, in order to enter one track in the degree (the CT/MRI track) students must already be certified radiographers; most earn this certification by completing UNLV's 2-year Radiography Certificate program (93-94 credits). In order to enter the Radiography Certificate program, students must already have a bachelor's degree. All three tracks of the BS-CMI at UNLV providing more advanced technical training than the BAS is intended to offer.

**F. Evaluation of need for the program**

**i. Intrinsic academic value of program within the discipline**

Articulation agreements for allied health degrees are found at institutions throughout the U.S., according to our planning report by Hanover Research (2014). A common model is for students to complete an associate's degree in an allied health field, then pursue a bachelor's in "a general field such as health sciences or interdisciplinary studies" (p. 3). This model, which we chose for the proposed 3+1 BAS-Allied Health Science degree, allows students from a number of AAS degrees to enter the BAS; all students in the program then complete the same set of major courses to complete the BAS degree. This model is used at institutions across the U.S., such as East Tennessee State University (articulated with Virginia Highlands Community College), University of New Orleans (articulated with Delgado Community College), and Wilmington University (articulated with Delaware Technical Community College).

**ii. Evidence of existing or projected local, state, regional, national and/or international need for program**

As part of the planning process, NSC requested that Hanover Research conduct an independent analysis of the need for a 4-year degree in allied health science. Hanover concluded that "labor

market data suggests a high demand for bachelor's degrees in 20 core occupations in the allied health field" (p. 4). Hanover Research noted that while many occupations in allied health fields do not \*require\* a bachelor's degree, "relatively high percentages of professionals in these fields nonetheless hold bachelor's degrees" (p. 8), indicating that a bachelor's degree may make students more competitive when applying for jobs. Looking at degree completions and growth in the western/Pacific Coast states, radiation therapy and diagnostic medical sonography, two of the areas included in our proposed 3+1 degree, were among the top five most popular allied health options at the bachelor's level. Moreover, Hanover found that institutions in this region currently offer a narrower range of allied health programs at the bachelor's level than is typical in other parts of the country.

**iii. If this or a similar program already exists within the System, what is the justification for this addition**

UNLV offers several majors that fall within the category of allied health sciences. The BS in Comprehensive Medical Imaging offers 3 tracks: CT/MRI, radiology, and ultrasound. As noted in section E.vi above, this degree provides much more intensive technical training in the specific field of medical imaging than the BAS-Allied Health Science degree is intended for. The BAS-Allied Health Science prepares students for occupations in which an interdisciplinary 4-year health science degree is an accepted qualification; for many students already working in their chosen fields, this will allow them to qualify for higher-level positions (including some administrative/managerial positions) that are not open to them with an AAS. However, it is not meant to provide the same type of in-depth training in a single health field that is provided by degrees such as the BS in Comprehensive Medical Imaging.

UNLV and UNR also offers BS degrees in allied health areas such as Kinesiology, Nutrition Sciences, and Athletic Training. None of these fields are included in the articulation for our 3+1 BAS degree, in addition, the BAS-AHS is a more general degree that these other allied health degrees at UNLV and UNR, and requires less technical training.

Overall, the BAS in Allied Health Science offers a 4-year degree pathway for students in select AAS health science fields at CSN. The courses students in these programs complete do not transfer well into the BS in Comprehensive Medical Imaging or other 4-year health science degrees in the state. The BAS-AHS has been designed with this specific population of students in mind, providign them an avenue to a 4-year degree that maximizes the transferability of their existing coursework. As such, it is not directly comparable to and does not compete with the more specialized degrees such as BS-Comprehensive Medical Imaging, which require significantly more advanced technical training.

**iv. Evidence of employment opportunities for graduates (state and national)**

According to the Hanover Research report (2014), "the employment outlook for allied health fields is very positive" (p. 4). They specifically listed radiation therapists, diagnostic medical sonographers, and physical therapists, among others as occupations that are "expected to grow much faster than average" (p. 4), with growth rates of 22% or higher; all 3 of these occupations are directly related to AAS degrees that are incorporated as part of this 3+1 agreement. Nationwide growth from 2012-2022 for diagnostic medical sonographers is estimated at 46% (33.9% for Nevada specifically); for physical therapist assistants, projected growth is 41% (34.4% for Nevada); and for radiation therapists, 23.5% (occupation not projected for Nevada; p. 15, 17).

The Bureau of Labor Statistics collects data on the educational attainment of workers broken down by occupation. According to BLS data, nationwide 37% of radiation therapists hold a bachelor's degree, as do 20% of diagnostic medical sonographers, 17% of physical therapist

assistants, and 37% of healthcare practitioners that fall into the "all other" category not otherwise enumerated. Each of these occupations is directly related to one of the AAS degrees included in our 3+1 articulation agreement with CSN.

Moreover, these are well-compensated occupations. Hanover Research collected data on 2013 mean annual wages for allied health occupations in Nevada (p. 16); the mean for radiation therapists was \$80,070; \$70,780 for diagnostic medical sonographers; \$57,100 for physical therapist assistants; and \$92,750 for all other therapists (a category which would include some of the fields of the other AAS degrees articulated with our BAS degree).

**v. Student clientele to be served (Explain how the student clientele is identified)**

The BAS-AHS major would provide a 4-year Allied Health Science degree that is available to any students successfully completing one of 6 AAS degrees at CSN.

**G. Detailed curriculum proposal**

**i. Representative course of study by year (options, courses to be used with/without modification; new courses to be developed)**

To enter the BAS-AHS program, students must first complete a relevant Associate's degree at CSN, as well as CSN's 1-year (32-34 credits) certificate in Health Science. The sequences of courses below cover the junior and senior years, when students would take courses specific to the 3+1 BAS-AHS agreement that are beyond the requirements for an Associate's degree. All lower-division courses required for the 3+1 program are intended to strengthen students' general education background (for instance, more rigorous math and writing training) or to fulfill pre-requisites for upper-division courses.

All courses listed below are already offered; no new courses are being proposed as part of this degree.

JUNIOR YEAR at CSN; 32-34 credits

Fall

BIOL 189 Fundamentals of Life Science (4 cr)

ENG 101 Composition I (3 cr)

PSY 101 General Psychology (3 cr)

Spring

BIOL 223 Human Anatomy & Physiology I (4 cr)

Fine Art or Humanities core course (3 cr)

PSC 101 Intro to American Politics (4 cr)

HIST 117B or HIT 118B (1-3 cr)

Summer

BIOL 224 Human Anatomy & Physiology II (4 cr)

MATH 120 College Mathematics or above (3 cr)

COM 101 Oral Communication (3 cr)

SENIOR YEAR at NSC (30-39 credits, depending on AAS degree completed)

Fall

Communication/leadership course; choose from major options (3 cr)

Communication/leadership course; choose from major options (3 cr)

ENG 102 Composition II (if not completed) (3 cr)

PSY 450 Industrial & Organizational Psychology (3 cr)

PSY 470 Health Psychology (3 cr)

Spring

Communication/leadership course; choose from major options (3 cr)

ENG 407A Fundamentals of Business Writing (3 cr)

COU 300 Human Services \*or\* SOC 466 Soc of Medicine \*or\* SOC 484 Death & Dying (3 cr)

Upper-division Humanities course (if needed) (3 cr)

Upper-division Cultural Diversity course (if needed) (3 cr)

Summer

Electives as needed to get to 30 upper-division credits in residence at NSC (0-9 cr)

Total credits for BAS degree: 120-127, depending on AAS major

**ii. Program entrance requirements**

Students must complete one of the following AAS degrees at CSN:

1. Diagnostic Medical Sonography
2. Health Information Technology
3. Ophthalmic Technology
4. Physical Therapist Assistant
5. Radiation Therapy Technology

**iii. Program completion requirements (credit hours, grade point average; subject matter distribution, preprogram requirements)**

Total credits: 120-127 (depending on AAS degree completed)

GPA: 2.0 minimum

Major requirements:

I. AAS from CSN in one of the following fields (68-93 cr)

1. Diagnostic Medical Sonography (AAS = 92-93 credits; BAS = 126-127 credits)
2. Health Information Technology (AAS = 68 credits; BAS = 120 credits)
3. Ophthalmic Technology (AAS = 68 credits; BAS = 120 credits)
4. Physical Therapist Assistant (AAS = 72 credits; BAS = 120 credits)
5. Radiation Therapy Technology (AAS = 82 credits; BAS = 120 credits)

II. Certificate in Health Science at CSN (32-34 credits)

1. BIOL 189 Fundamentals of Life Science (4 cr)
2. BIOL 223 Human Anatomy & Physiology I (4 cr)
3. BIOL 224 Human Anatomy & Physiology II (4 cr)
4. MATH 120 College Mathematics or higher (3 cr)
5. ENG 101 Composition I or equivalent (3 cr)
6. COM 101 Oral Communication (3 cr)
7. PSY 101 General Psychology
8. Fine Arts or Humanities course (3 cr)
9. PSC 101 American Politics (4 cr)
10. HIT 117B Medical Terminology I (1 cr) \*or\* HIT 118B Language of Medicine (3 cr)

Note: Depending on the AAS completed, students may have already taken some of these courses. This represents the maximum number of courses that a student could need to complete for the certificate.

III. Communication/Management Courses (21 cr)



1. Communication/Leadership courses; pick 3 of the following (9 cr total): COM 315 Small Group Communication, COM 404 Principles of Persuasion, COM 412 Intercultural Communication, COM 434 Conflict Management & Negotiation, COM 464 Leadership, PSC 461 Executive Leadership
2. Pick 1 of the following (3 cr): COU 300 Intro to Human Services & Counseling, SOC 466 Sociology of Medicine, SOC 484 Death & Dying
3. ENG 407A Fundamentals of Business Writing
4. PSY 450 Industrial & Organizational Psychology
5. PSY 470 Health Psychology

#### IV. NSC Core Curriculum courses (0-12 cr, depending on AAS completed)

Take courses as needed to complete any unfulfilled core curriculum areas; the AAS and certificate requirements at CSN will fulfill the majority of core curriculum requirements. To maximize transfer credits, NSC has made the following accommodations for students in this degree: 1) BIOL 223 will fulfill the natural science core; 2) PT 122 will fulfill the social science core.

#### V. Upper-division elective (0-9 cr)

Take upper-division courses as needed to complete the residency requirement of 30 upper-division courses at NSC.

Below are detailed requirement breakdowns for each track that articulations with a specific AAS degree at CSN. BIOL 223 will be accepted for the natural science core for all tracks.

#### HEALTH INFORMATION TECHNOLOGY

1. AAS in Health Information Technology (HIT) = 44 major credits
  2. CSN Health Science certificate of completion = 34 cr
    - a. 27 of these credits are core curriculum courses
    - b. 7 cr are additional health science courses (BIOL 224 & HIT 118b)
  3. NSC core curriculum = 9 cr
    - a. Most areas of the core curriculum will be fulfilled by courses from the AAS and certificate at CSN. The HIT track has been built so that if students follow the recommended courses for the core curriculum at CSN, they would only have 9 core credits to complete at NSC.
  4. Communication and Health Science Management major courses = 21 cr (completed at NSC)
    - a. Students pick 3 of the following: COM 315, COM 404, COM 412, COM 434, COM 464, PSC 461
    - b. ENG 407A Fundamentals of Business Writing
    - c. PSY 450 Industrial & Organizational Psychology
    - d. PSY 470 Health Psychology
    - e. COU 300, SOC 466, or SOC 484
  5. Upper-division general electives to reach 30 credit residency requirement = 6 cr
    - a. This assumes students will take an upper-division course for their cultural diversity requirement, getting them to 30 total UD credits at NSC.
  12. General electives (0-6)
- Total = 120

#### OPHTHALMIC TECHNOLOGY

1. AAS in Ophthalmic Technology = 46 major cr
2. CSN Health Science certificate of completion = 32 cr
  - a. 27 of these credits are core curriculum courses
  - b. 5 cr are additional health science courses (BIOL 224 & HIT 117b)

3. NSC core curriculum = 9 cr
  - a. Most areas of the core curriculum will be fulfilled by courses from the AAS and certificate at CSN.
4. Communication and Health Science Management major courses = 21 cr (completed at NSC)
  - a. Students pick 3 of the following: COM 315, COM 404, COM 412, COM 434, COM 464, PSC 461
  - b. ENG 407A
  - c. PSY 450
  - d. COU 300, SOC 466, or SOC 484
  - e. PSY 470
5. Upper-division general electives to reach 30 credit residency requirement = 3 cr
  - a. This assumes students will take an upper-division course for their cultural diversity requirement and at least one humanities requirement, getting them to 30 total UD credits at NSC.
6. General electives (0-9)  
Total = 120

#### PHYSICAL THERAPIST ASSISTANT

1. AAS in Physical Therapist Assistant = 48 major cr
2. CSN Health Science certificate of completion = 32 cr
  - a. 27 of these credits are core curriculum courses
  - b. 5 cr are additional health science courses (BIOL 224 & HIT 117b)
3. NSC core curriculum = 9 cr
  - a. Most areas of the core curriculum will be fulfilled by courses from the AAS and certificate at CSN. If students follow the recommended set of courses, they should have only 9 core credits to complete at NSC.
  - b. To maximize transfer credits, PT 122 Psychological-Social Considerations in Patient Care will be accepted as a social science core course
4. Communication and Health Science Management major courses = 21 cr (completed at NSC)
  - a. Students pick 3 of the following: COM 315, COM 404, COM 412, COM 434, COM 464, PSC 461
  - b. ENG 407A
  - c. PSY 450
  - d. COU 300, SOC 466, or SOC 484
  - e. PSY 470
5. Upper-division general electives to reach 30 credit residency requirement = 6 cr
  - a. This assumes students will take an upper-division course for their cultural diversity requirement, getting them to 30 total UD credits at NSC.
6. General electives (0-4)  
Total = 120

#### RADIATION THERAPY TECHNOLOGY

1. AAS in Radiation Therapy Technology = 51 major cr
2. CSN Health Science certificate of completion = 32 cr
  - a. 27 of these credits are core curriculum courses
  - b. 5 cr are additional health science courses (BIOL 224 & HIT 117b)
3. NSC core curriculum = 9 cr
  - a. Most areas of the core curriculum will be fulfilled by courses from the AAS and certificate at CSN. If students follow the recommended set of courses, they should have only 9 core credits to complete at NSC.
4. Communication and Health Science Management major courses = 21 cr (completed

at NSC)

- a. Students pick 3 of the following: COM 315, COM 404, COM 412, COM 434, COM 464, PSC 461
  - b. ENG 407A
  - c. PSY 450
  - d. COU 300, SOC 466, or SOC 484
  - e. PSY 470
5. Upper-division general electives to reach 30 credit residency requirement = 3 cr
- a. This assumes students will take an upper-division course for their cultural diversity and at least one humanities requirement, getting them to 30 total UD credits at NSC.
6. General electives (0-4)
- Total = 120

#### DIAGNOSTIC MEDICAL SONOGRAPHY

1. AAS in Diagnostic Medical Sonography = 61-62 major cr
  2. CSN Health Science certificate of completion = 32 cr
    - a. 27 of these credits are core curriculum courses
    - b. 5 cr are additional health science courses (BIOL 224 & HIT 117b)
  3. NSC core curriculum = 9 cr
    - a. Most areas of the core curriculum will be fulfilled by courses from the AAS and certificate at CSN. If students follow the recommended set of courses, they should have only 9 core credits to complete at NSC.
  4. Communication and Health Science Management major courses = 21 cr (completed at NSC)
    - a. Students pick 3 of the following: COM 315, COM 404, COM 412, COM 434, COM 464, PSC 461
    - b. ENG 407A
    - c. PSY 450
    - d. COU 300, SOC 466, or SOC 484
    - e. PSY 470
  5. Upper-division general electives to reach 30 credit residency requirement = 3 cr
    - a. This assumes students will take an upper-division course for their cultural diversity and at least one Humanities requirement, getting them to 30 total UD credits at NSC.
- Total = 126-127

As part of the certificate program at CSN, students will be advised on the best courses to take for each area in the core to ensure they maximize the transfer of credits into our core curriculum.

**iv. Accreditation consideration (organization (if any) which accredits program, requirements for accreditation, plan for attaining accreditation - include costs and time frame)**

N/A

**v. Evidence of approval by appropriate committees of the institution**

The proposal was approved by the following:

1. Liberal Arts & Sciences Curriculum Committee on 2/27/16
2. Faculty Senate on 4/4/16
3. NSC Provost on

#### **H. Readiness to begin program**

**i. Faculty strengths (specializations, teaching, research, and creative accomplishments)**

The majority of courses in the major will be taught by existing tenure-track faculty at NSC who hold PhDs in the field. These faculty members earned degrees from highly-regarded doctoral programs.

Current communication faculty:

Christopher Harris, Ph.D. in Communication Studies, University of Miami. Dr. Harris's research interests include media discourses in contemporary society, African American music and culture, and media portrayals of race/ethnicity. He has won top paper awards at the National Communication Association and the Broadcast Educators' Association annual meetings; he recently published an article on a semester-long active learning exercise in the journal *Communication Teacher*. In addition to his academic work, Dr. Harris spent several years running an innovative after-school program for inner-city middle school children in New Jersey.

Jasmine Phillips, Ph.D. in Communication Studies (concentration in Intercultural Communication), University of Miami. Dr. Phillips specializes in the design of culturally relevant public relations campaigns, including an HIV/AIDS health communication campaign aimed at Mayan youth in Guatemala. Dr. Phillips speaks Spanish and Portuguese and has organized study abroad programs aimed at helping students develop their global communication skills.

Relevant psychology and sociology faculty:

Wendi Benson, Ph.D. in Experimental (Organizational/Industrial) Psychology, Washington State University. Dr. Benson's research examines job, health, and psychological outcomes of workplace aggression, job insecurity, and organizational climate. Her commitment to providing unique real-world learning opportunities for NSC students won her the 2015 iTEACH Teaching Excellence Award.

Darlene Haff, Ph.D. in Medical Sociology, University of Alabama at Birmingham, and Master's of Public Health in Epidemiology, UNLV. (Adjunct faculty.) Dr. Darlene Haff has 12 journal publications related to public health and has served as a statistical consultant for the Southern Nevada Health District and UNLV's School of Community Health Sciences, working on various research projects including access to health care for Hispanics in Las Vegas. Dr. Haff has mentored students to develop their secondary data analysis of the Centers of Disease Control and Prevention's Youth Risk Behavior Surveillance Survey for undergraduate publication. To date, three students have published in undergraduate research journal

- ii. Contribution of new program to department's existing programs (both graduate and undergraduate) and contribution to existing programs throughout the college or university**  
This program will provide a long-awaited pathway to a bachelor's-level degree for students in the related AAS programs at CSN. This 3+1 program will complement CSN's AAS degrees and certificate in Health Science.

The 3+1 BAS degree also complements programs at NSC, and capitalizes on courses already offered as part of other degree programs (such as psychology, business, and the minors in sociology and communication). The courses required for the BAS-AHS are offered regularly since they are required for these other degrees as well. The BAS-AHS will contribute additional enrollment to these courses while capitalizing on existing faculty and course offerings.

- iii. Completed prior planning for the development of the program (recent hires, plans for future hires, securing of space, curricular changes, and reallocation of faculty lines)**

NSC hired a new tenure-track communication professor for the 2015-16 academic year. She and the existing (recently tenured) communication faculty member will be able to teach the communication courses included as part of the BAS-AHS degree.

Dr. Wendi Benson, the tenure-track psychology faculty member who will teach PSY 450, will revise her course syllabus slightly to ensure the class addresses HR topics sufficiently for the needs of this group of students. She has also revised the course for a completely online format, which she piloted this year. In 2016-17, NSC will fill two additional tenure-track lines (one in psychology, one in counseling); these hires will provide additional support for the program's psychology and counseling courses.

**iv. Recommendations from prior program review and/or accreditation review teams**

N/A

**v. Organizational arrangements that must be made within the institution to accommodate the program**

N/A

**I. Resource Analysis**

**i. Proposed source of funds (enrollment-generated state funds, reallocation of existing funds, grants, other state funds)**

Existing faculty will teach the courses. If enrollment exceeds expectations and new faculty lines become necessary, additional funds will come from enrollment-generated state funds.

**ii. Each new program approved must be reviewed for adequate full-time equivalent (FTE) to support the program in the fifth year. Indicate if enrollments represent 1) students formally admitted to the program, 2) declared majors in the program, or 3) course enrollments in the program.**

**a. (1) Full-time equivalent (FTE) enrollment in the Fall semester of the first, third, and fifth year.**

**1st Fall semester 5**

**3rd Fall semester 13**

**5th Fall semester 18**

**(2) Explain the methodology/assumptions used in determining projected FTE figures.**

For degree-seeking students at NSC, the average FTE-to-Headcount ratio for the past 3 years is 0.65. Assuming that this ratio maintains, we can expect the FTEs to be 5, 13, and 18 in 1st, 3<sup>rd</sup>, and 5th years, based on projected headcounts (see below).

**b. (1) Unduplicated headcount in the Fall semester of the first, third, and fifth year.**

**1st Fall semester 8**

**3rd Fall semester 20**

**5th Fall semester 29**

**(2) Explain the methodology/assumptions used in determining projected headcount figures.**

Currently, CSN offers 5 AAS programs that will articulate with the proposed BAS program. The programs are Diagnostic Medical Sonography, Health Information Technology, Ophthalmic Technology, Physical Therapist Assistant, and Radiation Therapy Technology. In fall 2015, there were over 250 students enrolled at CSN in these programs. During past five fall semesters, on average, about 25 students in these programs were concurrently active at NSC. It is expected that about one third of those students would enroll in the proposed BAS Allied Health Sciences program, yielding an approximate enrollment of 8 in the first year. Most new majors at NSC have grown at an average rate of 40% in their first five years, with more aggressive growth during initial years. Starting with 8 students in the first year, and assuming growth rates of 70%, 50%, 30%, and 10%, the program is expected to have headcounts of 8, 20, and 29 in the 1st, 3<sup>rd</sup>, and 5th years.

**iii. Budget Projections – Complete and attach the Five-Year Budget Projection Table.**

See attached budget projection spreadsheet. There will be no change in existing personnel allocations as all courses will be taught by currently employed faculty.

**J. Facilities and equipment required**

**i. Existing facilities: type of space required, number of assignable square feet, space utilization assumptions, special requirements, modifications, effect on present programs**

NSC provides exceptional facilities to serve the needs of students and faculty. We are already offering all courses required for this major, so the demand on space should not change with the adoption of the major. Additionally, a number of classes are offered online, which alleviates demands on our existing space. All NSC students have access to computing facilities in several areas across campus as well as help desks for assistance with the online learning platform.

**ii. Additional facilities required: number of assignable square feet, description of space required, special requirements, time sequence assumed for securing required space**

N/A

**iii. Existing and additional equipment required**

LAS prioritizes the provision of state-of-the-art resources to enhance the learning environment for students. Our “SMART” classrooms feature computing workstations, projectors, speakers, a document camera, Smartboard technologies, and interactive student response systems (iClickers). Our classroom technology fully serves the instructional needs of the BAS program, as all of the required courses are already offered. In addition, a lecture-capture system allows faculty to record themselves in the classroom; these videos can be edited and posted online as video lectures in online or hybrid courses.

In 2013, NSC migrated to the Canvas by Instructure learning management system. The ease of use and enhanced functionality this brings to online classes provides an improved learning environment for students. Canvas syncs easily with outside resources (such as Google Drive documents) and mobile apps.

Faculty development sessions and emails and instructional videos from the department chair inform faculty of available resources. Office computers are equipped with programs such as Jing and Camtasia for creation and editing of video lectures. Campus laptops are also available for

checkout as needed. Departmental funds are available to cover specific instructional equipment or materials for courses at an instructor's request.

Overall, NSC faculty have access to extremely high-quality equipment for developing their courses, and LAS remains dedicated to ensuring that our faculty have the resources needed to create innovative, engaging online courses.

**K. Student services required – Plans to provide student services, including advisement, to accommodate the program, including its implications for services to the rest of the student body**

Student advising will be provided through the existing Academic Advising Center; tenure-track faculty will serve as faculty advisors. Majors will have access to all services that are provided to undergraduates at NSC (for instance, the Academic Success Center provides free tutoring services). Our Career Services Center provides career advising. We do not anticipate any negative impacts on existing services for other students or programs.

**L. Consultant Reports – If a consultant was hired to assist in the development of the program, please complete subsections A through C. A copy of the consultant's final report must be on record at the requesting institution.**

**i. Names, qualifications and affiliations of consultant(s) used**

N/A

**ii. Consultant's summary comments and recommendations**

N/A

**iii. Summary of proposer's response to consultants**

N/A

**M. Articulation Agreements**

**i. Articulation agreements were successfully completed with the following NSHE institutions. (Attach copies of agreements)**

N/A

**ii. Articulation agreements have not yet been established with the following NSHE institutions. (Indicate status)**

Upon approval of the program, NSC will complete a 3+1 articulation agreement with CSN.

**iii. Articulation agreements are not applicable for the following institutions. (Indicate reasons)**

N/A

**N. Summary Statement**

Nevada State College proposes to establish a Bachelor of Applied Science (BAS) degree in Allied Health Science as a 3+1 program in conjunction with CSN. Students would complete a relevant AAS degree at CSN (one of 6 options listed earlier in this proposal), then complete a 32-34 credit certificate at CSN during their junior year. They would finish the degree at NSC, taking courses in communication, psychology, and core curriculum areas.

The proposed program provides students with the training they need for careers in several health fields, as well as the leadership knowledge and "soft skills" employers seek, particularly for supervisory positions. The BAS-AHS will provide a 4-year degree option for students who otherwise

do not have a path to a baccalaureate degree after receiving an AAS degree; it will do so while capitalizing on the strengths and missions of NSC and CSN through the design of the 3+1 agreement. Both institutions are excited at the opportunity to work together to offer this educational opportunity.

## SOURCES

Hanover Research. (May 2014). 2+2 program scan prepared for Nevada State College. Washington, D.C.: Hanover Research.



