



## **ACADEMIC PROGRAM PROPOSAL FORM**

*(Revised: November 2016)*

**DIRECTIONS:** Use this form when proposing a new major or primary field of study, new emphasis (BAS only), or new degree program.

**DATE SUBMITTED:**

*Date of AAC Approval:*

November 29, 2017

**INSTITUTION:** College of Southern Nevada

**REQUEST TYPE:**  New Degree  
 New Major or Primary Field of Study  
 New Emphasis (BAS only)

*Date of Board Approval:*

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

**MAJOR** (i.e. Animal Science): Environmental Management

**EMPHASIS** (BAS only):

**INCLUDED IN LAST NSHE PLANNING REPORT:**  Yes  No

(Website for NSHE Planning Reports: <https://www.nevada.edu/ir/Page.php?p=planning>)

**CREDITS TO DEGREE:** 61

**PROPOSED SEMESTER OF IMPLEMENTATION:** Fall 2019

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### **Action requested:**

The College of Southern Nevada (CSN) requests approval from the NSHE Board of Regents for a new Associate of Applied Science (AAS) degree with a major in Environmental Management. This program will focus student learning in biology, chemistry, geology, and environmental science. This degree will help fill environmental positions within Nevada and the region. This program is also the first step in the creation of a Bachelor of Applied Science (BAS) in Environmental Management.

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

This Associate of Applied Science in Environmental Management degree at CSN will provide a number of students the opportunity to achieve knowledge from higher education that will transfer directly to the work force. This program will help learners hone scientific and management skills required by industry.

Due to the fact that this is a generalist degree, students will complete specializations within four selected areas: biology, chemistry, geology, and environmental science. True to most science degrees, this AAS program will require significant field and laboratory work, experiential learning,

and other data-oriented effort outside of the typical classroom setting. Ultimately, this program will provide students the traditional learning environment and the the hands-on-knowledge that will have transferable value to future employers.

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

Students will graduate with an AAS in Environmental Management with the following outcomes:

- Understand and apply federal, state, and tribal policies driving natural resource management.
- Use landscape ecology principles and technology to analyze ecological scenarios for management decisions.
- Apply Environmental Management techniques to develop management scenarios for working environmental technicians.
- Contribute to natural resource decision-making groups utilizing effective communication techniques.
- Apply environmental management strategies and community ecology principles in the management of biodiversity and environmental management at the landscape level.
- Develop leadership skills within the environmental sciences and natural resources management.

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

The assessment of course-specific learning outcomes (objectives) will be mapped to program outcomes and evaluated accordingly.

- The Department will track the academic and workplace achievements of program graduates.
- Intermittent surveys of employers and enrolled students and program alumni will provide information and feedback used for program and course development.
- The program's curriculum and goals will be reviewed annually by the Program Director and faculty members based on studies of best practices and current trends in AAS programs in Nevada and nationwide.

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

Individual courses will evaluate student mastery of program-aligned learning outcomes in methods appropriate for course content and goals. These measures will inform course, curriculum and faculty development efforts. Methods of evaluation may include but are not limited to:

- Examinations and tests
- Laboratory exercises, reports, and notebooks
- Fields exercises and notebooks
- Term and mid-term papers
- In-person presentations
- Discussion assignments

Student course evaluations will be completed in each course. Data generated will inform course improvements, pedagogical training, and program development. Surveys of employers and current students and alumni will provide similar data for course and program development.

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

### **i. NSHE Master Plan**

As proposed in the 2017-2021 Planning Report from NSHE to the Board of Regents, this AAS degree program will:

- Focus on the student. The higher education system in Nevada will create a welcoming, respectful and friendly environment where all students have the opportunity to participate and succeed at every level of higher education.
- Increase the percentage of Nevada's general population who participate in some form of higher education, whether through coursework, workforce training, certificate programs, or degree programs.
- Strive to increase the percentage of students that express a high level of satisfaction with teaching, advising, and overall educational experiences at CSN and other NSHE institutions.
- Serve place-bound populations who nationally are less likely to attend or complete college when extensive travel between home and campus is required. Factors contributing to place-bound status include a lower value on education, remote location, social adjustment in moving to larger population centers, and family and employment circumstances. CSN is uniquely situated to address the circumstances and needs of this population of students in Nevada. Addressing the needs of these students is CSN's first mission. CSN has contact and support services for these place-bound students that cannot be addressed as effectively at other institutions of higher education.
- Engage CSN and Nevada's Reputation for Excellence: Nevada's institutions of higher education will increase their national, regional, and statewide reputation based on targeted, outstanding, innovative programs and other accomplishments.
- Continue to develop and maintain technical programs, centers, and institutes that elicit national, regional, or statewide recognition for excellence.
- Contribute to Nevada's quality of life and the efficiency and productivity of the state's enterprises through public service rendered by Nevada's faculty, staff, and students.
- Serve a diverse student population. CSN is Nevada's only certified Hispanic Serving Institution (HIS).
- Innovate new methods of delivering academic and professional knowledge. CSN has a highly innovative, technologically balanced approach to education that links the service area through combinations of traditional learning, online, and experiential learning. CSN is uniquely qualified to deliver programs in this setting. Providing access to this program is one step in developing environmental conservation professionals in across Nevada who are more likely to remain in Nevada where they are critically needed.
- Provide Quality Education. Nevada's system of higher education consistently provides excellent learning experiences for its students through instruction, research, and service.

- Develop and implement an assessment plan and effective measures of student learning outcomes at each institution and for each academic program. Assessment plans for educational programs will be congruent with the differentiated missions of each institution. Each plan will be required to define student learning outcomes, assess student performance on those outcomes, and use results to improve teaching and learning.
- Develop effective measures of institutional performance, collect data on institutional indicators, and demonstrate results are used in the planning and evaluation process. These indicators will include the regular evaluation of programs and justification for program continuation.
- Increase the number of experiential and rich learning experiences available to place-bound students through creative performance, scholarly and research collaboration with faculty, and through community service learning.
- Assess student performance to guide program development. CSN closely links its programs and students through supporting course outcomes and will be assessed regularly. The availability of an Environmental Management degree program to the place-bound students will enrich their opportunities to further their education in this discipline.
- Provide for a Prosperous Economy: Through a varied delivery of instruction, research, and service, higher education in Nevada will be an essential element in developing and sustaining a strong, dynamic, knowledge-based economy for Nevada.
- Develop and increase responsive educational programs that focus on state needs and critical shortages in identified fields.
- Increase the proportion of workers and the number of graduates in high-skill fields who come from Nevada's higher education institutions rather than from out of state.
- Increase institutional collaborations with the private sector and target significant research resources to achieve specific economic development objectives.
- Increase and focus workforce development to meet community needs in those sectors with the highest potential for growth.
- Develop a STEM workforce in Nevada. As a STEM discipline, graduates with the AAS in Environmental Management may serve within many high-demand workforce fields.
- Retain trained students in the Nevada workforce. Place-bound students are more likely to return to their home community, where the need for technical scientists is often critical, especially in Southern Nevada. Additionally, graduates of the AAS in Environmental Management program may find employment in a wide range of environmental professions, ranging from industrial companies, governmental agencies, private consulting and environmental firms.
- Build a better Quality of Life: Higher education in Nevada will be instrumental in advancing society's objectives and enriching the lives of Nevada's citizens.
- Increase public service and cultural opportunities that position higher education institutions as intellectual, cultural, and artistic centers and as a "marketplace for ideas."
- Ensure that all students have an opportunity to experience some form of internship in their educational programs focus.

- Be flexible enough to apply to a variety of fields and careers. The AAS in Environmental Management program is a basic science degree of wide application. The degree may be applied to professional positions, environmental studies, resource management, and others. All of these fields have need for people willing to work across Southern Nevada and the region.
- Provide Opportunity and Accessible Education for All: Nevada's System of Higher Education will increase the overall participation and, more importantly, the success of Nevadans enrolling at all levels of higher education and in all ethnic groups, and will address the unique educational needs of a highly diverse and non-traditional population.
- Raise the percentage of Nevada's high school graduates who continue into postsecondary education within the NSHE system.
- Increase programs and courses designed to meet the needs of place-bound and working adults.
- Expand the use of shared, new, and existing facilities on weekdays, evenings, weekends, and summers for the most cost-effective delivery of education to the learner.
- Make education accessible. CSN increases accessibility to students throughout Southern Nevada. The isolation of place-bound students makes them not readily supported by the current programs of Nevada's Universities and State College. CSN already has in place existing infrastructure to provide this program to its service area. This program will add enrollment to existing courses that are already being delivered with little increased cost. In addition, should students with appropriate Associate's degrees from the other institutions wish to transfer into the CSN's program, the lower division general education requirements completed with these degrees will be accepted as complete for the CSN degree.

This program will provide abundant opportunities for students who are place-bound and who do not currently have a pathway into a AAS in Environmental Management . The AAS in Environmental Management program availability already established in the curriculum and thus will provide a cost-savings.

The program aligns with the proposals in the E-Learning report (E-Learning and Higher Education's Iron Triangle: Opportunity, Affordability, and Student Success, 2/11/2013). Specific recommendations addressed by this program include the following:

- Recommendation 3: Invest in Distance Education and Related Policy Review.

At CSN, "distance education" means more than the basic use of online delivery of classes. The program will use online ability to enhance most classes, but will also use a large degree of delivery through experiential learning format. CSN is highly invested in using this effective method of synchronous delivery that enables CSN instructors from all three main campuses and annex locations to reciprocally offer course content. Laboratory classes must generally be provided in a classroom format with those facilities located at one of the three main campuses. These classes are an important component of this program. In the future, technology will be developed to address some of the courses through dual synchronous and asynchronous (recorded and available later) formats. Current CSN's infrastructure, policy, and scheduling are in place for this program to utilize.

- Recommendation 6: Invest in a Shared Student Learning Portal and Student e-Portfolio.

Currently, all four of Nevada's community colleges share the Canvas LMS, and Canvas provides options for creating Student Portfolios. This allows an early opportunity for implementing this recommendation.

- Recommendation 11: Invest in Shared Marketing.

The largest opportunity for shared marketing with this program is to promote the opportunity for program graduates to enter graduate school at one of Nevada's universities. The program is focused on providing a rigorous curriculum that provides a solid foundation for entering graduate school in a range of environmental-oriented options.

## **ii. Institutional mission**

The College of Southern Nevada institutional mission is to “Create opportunities and change lives through access to quality teaching, services, and experiences that enrich our diverse community.”

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

This Associate of Applied Science (AAS) degree is included in the 2017-2021 academic master plan for the College of Southern Nevada (CSN).

## **iv. Department and college plan**

This AAS in Environmental Management program will reside in the Department of Physical Sciences, which also oversees the AS Physical Science program and cooperatively oversees the AS (with Biological Sciences).

## **v. Other programs in the institution**

This AAS in Environmental Management degree provides an advanced educational opportunity for learners who are interested in either a career in Environmental Consulting or who would like to continue on to a Bachelors of Applied Science degree. Adding the AAS in Environmental Management to the CSN curriculum combines the synergies of four different science programs (chemistry, biology, geology, environmental science). The AAS program will have a strong foundation in existing CSN offerings that provide efficiencies that strengthen the entire department. This AAS program reflects the following components of the CSN Mission Statement:

- The program is specifically oriented toward students who are place-bound.
- Live student support services are available at the CSN main campuses and at several of its annex sites.
- Courses in this select baccalaureate program will be widely available across CSN using distance technologies where possible.
- The program addresses the educational, cultural, and economic needs of place-bound students in Southern Nevada.
- There are currently no programs for an AAS degree available to students in Nevada.
- The degree provides not only the opportunity for an education within the discipline of Environmental Management but also incorporates a strong base for experiential learning.

- Opportunities exist for graduates of the Environmental Management program in Nevada and beyond. Many jobs require a basic knowledge of science, hands-on-training, and problem solving skills. The program is highly invested in scientific knowledge, experiential learning, and critical analysis. Potential jobs exist in private business, consulting and engineering firms, and resource management agencies. The program will advance a productive workforce that is prepared to work effectively with others.

- The program will collaborate with local and state-wide businesses to identify needs for students who understand science and its application. These activities are continuously assessed to adapt to the rapidly changing needs of employers and to assist in the recruitment and economic development efforts of the state.

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

Currently, an AAS in Environmental Management is not offered at any other NSHE institution. Therefore, this AAS will provide advanced educational opportunities for students attending CSN.

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

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

This program will fulfill a workforce need in the STEM fields for agencies and private firms in Nevada. There is currently no program in Environmental Management in Nevada.

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

Environmental employment in Nevada is expected to grow at national rates, currently estimated to be 11%. According to the United States Department of Labor, Bureau of Labor Statistics: "Employment of environmental ... specialists is projected to grow 11 percent from 2014 to 2024, faster than the average for all occupations. Heightened public interest in the hazards facing the environment, as well as the increasing demands placed on the environment by population growth, is expected to spur demand for environmental scientists and specialists".

Promotion from technician to professional within the environmental field requires a baccalaureate degree. Place-bound students in Nevada are currently limited from advancing their education and moving up as a professional, which ultimately limits their earning potential.

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

There are Bachelor of Science degrees in various nuances of environmental science currently offered at UNR, UNLV and NSC that focus on the more traditional scientific routes. However, these programs are not accessible to place-bound and non-traditional students in the CSN service area nor are they applied science in nature (Source: Understanding Place-bound Students: Correlates and Consequences of Limited Educational Opportunities, Social Psychology of Education, 2004, 7(3):353–376).

The proposed program will not compete with the existing programs because of isolation of the student populations to be served by this program. It is likely that upon completion of the CSN AAS program as proposed here, there may be an increased pool of candidates prepared for and, with interest in, furthering their educational goal at the BAS or, other level, at one of the state universities.

**iv. Evidence of employment opportunities for graduates (state and national). Include information on institutional review of the need for the program based on data from the Nevada P-20 Workforce Research Data System (<https://www.nevada.edu/ir/Page.php?p=workforce>), including the supply/demand reports at <http://npwr.nv.gov/reports/student-completion-and-workforce-part-ii/>.**

This program is designed to lead to one of several potential career paths including environmental technicians in biology, chemistry, geology or environmental management in the private or public sectors. Students may also desire to continue on through a BAS program in environmental management if available.

As stated previously, careers in the sciences related to environmental management are projected to grow 11% through 2024 according to the United States Department of Labor, Bureau of Labor Statistics (<https://www.bls.gov/ooh/life-physical-and-social-science/environmental-scientists-and-specialists.htm>). It is known that this field is one of the fastest growing occupations as evidenced by:

(1) All scientific specialties represented in this degree within Nevada are expected to grow at rates similar to the national average for all scientific occupations.

(2) A large portion of Nevada is public land managed by agencies of the federal government. In order for this land to be utilized for activities such as mining, water resources, ranching, and development, technical scientists will be needed for operations to interface with the managing agency. This often requires specific federal designations and qualifications that this degree would provide. The best option for creating scientists for these positions is to educate place-bound and non-traditional students.

Students in this degree program will qualify for technician level employment that specifically requires an AAS in a related science. It was identified as part of a review of student and employer needs. The review determined a need for technically trained environmental managers.

Because the field is so diverse and fast moving, it is difficult to list all of the career options available to students with an AAS degree. Salaries and Career Outlook Overview according to the U.S. Department of Labor, Bureau of Labor Statistics:

Career	Annual Mean Wage	Projected Job Growth Rate
Env. Technician	\$58,530	15.5%
Env. Managers	\$91,440	11.0%

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

CSN will identify students for this program through several forms of recruitment and marketing. Current CSN students registered as Science and Mathematics majors will be the primary target recruitment audience. Place-bound undergraduates enrolled in CSN's Science programs would have alternative choices.

Current data indicate that there are at least 4,550 students that self-identify as "science-focused" each year at CSN. With such a large number of science-focused students, it is anticipated that their will be significant student interest in this program.



## **G. Detailed curriculum proposal**

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

Please see attached guided pathway and curriculum sheet.

### **ii. Program entrance requirements**

Admission requires acceptance to one of CSN's science programs. This open-door policy is in an effort to recruit a diverse population and underserved communities. As a note, CSN currently has a greater than 25% Latino/Hispanic student population and is a certified Hispanic Serving Institution (HSI).

CSN actively recruits at local Clark County School District (CCSD) high schools with a significant number of students of color. The Admissions Office also recruits students of color by attending local and national college fairs that directly target Latino/Hispanic and students of color .

The Mission Statement for CSN “creates opportunities and enriches lives with inclusive learning and working environments that support diversity and student success. The College fosters economic development, civic engagement, and cultural and scientific literacy, while helping students achieve their educational, professional, and personal goals.”

CSN commits to equity and one way this is measured through core themes for "access" and "achievement" both of which set a target of student body composition mirroring the demographics of Clark County and the State of Nevada.

The college has established strategic priorities, one of which is Latino/Hispanic community engagement in response to the rapidly increasing Latino/Hispanic population in our community.

The college is focusing on retention from area high schools with high percentages of Latino/Hispanic students. Articulations between high school and skill center classes are in progress.

CSN has a long-standing policy of reaching out to diverse populations within the local high schools. The College hosts ‘The Science Fair’ event where approximately 800 local high school students visit the CSN North Las Vegas Campus.

Most of CSN's students work part or full-time to supplement their income. The curriculum has been designed to accommodate the needs of working students.

Specific Entry Process:

1. Enrollment is open to all students accepted to CSN.
2. Admission date is open.

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

Please see attached Course sheet.

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

Due to the strong interdisciplinary and applied nature of the curriculum for the AAS, there is currently no program specific accreditation that is appropriate.

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

All courses have been approved by the CSN curriculum committee.

**H. Readiness to begin program**

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

Faculty teaching in the AAS program will come from existing CSN School of Science and Mathematics.

**ii. Contribution of new program to department's existing programs (both graduate and undergraduate) and contribution to existing programs throughout the college or university**

The Associate of Applied Science degree in Environmental Management will be a foundation for a trained technician.

**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)**

The degree will utilize current full-time faculty. The program will also make use of online resources in conjunction with standard lecture format, experiential learning, and laboratories.

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

The program was reviewed by numerous CSN faculty and industry professionals who all advocated for its development.

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

This program will be overseen by the Department of Physical Sciences. No accommodations to the existing program must be made.

**I. Resource Analysis**

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

The program will utilize existing funds. The lower division courses are low overhead and utilize existing full-time faculty.

**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** 20

**3rd Fall semester** 35

**5th Fall semester** 47

- (2) Explain the methodology/assumptions used in determining projected FTE figures.**  
For the FTE numbers above, please note the following

The formula for calculating FTE is (Head count X Credit hours) /12. The average credit hours is 9 and the we are using 12 credits as our threshold for full time enrollment each semester.

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

**1st Fall semester** 27

**3rd Fall semester** 46

**5th Fall semester** 62

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

For the unduplicated headcount numbers above, please note the following:

- a. 1st Fall semester unduplicated headcount includes only new students since this is the first year the program is offered.
- b. 3rd and 5th semester unduplicated headcount includes both new and returning students to this program.

A list of 30 interested students was used (these students would declare the AAS now if it was available). We believe that some students will drop off this list and additional students will show interest. To keep things simple, we cut 10% from the list of interested students for drop-off as we know that between now and when the AAS EM is available for its first semester, life will happen to some of these students. Additionally, we agreed that we have no data-backed formula to tell us how to predict any additional students showing interest in the AAS EM, so we did not calculate for this.

To come up with the number of new students for FY19 (Yr1) we took 30 interested students and multiplied by .10 (10%) |  $30 \times .10 = 3$  will drop off the interest list. So we predict losing 3 students off the interest list.  $30 - 3 = 27$ , so 27 will be the number of new students for the AAS EM for FY19 (Yr1).

Since we have 0 returning students (as this is the first year of a new program), returning students is 0. Thus, total students for FY19 (Yr1) would be:

0 returning students + 27 new students = 27 students for FY19 (Yr1)

CSN data tells us that 60% of students persist from the first year to the second year. That means 40% do not persist. We used the 40% to determine how many returning students we would lose from one fiscal year to the next. The rationale is that we can point to this number as "actual" data for why the percentage was chosen.

Additionally, we assume that the "returning students" all graduate at the end of their second year. So we only used the new student number to calculate the returning students for each fiscal year.

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

See attached spreadsheet.

**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**

The lecture halls and laboratory facilities that will house the AAS program are located on West Charleston, North Las Vegas and Henderson campuses. These locations have the most up-to-date instructional resources (i.e. classrooms, laboratory equipment) available to instructors facilitating laboratory exercises.

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

No additional facilities required.

**iii. Existing and additional equipment required**

No additional equipment will be required.

**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**

The School of Science and Mathematics will provide the necessary counseling services required for students participating in the program. Currently, the School of Science and Mathematics has science focused counselors embedded within the department offices at each main campus who will guide AAS-EM students along with program faculty.

**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)**

Courses will directly transfer to a future proposed CSN BAS in Environmental Management degree so no articulation agreement is required at this time.

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

N A

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

N A

## **N. Summary Statement**

Faculty in the Physical Sciences Department were approached by representatives from local environmental firms with concerns about the lack of hands-on-training graduates have even after completing a standard degree. They expressed concern about the cost of training a recent graduate with little hands-on-training (experiential learning), having to invest on the job training upwards of 2 to 5 years. They also reported that staff members require a degree in order to be promoted, leaving many of their technicians locked in their current positions. Industry leaders requested that CSN create an Applied Science degree in the field of environmental management to respond to their need. Consequently, the proposed AAS degree was created to meet the need in southern Nevada for technically trained scientists. This degree will offer place-bound and nontraditional students educational advancement with job placement opportunities. It will also fill an identified job gap in the community.

## NSHE Academic Program Proposal - Five-Year Program Cost Estimate and Resource Requirements

Enter N/A if the information is not applicable to the program proposal

Program Resource Requirements. Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first, third and fifth fiscal years of the program. Include reallocation of existing personnel and resources and anticipated or requested new resources. Third and fifth year estimates should be in dollars adjusted for inflation. If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies). Note: This form reflects the NWCCU's Substantive Change Budget Worksheet as of 8/28/17.

College/University: <u>College of Southern Nevada</u>			Program: <u>AAS Environmental Management</u>				
I. PLANNED STUDENT ENROLLMENT							
		FY 1: FY 19		FY 3: FY 21		FY 5: FY 23	
		FTE	Headcount	FTE	Headcount	FTE	Headcount
A. New enrollments to the Institution		20	27	35	46	47	62
B. Enrollments from Existing Programs		0	0	0	0	0	0
II. REVENUE							
		FY 1: FY 19		FY 3: FY 21		FY 5: FY 23	
		On-going	One-time	On-going	One-time	On-going	One-time
1. New Appropriated Funding Request		\$0	\$0	\$0	\$0	\$0	\$0
2. Institution Funds		\$0	\$0	\$0	\$0	\$0	\$0
3. Federal (e.g. grant, appropriation)		\$0	\$0	\$0	\$0	\$0	\$0
4. New Tuition Revenues (registration fee) from Increased Enrollments*		\$79,988	\$0	\$163,007	\$0	\$198,139	\$0
5. Other Student Fees (associated with the program)*		\$0	\$0	\$0	\$0	\$0	\$0
6. Other (i.e., Gifts)		\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Revenue</b>		<b>\$79,988</b>	<b>\$0</b>	<b>\$163,007</b>	<b>\$0</b>	<b>\$198,139</b>	<b>\$0</b>
*revised May 2018							

## NSHE Academic Program Proposal - Five-Year Program Cost Estimate and Resource Requirements

Enter N/A if the information is not applicable to the program proposal

III. EXPENDITURES		FY 1: FY 19		FY 3: FY 21		FY 5: FY 23	
		On-going	One-time	On-going	One-time	On-going	One-time
<b>A. Personnel Costs</b>							
1. FTE (Total FTE for all personnel types)		0.95	0	1.53	0	1.53	0
	Faculty	0.85	0	1.23	0	1.23	0
	Adjunct Faculty	0	0	0.1	0	0.1	0
	Grad Assts	0	0	0	0	0	0
	Research Personnel	0	0	0	0	0	0
	Directors/Administrators	0	0	0	0	0	0
	Administrative Support Personnel	0.10	0	0.20	0	0.20	0
	Other: _____	0	0	0	0	0	0
		<b>Expenditures for personnel type below must reflect FTE levels in Section A.1.</b>					
2. Faculty		\$50,779	\$0	\$73,480	\$0	\$73,480	\$0
3. Adjunct Faculty		\$0	\$0	\$2,475	\$0	\$2,475	\$0
4. Graduate Assistants		\$0	\$0	\$0	\$0	\$0	\$0
5. Research Personnel		\$0	\$0	\$0	\$0	\$0	\$0
6. Directors/Administrators		\$0	\$0	\$0	\$0	\$0	\$0
7. Administrative Support Personnel		\$4,882	\$0	\$9,765	\$0	\$9,765	\$0
8. Fringe Benefits		\$18,414	\$0	\$27,282	\$0	\$27,282	\$0
9. Other:		\$0	\$0	\$0	\$0	\$0	\$0
	<b>Total Personnel Costs</b>	<b>\$74,075</b>	<b>\$0</b>	<b>\$113,002</b>	<b>\$0</b>	<b>\$113,002</b>	<b>\$0</b>

## NSHE Academic Program Proposal - Five-Year Program Cost Estimate and Resource Requirements

Enter N/A if the information is not applicable to the program proposal

		FY 1: FY 19		FY 3: FY 21		FY 5: FY 23	
		On-going	One-time	On-going	One-time	On-going	One-time
<b>B. Operating Expenditures</b>							
1. Travel		\$0	\$0	\$0	\$0	\$0	\$0
2. Professional Services		\$0	\$0	\$0	\$0	\$0	\$0
3. Other Services		\$0	\$0	\$0	\$0	\$0	\$0
4. Communications		\$0	\$0	\$0	\$0	\$0	\$0
5. Materials and Supplies		\$1,000	\$0	\$2,000	\$0	\$2,000	\$0
6. Rentals		\$0	\$0	\$0	\$0	\$0	\$0
7. Marketing materials and Advertising		\$0	\$0	\$0	\$0	\$0	\$0
8. Miscellaneous		\$4,913	\$0	\$48,005	\$0	\$83,137	\$0
<b>Total Operating Expenditures</b>		\$5,913	\$0	\$50,005	\$0	\$85,137	\$0



**NSHE Academic Program Proposal - Five-Year Program Cost Estimate and Resource Requirements**

Enter N/A if the information is not applicable to the program proposal

		FY 1: FY 19		FY 3: FY 21		FY 5: FY 23	
		On-going	One-time	On-going	One-time	On-going	One-time
<b>C. Capital Outlay</b>							
1. Library Resources							
2. Equipment							
<b>Total Capital Outlay</b>		\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL EXPENDITURES (IIIA + IIIB + IIIC):</b>		\$79,988	\$0	\$163,007	\$0	\$198,139	\$0

**Budget Notes (optional):**