

# 2016-17 **Existing Program Review**

Prepared for the Board of Regents' Academic, Research and Student Affairs Committee



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## 2016-17 **Executive Summary**

The Review of Existing Programs report is prepared for the Academic, Research and Student Affairs (ARSA) Committee in accordance with Board policy (*Title 4, Chapter 14, Section 5* of the *Handbook*):

- 1. A review of existing academic programs shall be conducted by the universities, state college, and community colleges on at least a ten-year cycle to assure academic quality, and to determine if need, student demand, and available resources support their continuation pursuant to the following.
  - a. The review of existing programs must include multiple criteria. Although criteria may vary slightly between campuses, as institutions have different missions and responsibilities, there should be comparable data from all programs. The review must include both quantitative and qualitative dimensions of program effectiveness, and peer review.
  - b. Criteria to be utilized in the review of existing programs shall include the following: quality, need/demand for the program, relation to the institutional mission, cost, relationship to other programs in the System, student outcomes, and quality and adequacy of resources such as library materials, equipment, space, and nonacademic services.
  - c. An annual report will be published by the institution on the results of existing program evaluations and a summary of that report will be forwarded to the Chancellor's Office and presented to the Academic, Research and Student Affairs Committee annually. When the annual report is presented to the Committee, at least two teaching institutions selected by the Chancellor's Office will also present in detail the reviews conducted for at least one program. The presentation by each institution shall include, but is not limited to, the institution's process for evaluating existing programs generally, indications of quality, whether the program is meeting employer expectations, improvements in student learning outcomes, and any action steps identified based on the review of the program and the status of the action steps.

. . . .

In conducting program reviews each year, the institutions are guided by their respective process, as described in each program review in this report, and include self-study and faculty guidance and input. In addition, the universities may also utilize external reviewers. The major findings, recommendations and next steps concerning the programs reviewed are unique to each institution and the program itself, but generally, program strengths continue to include overall program quality and engaged students and faculty committed to the success of their programs.

The reports submitted by the institutions for each program are included in this publication and organized by institution. A summary table at the beginning of this report extracts and compiles data from the institutional reports regarding the unduplicated student headcount for the Fall of 2016 for each program and the number of students with a declared major in the program in 2016-17. This table also includes the number of graduates from the program for the past three academic years. In addition to the summary table, this publication includes a record of the programs that were eliminated or deactivated and new programs approved by the Board of Regents within the reporting year. As required by subsection 3 of *Title 4, Chapter 14, Section 5* of the *Handbook,* this table also includes any (1) certificates of at least 30 credit hours, and (2) certificates of less that 30 credit hours that provide preparation necessary to take state, national and/or industry recognized certification or licensing examinations ("skills certificates") created by the community colleges that were approved by the Academic Affairs Council in the reporting year.

This report, along with the corresponding <u>institutional reports</u> for each program summarized for 2016-17, and reports from prior years are available <u>online</u> through the NSHE website (<u>nshe.nevada.edu</u>).

## 2016-17 Summary of Eliminated and New Programs by Institution

Program	Elimination or Deactivation	New Program
University of Nevada, Las Vegas		
Data Analytics & Applied Economics, MS		Χ
Doctor of Dental Surgery, DDS		Χ
Environmental Studies, BS and BA	Χ	
Nutrition Sciences, MS		Χ
Science, MAS	Χ	
Workforce Development and Organizational Leadership, Ph.D.	Χ	
Workforce Education and Development, MS and M.Ed.	Χ	
University of Nevada, Reno		
Dance, BA		Χ
Mathematics, Ph.D.		Χ
Secondary Education, MS	Χ	
Statistics and Data Science, Ph.D.		Χ
Nevada State College		
Deaf Studies, BA		Χ
College of Southern Nevada		
Administrative Assistant, Skills Certificate		Χ
Cultural Resource Management, CA		Χ
Deaf Studies, BAS		Χ
Environmental Safety and Health—Occupational Safety	.,	
Management, CA	Χ	
Facility Maintenance and Manufacturing, AAS		Χ
Floral Design, Skills Certificate		Χ
Floral Design: Special Events and Weddings, Skills Certificate		Χ
Forensic Anthropology, CA		Χ
Office Assistant, Skills Certificate		Χ
Great Basin College		
Computer Technologies—Graphic Communications, CA		X
Truckee Meadows Community College		
Administrative Professional, AAS, CA	Χ	
Architectural Design Technology, AAS	Χ	
Architecture, AA	Χ	
Construction and Design, AAS		Χ
Early Childhood Education, AA	X	
Graphic Software, Skills Certificate		Χ
Industrial Electricity 1, Skills Certificate		Χ
Industrial Maintenance, CA		X
Northern Nevada Law Enforcement Academy,		
Peace Officers Certification	Χ	
Programmable Logic Controllers 1, Skills Certificate		Χ
Western Nevada College		
Mechatronics Technology, CA		X
31/		

**2016-17 Summary of Characteristics of Reviewed Programs** 

	Number of Students with	Number of Graduates from Program			Service	
Program	Declared Major 2016-17	2014-15	2015-16	2016-17	Headcount Fall 2016	
University of Nevada, Las Vegas						
Computer Science, MS and Ph.D.	58	13	17	21	121	
Creative Writing, MFA /English-Creative Dissertation, Ph.D.	63	15	14	16	198	
Geoscience: Geology, BS/ Earth and Environmental Science, BS	169	24	20	32	1,528	
Geoscience, MS and Ph.D.	46	12	14	10	84	
Hospitality Management, BS	58	643	641	525	8,269	
Hotel Administration, MS	55	35	14	22	157	
University of Nevada, Reno						
Geology, BS	83	9	20	13	2,228	
Geology, MS	18	12	4	7	172	
Geology, Ph.D.	16	0	4	0	113	
Geological Engineering, BS	90	13	20	20	361	
Geological Engineering, MS	3	1	0	3	17	
Geophysics, BS	20	5	2	5	113	
Geophysics, MS	7	0	1	0	3	
Geophysics, Ph.D.	11	3	1	1	1	
Geo-Engineering, Ph.D.	11	3	1	1	6	
History, BA	140	28	38	19	6,549	
History, MA	18	3	3	0	69	
Teaching History, MAT	2	1	1	1	69	
History, Ph.D.	8	2	0	3	15	
Physics, BS	233	14	18	20	6,549	
Physics, MS	9	6	1	4	74	
Physics, Ph.D.	26	8	4	4	203	
Theatre, BA	70	12	12	11	796	
Nevada State College						
Management, BAS	30	9	9	4	430	
College of Southern Nevada						
Biological Sciences	1,132	25	36	38	7,949	

**2016-17 Summary of Characteristics of Reviewed Programs** 

Program	Number of Students with	Number of Graduates from Program			Service Headcount
. 103.4	Declared Major 2016-17	2014-15	2015-16	2016-17	Fall 2016
Great Basin College					
Criminal Justice, AAS	66	16	10	14	135
Nursing, AAS	192	19	16	26	65
Nursing, BS	78	16	27	23	67
Radiology Technology, AAS	87	4	9	10	44
Truckee Meadows Community College					
Dental Hygiene, AS	25	11	12	11	287
Entrepreneurship, AA Emphasis and CA	2	0	0	0	116
Veterinary Technology, AAS	47	10	13	6	192
Western Nevada College					
Associate of Arts Degree Program (AA)	1,221	196	276	271	4,263
Graphic Communications, AAS and CA	50	21	15	11	128



## Program Review University of Nevada, Las Vegas

### **Degree Programs**

- I. List the existing programs and corresponding degree for all programs that were reviewed over this academic year of review.
  - Computer Science, MS and Ph.D.
  - Creative Writing, MFA/English—Creative Dissertation, Ph.D.
  - Geoscience: Geology, BS/Earth and Environmental Science, BS
  - Geoscience, MS and Ph.D.
  - Hospitality Management, BS
  - Hotel Administration, MS
- II. List any programs and corresponding degree level for all programs that received Board approval for elimination or deactivation in this academic year of review.
  - Environmental Studies, BA and BS
  - Science, MAS
  - Workforce Development & Organizational Leadership, Ph.D.
  - Workforce Education and Development: MS and M.Ed.
- III. List all new programs and corresponding degree programs that received Board approval in this academic year of review.
  - Data Analytics & Applied Economics, MS
  - Doctor of Dental Surgery, DDS
  - Nutrition Sciences, MS

### **Certificates**

None

### Computer Science, MS and Ph.D.

### I. Description of Program Reviewed

The MS and Ph.D. degree are awarded to candidates who have demonstrated breadth of knowledge in computer science in general and have displayed depth of knowledge in the area of specialty, as well as the ability to make original contributions to the body of knowledge in this field.

#### II. Review Process and Criteria

The program review was based on a self-study completed by the program with the involvement of the faculty. Two external experts in the field from similar institutions visited the campus, conducted interviews with students, faculty, staff, and the Vice Provost for Academic Programs, and then produced a comprehensive report on the program.

### **III. Major Findings and Conclusions of the Program Review**

The core faculty have a strong record of publications in top conferences and journals, while faculty working in more applied fields, like cyber security, software engineering, and big data, have excellent funding records. We remark the recent shift in computer science research, as outlined at Computer Research Association Heads meetings of the past few years, from journal papers to top tier conference papers that allow fast dissemination of results. Overall, in recent years, the CS faculty has a strong publication record and increased external funding. The Department has made strides into emerging areas, including the creation of the Sustainability Center for Information Technology and Algorithms, which can have significant impact on the local community. The PhD students have broad knowledge of the field and in depth expertise within their topics of research. They take pride in having to earn their PhD, rather than looking for an easy ride. This is the type of culture that can be found at top tier universities.

The faculty is strongly supportive of the current department Chair. It is our understanding that, would school bylaws permit, they would happily support extending the current department leadership. The Computer Science graduate program is based on solid foundations, with excellent faculty and PhD students. There is particular strength in theory and applied fields such as big data, cybersecurity, and software engineering. There is a strong sentiment of belonging and pride in the strength of the program among PhD students, while at the same time the level of PhD stipends seems inadequate. Faculty are very supportive of the current department chair.

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- Work to increase the number of graduate students.
- ♦ Increase the number of lecturers/PTIs.

#### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 58

B. Number of graduates from the program for the following years:

2014-15 13 2015-16 17 2016-17 21

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 121

#### **VI. Institutional Reports**

### Creative Writing, MFA/English-Creative Dissertation, Ph.D.

### I. Description of Program Reviewed

The M.F.A program is designed to be a three-year, intensive studio arts terminal degree with a strong international emphasis and requires the writing of a book-length creative thesis in either fiction or poetry.

The Ph.D. program is a highly specialized program designed to train a student for a career in teaching at the college or university level through the development of skills in research, original thought, and academic writing.

#### II. Review Process and Criteria

The program review was based on a self-study completed by the program with the involvement of the faculty. Two external experts in the field from similar institutions visited the campus, conducted interviews with students, faculty, staff, and the Vice Provost for Academic Programs, and then produced a comprehensive report on the program.

### III. Major Findings and Conclusions of the Program Review

The MFA program is to be commended for its commitment to thinking of writing within a world context, and for making this commitment a substantive endeavor for its cohort through its commitment to student travel abroad and translation. The PhD program is one of the best funded in the country in creative writing and it has consistently admitted strong students who have gone on to make a mark in their field and to teach in academia. The Black Mountain Institute is to be commended for the degree and level of support it provides to the PhD students in particular, and for the support it gives to the MFA students to travel abroad. But it should be emphasized that none of this would be remotely possible without a highly dedicated and hard-working faculty—indeed, one of the hardest working we have seen—willing to give a great deal of their time to the aspects of the program they rightly feel are important. The level of commitment of the faculty within the creative writing program is exceptional, and is a huge part of what has made the program a success.

UNLV's creative writing program is a fine graduate program that is commendable in most every way. It is enhanced greatly by its connection to the Black Mountain Institute, which provides the program with resources and support that help make it competitive (particularly on the PhD level) with creative writing programs at peer institutions. The program is well-funded at the PhD level, but faces potential challenges at the MFA level in terms of attracting the very best students, challenges that would be most effectively resolved proactively. With the heavy workload that faculty face, there is also danger of faculty burnout. A small increase in stipend for the MFAs, a decrease in student teaching load, the addition of a tenure track member or members beyond the current non-fiction hires that are in process, and an additional administrative assistant dedicated to supporting the creative writing program will all lead to the university's goal of Top Tier status.

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- ♦ Examine the appropriateness of Creative Writing existing within the English Department.
- Consider reducing the teaching loads of students.
- ♦ Address the lack of book publishing by faculty.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 63

**B.** Number of graduates from the program for the following years:

2014-15 15 2015-16 14 2016-17 16

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 198

### **VI. Institutional Reports**

### Geoscience: Geology BS/Earth & Environmental Science BS

### I. Description of Program Reviewed

The undergraduate Bachelor of Science degree in Geology (GEOL) is a rigorous program that is designed to: 1) prepare students for entry into the workforce as practicing geoscientists, and 2) provide them with the foundational knowledge required to pursue an advanced degree.

The undergraduate Bachelor of Science degree in Earth and Environmental Science (EES) is a science-based program designed to prepare students for a range of challenging careers in the broad fields of environmental and geologic sciences, including science education. The degree program also provides a solid foundation for those looking to pursue advanced degrees in education, environmental studies, public policy, or law.

#### II. Review Process and Criteria

The program review was based on a self-study completed by the program with the involvement of the faculty. Two external experts in the field from similar institutions visited the campus, conducted interviews with students, faculty, staff, and the Vice Provost for Academic Programs, and then produced a comprehensive report on the program.

### III. Major Findings and Conclusions of the Program Review

From the external reviewers' report:

The undergraduate students are very satisfied with the educational environment and their learning experiences. These positive responses arise for a number of reasons:

- The overall learning environment is welcoming and respectful, including faculty members, GAs, and staff. This environment has led to both scientific and social interaction of students at all levels, as well as active student organizations. As a result, undergraduates become active learners concerning scientific research and potential career paths.
- ♦ Course work is perceived to be pertinent to students' professional advancement.
- ♦ The heavy emphasis on field-based learning and research is widely appreciated.
- The opportunity to conduct research using available cutting-edge technology results in very enthusiastic student cohorts. Students recognize that their research projects provide excellent preparation for postgraduate study and prepare them for a career in geotechnical fields if that is their interest.
- Students were highly enthusiastic about the Geoscience Symposium, which is held in the Spring Semester, and allows students to present their research, view the research of others, and interact with professional geologists. Many earth science departments conduct such events, but few are as well run and enthusiastically embraced as UNLV's.

The undergraduate program in Geosciences is healthy and vibrant. The Department is to be commended on:

- Development of two academic tracks, with options to pursue the traditional quantitative degree (Geology) or a more broadly-based degree (Earth and Environmental Science).
- ♦ The emphasis on and dedication to field-based instruction, which sets the program apart from many geoscience programs.
- ♦ Encouraging undergraduate students to engage in research.
- Student access to state-of-the-art analytical facilities
- ♦ A welcoming environment with ready access to faculty members.

- Do more to project tentative schedules out into the future, perhaps two years.
- Be more attentive to the issue of advising transfer students.

### **Geoscience: Geology BS/Earth & Environmental Science BS**

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 169

B. Number of graduates from the program for the following years:

2014-15 24 2015-16 20 2016-17 32

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 1,528

### **VI. Institutional Reports**

### Geoscience, MS and Ph.D.

### I. Description of Program Reviewed

The Masters of Science degree in Geoscience is designed to prepare students for a broad range of challenging careers in government service, private consulting, and industry. This thesis-based degree program also serves as a stepping-stone for those students who wish to pursue further graduate studies at the Doctoral level.

The Doctor of Philosophy degree in Geoscience is designed to prepare students for demanding researchoriented careers in academia, government service, private consulting, and industry.

#### **II. Review Process and Criteria**

The program review was based on a self-study completed by the program with the involvement of the faculty. Two external experts in the field from similar institutions visited the campus, conducted interviews with students, faculty, staff, and the Vice Provost for Academic Programs, and then produced a comprehensive report on the program.

### III. Major Findings and Conclusions of the Program Review

From the external reviewers' report:

Students were complimentary about the approachable nature of the faculty and the quality of the classes. The faculty have assembled a world class array of analytical instrumentation. The department has continued to maintain a strong field emphasis to their research and to the training they provide the graduate students. Faculty provide professional development for students through travel support for conferences and workshops. The department climate is healthy and collegial and there appears to be a sincere desire to continue to build strength in the department. The department has successfully recruited productive junior faculty. The Department of Geosciences and its graduate programs are true assets to UNLV. We found a student-centered, research powerhouse that has already accomplished numerous successes, yet has potential for growth in research productivity and quality of students as resources are made available.

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

Consider designating a faculty member to work on fundraising for the department.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 46

B. Number of graduates from the program for the following years:

2014-15 12 2015-16 14 2016-17 10

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 84

### **VI. Institutional Reports**

### **Hospitality Management, BS**

### I. Description of Program Reviewed

The program develops students into leaders of the hospitality industry, contribute to the advancement of the profession and provide service to the community by having an outstanding faculty, challenging curriculum, innovative research, supportive culture and wide range of professional experiences; all in the context of one of the most exciting cities in the world .

#### II. Review Process and Criteria

The program review was based on a self-study completed by the program with the involvement of the faculty. Two external experts in the field from similar institutions visited the campus, conducted interviews with students, faculty, staff, and the Vice Provost for Academic Programs, and then produced a comprehensive report on the program.

### III. Major Findings and Conclusions of the Program Review

From the external reviewers' report:

The Harrah College is rapidly reforming and evolving. The recent development and changes the College has undertaken are impressive. A new academic building is one of the great achievements. The College is also actively recruiting new tenure track faculty members to strengthen research endeavors. The new P &T document has been established. All these accomplishments are commendable. They will serve as a foundation for the College's further development and future survival. The Harrah College of Hotel Administration is ideally situated to be a top-tier program.

It is located "a short distance from the most tourist-oriented stretch of real estate in the country." Hospitality businesses abound, and there are a multitude of opportunities for undergraduate students to obtain internships, and acquire other work experiences. It can also serve as a laboratory for hospitality research. There are few programs that have an environment as conducive to hospitality education.

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- ♦ Develop more connections between faculty and industry.
- ♦ Improve accuracy of college website.
- ♦ Improve the preparedness of part-time faculty.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 58

B. Number of graduates from the program for the following years:

2014-15 643 2015-16 641 2016-17 525

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 8,269

#### **VI. Institutional Reports**

### **Hotel Administration, MS**

### I. Description of Program Reviewed

The 36-hour MS in Hotel Administration is designed to prepare graduate students for a successful career as an upper-level executive in the hospitality sector or an instructor/researcher in a hospitality education program.

#### II. Review Process and Criteria

The program review was based on a self-study completed by the program with the involvement of the faculty. Two external experts in the field from similar institutions visited the campus, conducted interviews with students, faculty, staff, and the Vice Provost for Academic Programs, and then produced a comprehensive report on the program.

### III. Major Findings and Conclusions of the Program Review

From the external reviewers' report:

Our visit with faculty and students along with our review of the provided documents has led us to conclude that the college has invested concerted efforts to reexamine the curriculum, its content, and the student outcomes of the MS Hotel Administration degree program. We sincerely compliment their efforts in this direction. The students we talked with jointly indicated how much they enjoyed being in the program and very much appreciated the support they receive from faculty and administrators. They also greatly value the level of high collegiality that exists in the college.

The college has excellent resources. The physical resources will soon be sterling (a new college building with outstanding facilities: smart class rooms and labs, clustering of faculty offices, food & beverage stations, a career and advising center, breakout rooms for group projects, and open space for student engagement). They have an excellent faculty with a strong support staff. The move into the new facilities along with the alignment of the curriculum with industry current needs would likely result in an enhancement of the program reputation and a related increase in program enrollment.

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- ♦ Reduce the number of core courses while adding electives.
- ♦ Consider instituting a 4+1 program.
- Consider ways of counting work experience in the cases of industry professionals.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 55

B. Number of graduates from the program for the following years:

2014-15 35 2015-16 14 2016-17 22

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 157

### **VI. Institutional Reports**



## Program Review University of Nevada, Reno

### **Degree Programs**

- List the existing programs and corresponding degree for all programs that were reviewed over this academic year of review.
  - Geology, BS
  - Geology, MS
  - Geology, Ph.D.
  - Geological Engineering, BS
  - Geological Engineering, MS
  - Geophysics, BS
  - Geophysics, MS
  - Geophysics, Ph.D.
  - Geo-Engineering, Ph.D.

- History, BA
- History, MA
- History-Teaching History, MAT
- History, Ph.D.
- Physics, BS
- Physics, MS
- Physics, Ph.D.
- Theatre, BA
- II. List any programs and corresponding degree level for all programs that received Board approval for elimination or deactivation in this academic year of review.
  - Secondary Education, MS
- III. List all new programs and corresponding degree programs that received Board approval in this academic year of review.
  - Dance, BA
  - Mathematics, Ph.D.
  - Statistics and Data Science, Ph.D.

### **Certificates**

None

### Geology, BS

### I. Description of Program Reviewed

The undergraduate degree in Geology is focused on learning about the major earth systems and the geologic processes that create and shape them. Study of geologic systems includes coursework to develop an in-depth understanding of earth surface processes, earth materials and geochemistry, structure and tectonics, rock forming processes and paleoecology. The curriculum culminates with the capstone course, Summer Field Camp, a six-week outdoor experience in which faculty guide students in the completion of several mapping projects in Utah, Nevada, and California. To receive a Bachelor of Science in Geology the minimum requirement is 131 credits, comprised of 39-42 University core, 86-94 Major and 6-19 Elective credits. Specialization course options are available: Economic, Environmental, Custom.

#### II. Review Process and Criteria

The Geological Sciences programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the programs was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an on-campus visit on April 6-7, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on August 25, 2017. A final MOU of findings and recommendations from the provost and vice provost was prepared on September 28, 2017.

### III. Major Findings and Conclusions of the Program Review

- 1. General: Excellent and world renowned faculty and students; world class research and exciting teaching programs; publications in top journals; great setting to do geosciences; excellent MacKay reputation Particular strength in economic geology; distinctive mining engineering program
- Undergraduate student recruitment through the Mackay School is excellent
- Breadth of undergraduate degree options is a strength
- Strong undergraduate research program with accessible faculty
- Excellent Field Camp
- Excellent undergraduate advising with dedicated advisors
- Very good placement of graduates in both graduate schools and industry
- 9. Positive junior faculty who appreciate the leadership of the chair

- 1. Course scheduling is inefficient and uncoordinated. The chair should reestablish department curriculum committees to take on this task.
- The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
- 3. The reviewers suggested that expansion of service to the Core Curriculum/General Education could justify new GTA positions. Those positions could be used in recruiting excellent graduate students not tied to PIprovided RA positions. The department has 2 proposals with the Courses & Curricula Committee that could fulfill Core 9 objectives.
- 4. The reviewers also suggested that additional Graduate Teaching Assistants are needed to support the existing courses. The department was allocated two additional assistants in 2016-17. The dean has requested the department to do a survey of university geoscience departments to determine best practices for GTA assignments and workload.
- 5. The reviewers recommended that course scheduling be delegated to an associate chair or faculty member with this service assignment. As an interim step, the undergraduate curriculum committee with this responsibility will be reestablished. The department is also looking at a "chair elect" model that could address this work. The department is asked to be prepared to report on how the committee is working as well as the result of their exploration of a chair elect and/or associate chair model during the mid-point evaluation for this review.

### Geology, BS

- 6. The reviewers were impressed with the quality of the Field Camp but were also concerned that this service role is an imposition on untenured faculty. The department has a commitment from a faculty member in NBMG to take responsibility for the camp for the next few years and will explore other methods for ensuring the camp continues but does not burden untenured faculty.
- 7. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.
- 8. The department was advised to clarify faculty roles in fundraising/development with alumni and others. The college development officers are ready to work with faculty on how they can be an asset for development for the department and programs. The first step should be a meeting with the dean and his development officers to discuss possible other areas for fund raising. Continued attention will occur to ensure that the teaching and research missions of the department are well-coordinated with Nevada Seismology Lab and the Nevada Bureau of Mines and Geology.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 83

B. Number of graduates from the program for the following years:

2014-15 9 2015-16 20 2016-17 13

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 2,228

### **VI. Institutional Reports**

### Geology, MS

### I. Description of Program Reviewed

Students may enter either a major or major-minor program in geology, choosing an appropriate course of study for their academic or career goals. Graduate students conduct research within the department and/or in association with the Center for Neotectonic Studies, the Ralph J. Roberts Center for Research in Economic Geology, the Arthur Brant Laboratory for Exploration Geophysics, the Desert Research Institute, the Nevada Bureau of Mines and Geology, the Nevada Seismological Laboratory, and the United States Geological Survey-Reno Field Office. A cooperative program in quaternary sciences exists with the collaboration of faculty in the Quaternary Sciences Center, Desert Research Institute. Both regional and international research programs are available. The master's degree is 31 credits and requires 1 credit of comprehensive examination.

#### **II. Review Process and Criteria**

The Geological Sciences programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the program was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an on-campus visit on April 6-7, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on August 25, 2017. A final MOU of findings and recommendations from the provost and vice provost was prepared on September 28, 2017.

### III. Major Findings and Conclusions of the Program Review

- 1. General: Excellent and world renowned faculty and students; world class research and exciting teaching programs; publications in top journals; great setting to do geosciences; excellent MacKay reputation
- 2. Particular strength in economic geology; distinctive mining engineering program
- 3. Strong graduate programs
- Excellent Field Camp
- 5. Very good placement of graduates in both graduate schools and industry
- 6. Positive junior faculty who appreciate the leadership of the chair

- 1. A strong graduate program could be improved; enrollment numbers have fluctuated. Recruitment of graduate students is often by word-of-mouth, and faculty are not coordinated in this effort. Recruiting efforts should focus on the Ph.D. program. The graduate studies committee is currently focused on admissions evaluation, but should expand to look at recruitment and the curriculum. A joint website is recommended for all geological sciences programs, similar to what Molecular Biosciences has implemented. They should inquire with Marketing & Communications about receiving a report of the traffic to their website and also get advice from the graduate school about curriculum, recruitment, and advising.
- 2. Course scheduling is inefficient and uncoordinated. The unstructured graduate curriculum leads to inefficiency and uncertainty in graduate student progression and excessive time to degree. The chair should reestablish department curriculum committees to take on this task.
- 3. The current required credit levels for graduate degrees may be too high, and Ph.D. students take courses until they defend. The department should review the requirements at peer and aspirant institutions.
- 4. The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
- 5. The reviewers suggested that expansion of service to the Core Curriculum/General Education could justify new GTA positions. Those positions could be used in recruiting excellent graduate students not tied to PI-provided RA positions. The department has 2 proposals with the Courses & Curricula Committee that could fulfill Core 9 objectives.

### Geology, MS

- 6. The reviewers also suggested that additional Graduate Teaching Assistants are needed to support the existing courses. The department was allocated two additional assistants in 2016-17. The dean has requested the department to do a survey of university geoscience departments to determine best practices for GTA assignments and workload.
- 7. The reviewers recommended that course scheduling be delegated to an associate chair or faculty member with this service assignment. As an interim step, the undergraduate curriculum committee with this responsibility will be reestablished. The department is also looking at a "chair elect" model that could address this work. The department is asked to be prepared to report on how the committee is working as well as the result of their exploration of a chair elect and/or associate chair model during the mid-point evaluation for this review.
- 8. The reviewers were impressed with the quality of the Field Camp but were also concerned that this service role is an imposition on untenured faculty. The department has a commitment from a faculty member in NBMG to take responsibility for the camp for the next few years and will explore other methods for ensuring the camp continues but does not burden untenured faculty.
- 9. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.
- 10. The department was advised to clarify faculty roles in fundraising/development with alumni and others. The college development officers are ready to work with faculty on how they can be an asset for development for the department and programs. The first step should be a meeting with the dean and his development officers to discuss possible other areas for fund raising.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 18

B. Number of graduates from the program for the following years:

2014-15 12 2015-16 4 2016-17 7

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 172

### **VI. Institutional Reports**

### Geology, Ph.D.

### I. Description of Program Reviewed

The University's Ph.D. in geology invites students to explore earth-science research areas such as geodynamics, volcanology, geochemistry and petrology, earth and planetary surface processes, earthquakes and seismology, and mineral and energy resources. Graduate students conduct research within the Department and/or in association with the Center for Neotectonic Studies, the Ralph J. Roberts Center for Research in Economic Geology, the Arthur Brant Laboratory for Exploration Geophysics, the Desert Research Institute, the Nevada Bureau of Mines and Geology, the Nevada Seismological Laboratory, the Great Basin Center for Geothermal Energy, the Nevada Geodetic Laboratory, and the United States Geological Survey-Reno Field Office. Field studies are a natural area of emphasis for this program. Potential areas of specialization within the program include:

- Earthquakes and neotectonics
- Geologic hazards
- Geomorphology
- Global change
- Igneous petrology and volcanology
- Metamorphic geochemistry
- Mineral exploration and ore genesis
- Paleoseismology
- Planetary geology
- · Quaternary sciences
- Regional geology
- Seismology and seismic hazards

### **II. Review Process and Criteria**

The Geological Sciences programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the program was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an on-campus visit on April 6-7, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on August 25, 2017. A final MOU of findings and recommendations from the review was prepared by the provost and vice provost on September 28, 2017.

#### III. Major Findings and Conclusions of the Program Review

- 1. General: Excellent and world renowned faculty and students; world class research and exciting teaching programs; publications in top journals; great setting to do geosciences; excellent MacKay reputation
- 2. Particular strength in economic geology; distinctive mining engineering program
- 3. Strong graduate programs
- 4. Excellent Field Camp
- 5. Very good placement of graduates in both graduate schools and industry
- 6. Positive junior faculty who appreciate the leadership of the chair

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

1. A strong graduate program could be improved; enrollment numbers have fluctuated. Recruitment of graduate students is often by word-of-mouth, and faculty are not coordinated in this effort. Recruiting efforts should focus on the Ph.D. program. The graduate studies committee is currently focused on admissions evaluation, but should expand to look at recruitment and the curriculum. A joint website is recommended for all geological sciences programs, similar to what Molecular Biosciences has implemented. They should inquire with Marketing & Communications about receiving a report of the traffic to their website and also get advice from the graduate school about curriculum, recruitment, and advising.

### Geology, Ph.D.

- 2. Course scheduling is inefficient and uncoordinated. The unstructured graduate curriculum leads to inefficiency and uncertainty in graduate student progression and excessive time to degree. The chair should reestablish department curriculum committees to take on this task.
- 3. The current required credit levels for graduate degrees may be too high, and Ph.D. students take courses until they defend. The department should review the requirements at peer and aspirant institutions.
- 4. The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
- 5. The reviewers suggested that expansion of service to the Core Curriculum/General Education could justify new GTA positions. Those positions could be used in recruiting excellent graduate students not tied to PI-provided RA positions. The department has 2 proposals with the Courses & Curricula Committee that could fulfill Core 9 objectives.
- 6. The reviewers also suggested that additional Graduate Teaching Assistants are needed to support the existing courses. The department was allocated two additional assistants in 2016-17. The dean has requested the department to do a survey of university geoscience departments to determine best practices for GTA assignments and workload.
- 7. The reviewers recommended that course scheduling be delegated to an associate chair or faculty member with this service assignment. As an interim step, the undergraduate curriculum committee with this responsibility will be reestablished. The department is also looking at a "chair elect" model that could address this work. The department is asked to be prepared to report on how the committee is working as well as the result of their exploration of a chair elect and/or associate chair model during the mid-point evaluation for this review.
- 8. The reviewers were impressed with the quality of the Field Camp but were also concerned that this service role is an imposition on untenured faculty. The department has a commitment from a faculty member in NBMG to take responsibility for the camp for the next few years and will explore other methods for ensuring the camp continues but does not burden untenured faculty.
- 9. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.
- 10. The department was advised to clarify faculty roles in fundraising/development with alumni and others. The college development officers are ready to work with faculty on how they can be an asset for development for the department and programs. The first step should be a meeting with the dean and his development officers to discuss possible other areas for fund raising.

#### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 16

**B.** Number of graduates from the program for the following years:

2014-15 0 2015-16 4 2016-17 0

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 113

### **VI. Institutional Reports**

### **Geological Engineering, BS**

### I. Description of Program Reviewed

Geological Engineering is a interdisciplinary program that provides a comprehensive basis for understanding the Earth and its context in the solar system through application of physics, chemistry, meteorology, hydrology, biology, geology and engineering science to understanding the Earth, recognizing and coping with environmental hazards, exploiting natural resources while preserving the environment. The primary goal of the degree is to produce a professional who is uniquely skilled in solving problems in multiple technical disciplines.

### **II. Review Process and Criteria**

The Geological Sciences programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the program was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an on-campus visit on April 6-7, 2017. The external reviewers reviewed the program and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses were solicited from the department and the dean. A final meeting of all parties took place on August 25, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 28, 2017.

### III. Major Findings and Conclusions of the Program Review

- 1. General: Excellent and world renowned faculty and students; world class research and exciting teaching programs; publications in top journals; great setting to do geosciences; excellent MacKay reputation
- Particular strength in economic geology; distinctive mining engineering program
- 3. Undergraduate student recruitment through the Mackay School is excellent
- Breadth of undergraduate degree options is a strength
- Strong undergraduate research program with accessible faculty Excellent Field Camp
- Excellent undergraduate advising with dedicated advisors
- 8. Very good placement of graduates in both graduate schools and industry
- 9. Positive junior faculty who appreciate the leadership of the chair

- 1. Course scheduling is inefficient and uncoordinated. The chair should reestablish department curriculum committees to take on this task.
- 2. The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
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### **Geological Engineering, BS**

- 6. The reviewers were impressed with the quality of the Field Camp but were also concerned that this service role is an imposition on untenured faculty. The department has a commitment from a faculty member in NBMG to take responsibility for the camp for the next few years and will explore other methods for ensuring the camp continues but does not burden untenured faculty.
- 7. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.
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### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 90

B. Number of graduates from the program for the following years:

2014-15 13 2015-16 20 2016-17 20

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 361

### **VI. Institutional Reports**

### **Geological Engineering, MS**

### I. Description of Program Reviewed

The program is designed to enhance students' professional abilities in engineering and the geological sciences. The MS program emphasizes the professional nature of the geological engineering discipline. Laboratory facilities exist in support of the GE program. These include slope stability, data analysis, MMV (mapping, modeling, and visualization), and soil and rock testing. Fields of specialization include:

- Applied geophysics
- Geologic hazards
- $\Diamond$
- Geomechanics
- Λ Geostatistics
- $\Diamond$ Hydrogeology
- Industrial minerals
- $\Diamond$ **Neotectonics**
- $\Diamond$ Paleoseismology
- $\Diamond$ Planetary geology
- Remote sensing
- $\Diamond$ Rock fracture mechanics
- $\Diamond$ Rock slope instability processes
- Rock mass characterization and design  $\Diamond$
- Structural analysis
- $\Diamond$ Structural geology
- $\Diamond$ **Tectonics**
- $\Diamond$ Waste containment

#### II. Review Process and Criteria

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### III. Major Findings and Conclusions of the Program Review

- 1. General: Excellent and world renowned faculty and students; world class research and exciting teaching programs; publications in top journals; great setting to do geosciences; excellent MacKay reputation
- Particular strength in economic geology; distinctive mining engineering program
- 3. Strong graduate programs
- 4. Excellent Field Camp
- Very good placement of graduates in both graduate schools and industryPositive junior faculty who appreciate the leadership of the chair

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

1. A strong graduate program could be improved; enrollment numbers have fluctuated. Recruitment of graduate students is often by word-of-mouth, and faculty are not coordinated in this effort. Recruiting efforts should focus on the Ph.D. program. The graduate studies committee is currently focused on admissions evaluation, but should expand to look at recruitment and the curriculum. A joint website is recommended for all geological sciences programs, similar to what Molecular Biosciences has implemented. They should inquire with Marketing & Communications about receiving a report of the traffic to their website and also get advice from the graduate school about curriculum, recruitment, and advising.

### **Geological Engineering, MS**

- 2. Course scheduling is inefficient and uncoordinated. The unstructured graduate curriculum leads to inefficiency and uncertainty in graduate student progression and excessive time to degree. The chair should reestablish department curriculum committees to take on this task.
- 3. The current required credit levels for graduate degrees may be too high, and Ph.D. students take courses until they defend. The department should review the requirements at peer and aspirant institutions.
- 4. The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
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- 8. The reviewers were impressed with the quality of the Field Camp but were also concerned that this service role is an imposition on untenured faculty. The department has a commitment from a faculty member in NBMG to take responsibility for the camp for the next few years and will explore other methods for ensuring the camp continues but does not burden untenured faculty.
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#### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17

B. Number of graduates from the program for the following years:

2014-15 1 2015-16 0 2016-17 3

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 17

### VI. Institutional Reports

### **Geophysics, BS**

### I. Description of Program Reviewed

Geophysics applies mathematical and physical principles to the study of the Earth and planets. The curriculum introduces the global properties of the Earth and the determination of near-surface and interior properties through the use of seismology, electromagnetics, potential fields, remote sensing, geodesy and GPS. The curriculum provides a broad grounding in physical and mathematical fundamentals useful for future graduate study or for work in energy, natural resource or engineering industries. Geophysicists study Earth processes through a combination of laboratory experiments, computational and theoretical modeling, remote imaging, and direct measurements. This includes the study of magnetic and gravitational fields, tectonics and volcanism, the hydrological cycle, and interactions with the Moon and other celestial bodies. All Geophysics Major Requirements courses and their prerequisite courses must be passed with a grade of "C" or greater.

#### **II. Review Process and Criteria**

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### III. Major Findings and Conclusions of the Program Review

- 1. General: Excellent and world renowned faculty and students; world class research and exciting teaching programs; publications in top journals; great setting to do geosciences; excellent MacKay reputation
- 2. Particular strength in economic geology; distinctive mining engineering program
- Undergraduate student recruitment through the Mackay School is excellent
- 4. Breadth of undergraduate degree options is a strength
- 5. Strong undergraduate research program with accessible faculty
- 6. Excellent Field Camp
- 7. Excellent undergraduate advising with dedicated advisors
- 8. Very good placement of graduates in both graduate schools and industry
- 9. Positive junior faculty who appreciate the leadership of the chair

- 1. Course scheduling is inefficient and uncoordinated. The chair should reestablish department curriculum committees to take on this task.
- 2. The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
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- 4. The reviewers also suggested that additional Graduate Teaching Assistants are needed to support the existing courses. The department was allocated two additional assistants in 2016-17. The dean has requested the department to do a survey of university geoscience departments to determine best practices for GTA assignments and workload.

### **Geophysics, BS**

- 5. The reviewers recommended that course scheduling be delegated to an associate chair or faculty member with this service assignment. As an interim step, the undergraduate curriculum committee with this responsibility will be reestablished. The department is also looking at a "chair elect" model that could address this work. The department is asked to be prepared to report on how the committee is working as well as the result of their exploration of a chair elect and/or associate chair model during the mid-point evaluation for this review.
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### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 20

**B.** Number of graduates from the program for the following years:

2014-15 5 2015-16 2 2016-17 5

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 113

### **VI. Institutional Reports**

### **Geophysics, MS**

### I. Description of Program Reviewed

Graduate studies include theoretical, experimental, and applied research in:

- Seismology
- Geophysical exploration
- Earthquake Hazards
- **Paleomagnetism**
- Rock magnetism
- Geodesy
- Remote sensing

Students may choose an appropriate course of study for their academic or career goals. Graduate students conduct research within the Department and/or in association with the Nevada Seismological Laboratory, the Great Basin Center for Geothermal Energy, the Nevada Geodetic Laboratory, the Center for Neotectonic Studies, the Ralph J. Roberts Center for Research in Economic Geology, the Arthur Brant Laboratory for Exploration Geophysics, the Desert Research Institute, the Nevada Bureau of Mines and Geology, and the United States Geological Survey-Reno Field Office. Both regional and international research programs are available. Fieldrelated studies and research are among the strengths of our programs. A 10-page paper published in an international peer-reviewed journal represents the ideal Geophysics M.S. thesis.

#### II. Review Process and Criteria

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- 2. Particular strength in economic geology; distinctive mining engineering program
- 3. Strong graduate programs
- 4. Excellent Field Camp
- Very good placement or graduates in both graduatesPositive junior faculty who appreciate the leadership of the chair Very good placement of graduates in both graduate schools and industry

- 1. A strong graduate program could be improved; enrollment numbers have fluctuated. Recruitment of graduate students is often by word-of-mouth, and faculty are not coordinated in this effort. Recruiting efforts should focus on the Ph.D. program. The graduate studies committee is currently focused on admissions evaluation, but should expand to look at recruitment and the curriculum. A joint website is recommended for all geological sciences programs, similar to what Molecular Biosciences has implemented. They should inquire with Marketing & Communications about receiving a report of the traffic to their website and also get advice from the graduate school about curriculum, recruitment, and advising.
- 2. Course scheduling is inefficient and uncoordinated. The unstructured graduate curriculum leads to inefficiency and uncertainty in graduate student progression and excessive time to degree. The chair should reestablish department curriculum committees to take on this task.
- 3. The current required credit levels for graduate degrees may be too high, and Ph.D. students take courses until they defend. The department should review the requirements at peer and aspirant institutions.

### **Geophysics, MS**

- 4. The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
- 5. The reviewers suggested that expansion of service to the Core Curriculum/General Education could justify new GTA positions. Those positions could be used in recruiting excellent graduate students not tied to PI-provided RA positions. The department has 2 proposals with the Courses & Curricula Committee that could fulfill Core 9 objectives.
- 6. The reviewers also suggested that additional Graduate Teaching Assistants are needed to support the existing courses. The department was allocated two additional assistants in 2016-17. The dean has requested the department to do a survey of university geoscience departments to determine best practices for GTA assignments and workload.
- 7. The reviewers recommended that course scheduling be delegated to an associate chair or faculty member with this service assignment. As an interim step, the undergraduate curriculum committee with this responsibility will be reestablished. The department is also looking at a "chair elect" model that could address this work. The department is asked to be prepared to report on how the committee is working as well as the result of their exploration of a chair elect and/or associate chair model during the mid-point evaluation for this review.
- 8. The reviewers were impressed with the quality of the Field Camp but were also concerned that this service role is an imposition on untenured faculty. The department has a commitment from a faculty member in NBMG to take responsibility for the camp for the next few years and will explore other methods for ensuring the camp continues but does not burden untenured faculty.
- 9. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.
- 10. The department was advised to clarify faculty roles in fundraising/development with alumni and others. The college development officers are ready to work with faculty on how they can be an asset for development for the department and programs. The first step should be a meeting with the dean and his development officers to discuss possible other areas for fund raising.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17

B. Number of graduates from the program for the following years:

2014-15 0 2015-16 1 2016-17 0

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 3

### **VI. Institutional Reports**

### Geophysics, Ph.D.

### I. Description of Program Reviewed

Students in this Ph.D. program enjoy opportunities for study and research in the following fields:

- Seismology: The program operates a major regional seismic network, and uses the data to examine causes and source physics of earthquakes.
- Earthquake hazards: The program studies and models strong earthquake ground motions from all over the world.
- Geophysical exploration: The program uses seismic, electrical and potential-field techniques to discover what is below the surface of the earth.
- Remote sensing: The program uses satellite data to study earth resources, crustal deformation, global change and explore the nature of other planets in this solar system.
- Paleomagnetism: The program uses the changing magnetic field of the earth, frozen on rocks and sediments, to learn how the earth has deformed over the past thousands and millions of years.
- Geodesy: The program studies signals from satellites to monitor locations with millimeter precision to learn how the earth is deforming now.

Students in the University's Ph.D. program gain experience in using geologic observations and geophysical measurements to analyze earth science and related engineering problems using current, industry-standard computational and Geographic Information System (GIS) tools. While graduates of this program may pursue teaching or research at the university level, the curriculum provides a broad grounding in physical and mathematical fundamentals useful in settings beyond academia, including energy, natural resource and engineering industries.

#### **II. Review Process and Criteria**

The Geological Sciences programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the program was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an on-campus visit on April 6-7, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on August 25, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 28, 2017.

### III. Major Findings and Conclusions of the Program Review

- 1. General: Excellent and world renowned faculty and students; world class research and exciting teaching programs; publications in top journals; great setting to do geosciences; excellent MacKay reputation
- 2. Particular strength in economic geology; distinctive mining engineering program
- 3. Strong graduate programs
- 4. Excellent Field Camp
- 5. Very good placement of graduates in both graduate schools and industry
- 6. Positive junior faculty who appreciate the leadership of the chair

- 1. A strong graduate program could be improved; enrollment numbers have fluctuated. Recruitment of graduate students is often by word-of-mouth, and faculty are not coordinated in this effort. Recruiting efforts should focus on the Ph.D. program. The graduate studies committee is currently focused on admissions evaluation, but should expand to look at recruitment and the curriculum. A joint website is recommended for all geological sciences programs, similar to what Molecular Biosciences has implemented. They should inquire with Marketing & Communications about receiving a report of the traffic to their website and also get advice from the graduate school about curriculum, recruitment, and advising.
- 2. Course scheduling is inefficient and uncoordinated. The unstructured graduate curriculum leads to inefficiency and uncertainty in graduate student progression and excessive time to degree. The chair should reestablish department curriculum committees to take on this task.

### Geophysics, Ph.D.

- 3. The current required credit levels for graduate degrees may be too high, and Ph.D. students take courses until they defend. The department should review the requirements at peer and aspirant institutions.
- 4. The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
- 5. The reviewers suggested that expansion of service to the Core Curriculum/General Education could justify new GTA positions. Those positions could be used in recruiting excellent graduate students not tied to PI-provided RA positions. The department has 2 proposals with the Courses & Curricula Committee that could fulfill Core 9 objectives.
- 6. The reviewers also suggested that additional Graduate Teaching Assistants are needed to support the existing courses. The department was allocated two additional assistants in 2016-17. The dean has requested the department to do a survey of university geoscience departments to determine best practices for GTA assignments and workload.
- 7. The reviewers recommended that course scheduling be delegated to an associate chair or faculty member with this service assignment. As an interim step, the undergraduate curriculum committee with this responsibility will be reestablished. The department is also looking at a "chair elect" model that could address this work. The department is asked to be prepared to report on how the committee is working as well as the result of their exploration of a chair elect and/or associate chair model during the mid-point evaluation for this review.
- 8. The reviewers were impressed with the quality of the Field Camp but were also concerned that this service role is an imposition on untenured faculty. The department has a commitment from a faculty member in NBMG to take responsibility for the camp for the next few years and will explore other methods for ensuring the camp continues but does not burden untenured faculty.
- 9. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.
- 10. The department was advised to clarify faculty roles in fundraising/development with alumni and others. The college development officers are ready to work with faculty on how they can be an asset for development for the department and programs. The first step should be a meeting with the dean and his development officers to discuss possible other areas for fund raising.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 11

B. Number of graduates from the program for the following years:

2014-15 3 2015-16 1 2016-17 1

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016

### **VI. Institutional Reports**

### Geo-Engineering, Ph.D.

### I. Description of Program Reviewed

The Geo-Engineering Ph.D. is an interdisciplinary degree that combines studies from the Department of Mining Engineering and Department of Geological Sciences, with applications in mine ventilation, mine environmental, reclamation, remediation and restoration studies, mine automation and robotics, rock mechanics, drilling and blasting, materials handling, ore reserve characterization, geostatics and mineral economics. The Department of Geological Sciences and Engineering offers a wide range of dissertation research topics.

### **II. Review Process and Criteria**

The Geological Sciences programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the program was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an on-campus visit on April 6-7, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on August 25, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 28, 2017.

### III. Major Findings and Conclusions of the Program Review

- 1. General: Excellent and world renowned faculty and students; world class research and exciting teaching programs; publications in top journals; great setting to do geosciences; excellent MacKay reputation
- Particular strength in economic geology; distinctive mining engineering program
- 3. Strong graduate programs
- 4. Excellent Field Camp
- 5. Very good placement of graduates in both graduate schools and industry
- 6. Positive junior faculty who appreciate the leadership of the chair

- 1. A strong graduate program could be improved; enrollment numbers have fluctuated. Recruitment of graduate students is often by word-of-mouth, and faculty are not coordinated in this effort. Recruiting efforts should focus on the Ph.D. program. The graduate studies committee is currently focused on admissions evaluations, but should expand to look at recruitment and the curriculum. A joint website is recommended for all geological sciences programs, similar to what Molecular Biosciences has implemented. They should inquire with Marketing & Communications about receiving a report of the traffic to their website and also get advice from the graduate school about curriculum, recruitment, and advising.
- 2. Course scheduling is inefficient and uncoordinated. The unstructured graduate curriculum leads to inefficiency and uncertainty in graduate student progression and excessive time to degree. The chair should reestablish department curriculum committees to take on this task.
- 3. The current required credit levels for graduate degrees may be too high, and Ph.D. students take courses until they defend. The department should review the requirements at peer and aspirant institutions.
- 4. The reviewers saw the need for better integration of the teaching and research missions of the department, Nevada Seismo Lab, and Nevada Bureau of Mines and Geology. These units are working on regular joint meetings. They are talking about doing more joint work with the undergraduate curriculum. The tensions of the past are gone, and they are much more collaborative, especially the junior faculty. They are coordinating well on hires too. Currently teaching assignments are done by the chair, but they will work on establishing a "teaching oversight committee" with representation from all units to perform an evaluation of the teaching of the faculty. Teaching evaluations should be routed through the DGSE chair, and then to the respective directors in the appropriate unit. This information would then be incorporated into the annual evaluation of the relevant faculty member.
- 5. The reviewers suggested that expansion of service to the Core Curriculum/General Education could justify new GTA positions. Those positions could be used in recruiting excellent graduate students not tied to PI-provided RA positions. The department has 2 proposals with the Courses & Curricula Committee that could fulfill Core 9 objectives.
- 6. The reviewers also suggested that additional Graduate Teaching Assistants are needed to support the existing courses. The department was allocated two additional assistants in 2016-17. The dean has requested the department to do a survey of university geoscience departments to determine best practices for GTA assignments and workload.

### **Geo-Engineering, Ph.D.**

- 7. The reviewers recommended that course scheduling be delegated to an associate chair or faculty member with this service assignment. As an interim step, the undergraduate curriculum committee with this responsibility will be reestablished. The department is also looking at a "chair elect" model that could address this work. The department is asked to be prepared to report on how the committee is working as well as the result of their exploration of a chair elect and/or associate chair model during the mid-point evaluation for this review.
- 8. The reviewers were impressed with the quality of the Field Camp but were also concerned that this service role is an imposition on untenured faculty. The department has a commitment from a faculty member in NBMG to take responsibility for the camp for the next few years and will explore other methods for ensuring the camp continues but does not burden untenured faculty.
- 9. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.
- 10. The department was advised to clarify faculty roles in fundraising/development with alumni and others. The college development officers are ready to work with faculty on how they can be an asset for development for the department and programs. The first step should be a meeting with the dean and his development officers to discuss possible other areas for fund raising.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 11

B. Number of graduates from the program for the following years:

2014-15 3 2015-16 1 2016-17 1

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 6

### **VI. Institutional Reports**

### History, BA

### I. Description of Program Reviewed

Part of the College of Liberal Arts, History was among the earliest subjects to be offered at the University of Nevada. The undergraduate History program teaches students research, analytical writing, and presentation skills that can be applied to any career. Programs in the History Department offer the student understanding in the scholarly discipline of history through the expansion of historical knowledge, the comprehension of historiography, and the practice of critical inquiry. The Department offers majors and minors in history with options for emphasis in United States, Latin Américan, European, Eastern European, African and Asian History. The department's areas of study range from ancient to medieval, and early-modern to modern time periods as well as Digital/Public history.

#### II. Review Process and Criteria

The History programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the department was developed by the department faculty and completed in Spring 2017. The report was provided to two reviewers before they conducted an on-campus visit on April 13-14, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's program accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the départment and dean. A final meeting of all parties took place on September 18, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 28, 2017.

### III. Major Findings and Conclusions of the Program Review

- 1. Productive and collegial department, despite some personnel turnover
- 2. Excellent and dedicated faculty
- Steady undergraduate enrollment despite a national trend of declining enrollments in History
- Shared History program is commendable and is an opportunity for future strength Small size for a "full service" department
- **Budget constraints**
- Service demands on faculty
- Department faculty value the History Writing Center and feel it is not duplicative of the services of the University Writing Center because it focuses on field-specific assistance

- 1. Regarding faculty recruitment, they have 3 new hires this year—one in Latin American history, an African American historian, and an American West historian. The cybersecurity hire gives them access to expertise on middle-eastern topics. Because of these hires, they expect to have a vast expansion of courses.
- 2. The department should address flat undergraduate enrollment by looking for ways to increase the appeal of the major. This includes updating the department website to convey the breadth and dynamism of the department to prospective undergraduate as well as to graduate students. Also, the existing menu of undergraduate courses is quite large; consider updating/replacing course offerings with courses of contemporary interest and broad appeal, and with substantial enrollment capacity.
- 3. The hire of a Latina/o faculty member could increase enrollments. It is recommended that a hire in the area of US Chicana history be requested in the next RFP process. This position could be coordinated with the GRI
- 4. Consider alternative capstone projects in HIST 499 or implement an alternative capstone course if faculty workload in maintaining quality of undergraduate research becomes a problem. One option to consider is team based projects similar to what Biochemistry and Engineering have implemented.
- 5. Undergraduate survey data should be included as part of the undergraduate assessment plan. A graduating senior survey is possible. Limited alumni data is available from Career Studio.
- 6. Grow the Shared History program as a means of helping students find careers in museums, archives, historical agencies, non-profits, and the private sector. This is aligned with the University's goals to achieve the Carnegie Foundation Community Engagement Classification. It affords opportunities for students to undertake service learning, enhances existing and new collaborations with other departments, and potentially extramural support.

# History, BA

- 7. Participate or increase participation in the Service Learning Council.
- 8. Central administration acknowledges the desirability of staffing Shared History with a full-time coordinator/ director. Consider defining this position along the lines of the professor of practice model (consult with the Reynolds School of Journalism about this model). The coordinator/director should be made an integral part of the life of the department and its teaching, and seen as a peer to other faculty members.
- 9. Central administration acknowledges the need for an additional full-time or part-time staff person to assist with department operations. The department should submit a request when solicited.
- 10. Implement the best practices defined by the college and central administration for service obligations and personnel actions for faculty holding joint appointments.
- 11. Central administration acknowledges the need for library resources and databases aligned with R1 expectations.
- 12. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place next fall. These plans should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.

# **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 140

B. Number of graduates from the program for the following years:

2014-15 28 2015-16 38 2016-17 19

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 6,549

### **VI. Institutional Reports**

# History, MA

# I. Description of Program Reviewed

The graduate MA program is designed to prepare students for careers in applied history, teaching and for application to Ph.D. programs in history. Graduate students can choose to study in four historic fields: American Colonial History, Medieval European History, Colonial Latin American History, and Cultural Theory. The four fields require a set of three courses for graduation: HIST 600, HIST 795, & HIST 797, as well as three seminars.

### **II. Review Process and Criteria**

The History programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the department was developed by the department faculty and completed in Spring 2017. The report was provided to two reviewers before they conducted an on-campus visit on April 13-14, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and dean. A final meeting of all parties took place on September 18, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 28, 2017.

# III. Major Findings and Conclusions of the Program Review

- Productive and collegial department, despite some personnel turnover
- 2. Excellent and dedicated faculty
- 3. Shared History program is commendable and is an opportunity for future strength4. Small size for a "full service" department
- 5. Budget constraints
- Service demands on faculty
   Department faculty value the History Writing Center and feel it is not duplicative of the services of the University Writing Center because it focuses on field-specific assistance
- 8. Declining graduate enrollments. There were 10 Ph.D. grads in 2013, only 4 in 2017 which could be a problem in the near future considering low yield benchmarks. The department chair notes that declining enrollments are an issue for many humanities departments. They are mindful of the issue, and an ad hoc committee is looking at ways of improving recruitment. Currently, only 1/3 of Ph.D.'s are getting tenuretrack jobs, so they need to consider this as well.

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. Regarding faculty recruitment, they have 3 new hires this year—one in Latin American history, an African American historian, and an American West historian. The cybersecurity hire gives them access to expertise on middle-eastern topics. Because of these hires, they expect to have a vast expansion of courses.
- 2. The hire of a Latina/o faculty member could increase enrollments. It is recommended that a hire in the area of US Chicana history be requested in the next RFP process. This position could be coordinated with the GRI
- 3. Implement direct admission to Ph.D. program and retain twice-a-year admission to all graduate programs.
- 4. The department should explore participation in GradFit as one approach to graduate recruitment.
- 5. Additional funding for graduate students should be explored by participating in the GA RFP process with the assistance of the campus administration.
- 6. A yearly evaluation process for all History Department graduate students should be implemented.
- 7. Clarify graduate program requirements and address graduate student concerns by improving department website and formalizing regular, intradepartmental communication among faculty and graduate students.
- 8. Update the Graduate Handbook to provide a consistent description of the expectations of graduate students and requirements for progression.
- Once each semester the chair and graduate advisor should hold a meeting with grad students to answer questions and provide quidance.
- 10. Eliminate the comprehensive examination requirement for the MA program. Consider implementing the grad student changes identified in the 2016 master plan: 5 year BA-MA, MATH program needs, and streamlining.

# History, MA

- 11. Grow the Shared History program as a means of helping students find careers in museums, archives, historical agencies, non-profits, and the private sector. This is aligned with the University's goals to achieve the Carnegie Foundation Community Engagement Classification. It affords opportunities for students to undertake service learning, enhances existing and new collaborations with other departments, and potentially extramural support.
- 12. Participate or increase participation in the Service Learning Council.
- 13. Central administration acknowledges the desirability of staffing Shared History with a full-time coordinator/director. Consider defining this position along the lines of the professor of practice model (consult with the Reynolds School of Journalism about this model). The coordinator/director should be made an integral part of the life of the department and its teaching, and seen as a peer to other faculty members.
- 14. Central administration acknowledges the need for an additional full-time or part-time staff person to assist with department operations. The department should submit a request when solicited.
- 15. Implement the best practices defined by the college and central administration for service obligations and personnel actions for faculty holding joint appointments.
- 16. Central administration acknowledges the need for library resources and databases aligned with R1 expectations.
- 17. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place next fall. These plans should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.

## **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 18

B. Number of graduates from the program for the following years:

2014-15 3 2015-16 3 2016-17 0

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 69

#### **VI. Institutional Reports**

# History—Teaching History, MAT

# I. Description of Program Reviewed

The M.A.T. in History program is designed primarily for elementary and secondary teachers of history and social studies. Students enhance their understanding of two fields of their selection for content depth, research and writing skills, and pedagogy. Graduate students must take courses in the Chronological and Geographical fields, which align with the Washoe County School District history standards. The program also offers courses in Topical Interdisciplinary fields. The M.A.T. degree requires 32 semester units of course work, written comprehensive work consisting of an examination and a teaching unit plan, and a final oral presentation. The program does not require a thesis.

#### II. Review Process and Criteria

The History programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the department was developed by the department faculty and completed in Spring 2017. The report was provided to two reviewers before they conducted an on-campus visit on April 13-14, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and dean. A final meeting of all parties took place on September 18, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 28, 2017.

# III. Major Findings and Conclusions of the Program Review

- 1. Productive and collegial department, despite some personnel turnover
- 2. Excellent and dedicated faculty
- 3. Shared History program is commendable and is an opportunity for future strength4. Small size for a "full service" department
- **Budget constraints**
- Service demands on faculty
- Department faculty value the History Writing Center and feel it is not duplicative of the services of the University Writing Center because it focuses on field-specific assistance

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. Regarding faculty recruitment, they have 3 new hires this year—one in Latin American history, an African American historian, and an American West historian. The cybersecurity hire gives them access to expertise on middle-eastern topics. Because of these hires, they expect to have a vast expansion of courses.
- 2. The department should address flat undergraduate enrollment by looking for ways to increase the appeal of the major. This includes updating the department website to convey the breadth and dynamism of the department to prospective undergraduate as well as to graduate students. Also, the existing menu of undergraduate courses is quite large; consider updating/replacing course offerings with courses of contemporary interest and broad appeal, and with substantial enrollment capacity.
- 3. The hire of a Latina/o faculty member could increase enrollments. It is recommended that a hire in the area of US Chicana history be requested in the next RFP process. This position could be coordinated with the GRI program.
- 4. The department should explore participation in GradFit as one approach to graduate recruitment.
- 5. Additional funding for graduate students should be explored by participating in the GA RFP process with the assistance of the campus administration.
- 6. A yearly evaluation process for all History Department graduate students should be implemented.
- 7. Clarify graduate program requirements and address graduate student concerns by improving department website and formalizing regular, intradepartmental communication among faculty and graduate students.
- 8. Update the Graduate Handbook to provide a consistent description of the expectations of graduate student and requirements for progression.
- 9. Once each semester the chair and graduate advisor should hold a meeting with grad students to answer questions and provide guidance.

# **History—Teaching History, MAT**

- 10. Eliminate the comprehensive examination requirement for the MA program. Consider implementing the grad student changes identified in the 2016 master plan: 5 year BA-MA, MATH program needs, and streamlining.
- 11. Grow the Shared History program as a means of helping students find careers in museums, archives, historical agencies, non-profits, and the private sector. This is aligned with the University's goals to achieve the Carnegie Foundation Community Engagement Classification. It affords opportunities for students to undertake service learning, enhances existing and new collaborations with other departments, and potentially extramural support.
- 12. Participate or increase participation in the Service Learning Council.
- 13. Central administration acknowledges the desirability of staffing Shared History with a full-time coordinator/ director. Consider defining this position along the lines of the professor of practice model (consult with the Reynolds School of Journalism about this model). The coordinator/director should be made an integral part of the life of the department and its teaching, and seen as a peer to other faculty members.
- 14. Central administration acknowledges the need for an additional full-time or part-time staff person to assist with department operations. The department should submit a request when solicited.
- 15. Implement the best practices defined by the college and central administration for service obligations and personnel actions for faculty holding joint appointments.
- 16. Central administration acknowledges the need for library resources and databases aligned with R1 expectations.
- 17. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place next fall. These plans should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.

# **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17

B. Number of graduates from the program for the following years:

2014-15 1 2015-16 1 2016-17 1

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 69

#### **VI. Institutional Reports**

# History, Ph.D.

# I. Description of Program Reviewed

The Ph.D. History program is designed to prepare students for careers in higher education and historical research and writing. Areas of major study (dissertation) for the Ph.D. in History include Nevada and the West, U.S. history, American Studies, cultural history, History of Science, History of Medicine, or selected fields in European history. In consultation with the Graduate Advisor, the student must select three fields of study (leading to comprehensive examinations over a broad spectrum of historical material) from the list of Ph.D. Examination Fields. Usually these fields will be from a minimum of two groups. One field should be in the same subject area as the dissertation. One field may be taken in a department outside History with the approval of the student's committee. The 73 credit Ph.D. degree program requires an oral qualifying interview, a current working knowledge of one foreign language, written comprehensive exams, a prospectus colloquium, dissertation and oral defense.

# **II. Review Process and Criteria**

The History programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the department was developed by the department faculty and completed in Spring 2017. The report was provided to two reviewers before they conducted an on-campus visit on April 13-14, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and dean. A final meeting of all parties took place on September 18, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 28, 2017.

# III. Major Findings and Conclusions of the Program Review

- Productive and collegial department, despite some personnel turnover
- Excellent and dedicated faculty
- Shared History program is commendable and is an opportunity for future strength Small size for a "full service" department
- 5. Budget constraints
- Service demands on faculty
- Department faculty value the History Writing Center and feel it is not duplicative of the services of the University Writing Center because it focuses on field-specific assistance
- 8. Declining graduate enrollments. There were 10 Ph.D. grads in 2013, only 4 in 2017 which could be a problem in the near future considering low yield benchmarks. The department chair notes that declining enrollments are an issue for many humanities departments. They are mindful of the issue, and an ad hoc committee is looking at ways of improving recruitment. Currently, only 1/3 of Ph.D.'s are getting tenuretrack jobs, so they need to consider this as well.

#### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. Regarding faculty recruitment, they have 3 new hires this year—one in Latin American history, an African American historian, and an American West historian. The cybersecurity hire gives them access to expertise on middle-eastern topics. Because of these hires, they expect to have a vast expansion of courses.
- 2. The department should address flat undergraduate enrollment by looking for ways to increase the appeal of the major. This includes updating the department website to convey the breadth and dynamism of the department to prospective undergraduate as well as to graduate students. Also, the existing menu of undergraduate courses is quite large; consider updating/replacing course offerings with courses of contemporary interest and broad appeal, and with substantial enrollment capacity.
- 3. The hire of a Latina/o faculty member could increase enrollments. It is recommended that a hire in the area of US Chicana history be requested in the next RFP process. This position could be coordinated with the GRI program.
- 4. Implement direct admission to Ph.D. program and retain twice-a-year admission to all graduate programs.
- 5. The department should explore participation in GradFit as one approach to graduate recruitment.
- 6. Additional funding for graduate students should be explored by participating in the GA RFP process with the assistance of the campus administration.
- 7. A yearly evaluation process for all History Department graduate students should be implemented.
- 8. Clarify graduate program requirements and address graduate student concerns by improving department website and formalizing regular, intradepartmental communication among faculty and graduate students.

# History, Ph.D.

- 9. Update the Graduate Handbook to provide a consistent description of the expectations of graduate students and requirements for progression.
- 10. Once each semester the chair and graduate advisor should hold a meeting with grad students to answer questions and provide guidance.
- 11. Grow the Shared History program as a means of helping students find careers in museums, archives, historical agencies, non-profits, and the private sector. This is aligned with the University's goals to achieve the Carnegie Foundation Community Engagement Classification. It affords opportunities for students to undertake service learning, enhances existing and new collaborations with other departments, and potentially extramural support.
- 12. Participate or increase participation in the Service Learning Council.
- 13. Central administration acknowledges the desirability of staffing Shared History with a full-time coordinator/director. Consider defining this position along the lines of the professor of practice model (consult with the Reynolds School of Journalism about this model). The coordinator/director should be made an integral part of the life of the department and its teaching, and seen as a peer to other faculty members.
- 14. Central administration acknowledges the need for an additional full-time or part-time staff person to assist with department operations. The department should submit a request when solicited.
- 15. Implement the best practices defined by the college and central administration for service obligations and personnel actions for faculty holding joint appointments.
- 16. Central administration acknowledges the need for library resources and databases aligned with R1 expectations.
- 17. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place next fall. These plans should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.

## **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 8

B. Number of graduates from the program for the following years:

2014-15 2 2015-16 0 2016-17 3

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 15

# **VI. Institutional Reports**

# Physics, BS

# I. Description of Program Reviewed

The Department of Physics at the University of Nevada, Reno specializes in atomic, molecular, optical and chemical physics, high energy density and plasma physics, condensed matter physics, and atmospheric sciences. The Bachelor of Science degree provides a foundation in basic science. PHYS 497 (senior thesis) is the physics major capstone course that students complete during their senior year. The senior thesis is a research project that is conducted under the direction of a faculty member, the product of which is a 10-20 page thesis that is submitted to the advisor and to one other faculty member who serves as reader. After submission of the thesis, the student gives a 20-30 minute oral presentation to the Physics Department.

#### II. Review Process and Criteria

The physics programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the department and its programs was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an oncampus visit on March 9-10, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the department's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on September 21, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 29, 2017.

## III. Major Findings and Conclusions of the Program Review

- 1. The UNR Department of Physics has very productive faculty in terms of grants, publications, and students being graduated at both the undergrad and grad level.
- 2. The department has effectively handled a large increase in enrollment without an increase in instructional personnel.
- 3. The department is responsive to student needs in terms of academic advising and placement, and has a supportive departmental atmosphere.
- 4. There is a very high level of student satisfaction at both undergrad and grad levels, with high quality advising and faculty access.
- 5. Involvement of undergraduate students in research is excellent. The senior research project requirement is highly meritorious.
- 6. All courses are taught by individuals with a Ph.D.
- 7. The department respects its instructors and treats them well.

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. The department should evaluate how to expand the ATMS undergraduate curriculum to satisfy the Office of Personnel Management requirements for employment as a professional meteorologist (Meteorology Series 1340). It is understood that mathematics requirements of the courses may need to be made more rigorous.
- 2. A review of best practices for advanced undergraduate class sizes and modes of instruction at peer and aspirant institutions, as well as at other science departments at UNR should occur. It is acknowledged that the use of graders and GTA-led recitation sections may be advantageous to undergraduate pedagogy, and that GTA experience may increase the employment competitiveness of graduate students.
- 3. The department should consult with the CCID program on strategies to improve training in scientific writing and communication, and to explore new ways to integrate writing into the undergraduate and graduate curriculum.
- 4. A review of the rigor of introductory and more advanced undergraduate physics courses should also occur. The department should address discontinuities in difficulty and consider the introduction of intermediate, problems-based elements to the undergraduate curriculum.
- 5. Central administration acknowledges, despite two recent positions newly assigned to the Physics Department, that additional strategic hires would strengthen the department and that a strong physics program is central to UNR's R1 goals. The Space Physics cluster proposal is recognized as meritorious and there is opportunity build upon the strength in AMO physics. The department is encouraged to submit proposals to the dean in response to future RFP solicitations for new positions.
- 6. Central administration acknowledges that competitive startup packages are required to attract top faculty. When new positions are proposed, faculty should contact peer institutions to evaluate the startup funding levels needed to construct competitive offers. That information should be included in proposals that are in response to future RFP solicitations for new positions.

# Physics, BS

- 7. In response to the concerns identified during the external review visit, the provost has provided resources to stabilize the NTF. Central administration acknowledges that additional resources are needed over the longer term. The VPRI will evaluate the feasibility of a larger fraction of NTF F&A being returned to the NTF.
- 8. The department needs to confirm for research faculty that they have role statements that are aligned with their position descriptions and are the basis for merit review.
- Institutional funding proposals among HEDP research faculty should be coordinated in order to be successful.
- 10. Central administration encourages the department to request needed administrative support positions in response to future RFP solicitations.
- 11. Central administration acknowledges that science faculty, and especially junior faculty, should be consulted with regard to implementation of UNR's High Performance Computing (HPC) initiative.
- 12. The department should review project wait times and the job scheduling system in the physics machine shop to assure junior faculty receive high priority. A recharge system to improve throughput and efficiency should be examined. It is acknowledged that startup costs could increase if recharge were implemented.
- 13. Central administration acknowledges that future renovation of the first floor of the Physics Building will be required as the department grows. The existing renovation plan should be reviewed holistically.
- 14. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.

## **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 233

B. Number of graduates from the program for the following years:

2014-15 14 2015-16 18 2016-17 20

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 6,549

### VI. Institutional Reports

# Physics, MS

## I. Description of Program Reviewed

The Department of Physics at the University of Nevada, Reno specializes in atomic, molecular, optical and chemical physics, high energy density and plasma physics, condensed matter physics, and atmospheric sciences. The physics department recommends that students follow the Plan A (with thesis) option. The thesis should demonstrate the student's ability to carry out independent research. All master of science candidates must pass a final oral examination administered by the student's advisory/examining committee. The emphasis in the examination will be on the thesis. Subject to the approval of the committee, a student may elect to follow the Plan B (without thesis) option. For the master's program without thesis, 32 credits are required, with no more than six credits in special problems courses. Students also must pass a written comprehensive examination and a final oral examination on graduate-level course work administered by the student's advisory committee.

### **II. Review Process and Criteria**

The physics programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the department and its programs was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an oncampus visit on March 9-10, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's program accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on September 21, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 29, 2017.

# III. Major Findings and Conclusions of the Program Review

- 1. The UNR Department of Physics has very productive faculty in terms of grants, publications, and students being graduated at both the undergrad and grad level.
- 2. The department has effectively handled a large increase in enrollment without an increase in instructional personnel.
- 3. The department is responsive to student needs in terms of academic advising and placement, and has a supportive departmental atmosphere.
- 4. There is a very high level of student satisfaction at both undergrad and grad levels, with high quality advising and faculty access.
- 5. All courses are taught by individuals with a Ph.D.
- 6. The department respects its instructors and treats them well.

## IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. In consultation with the Dean of the Graduate School, the department should work to improve recruitment of high quality graduate students. The department should utilize support offered by the Graduate School and consider implementing a recruiting weekend event. The recently implemented earlier application deadlines (from March 1 in the past) are an improvement, and the department should consider moving them even earlier as appropriate in relation to national norms in the field. (This may be as early as January 1-15.)
- 2. The Physics Chair should work with the Dean of the Graduate School to facilitate collaboration between ATMS faculty at UNR and DRI (and other faculty at UNR). Joint appointments are an option to consider. The chair should complete an MOU that confirms commitments from DRI to current ATMS faculty at UNR.
- 3. A review of best practices for advanced undergraduate class sizes and modes of instruction at peer and aspirant institutions, as well as at other science departments at UNR should occur. It is acknowledged that the use of graders and GTA-led recitation sections may be advantageous to undergraduate pedagogy, and that GTA experience may increase the employment competitiveness of graduate students.
- 4. The department should consult with the CCID program on strategies to improve training in scientific writing and communication, and to explore new ways to integrate writing into the undergraduate and graduate curriculum.
- 5. The department should also review the breadth of graduate course selections at peer/aspirant institutions and then respond with a proposal for augmented course offerings if a deficiency is identified.
- 6. A review of the level of rigor in instruction and textbook selection in core graduate courses taught by different individual faculty (e.g. E&M) should occur. Faculty should have a consensus on a set of acceptable textbooks and assessments needed to assure that SLOs are being met.
- 7. The purpose of the comprehensive exam should be clarified. Physics faculty should arrive at a consensus on whether to retain it or replace it with a qualifying exam.

# Physics, MS

- 8. Central administration acknowledges, despite two recent positions newly assigned to the Physics Department, that additional strategic hires would strengthen the department and that a strong physics program is central to UNR's R1 goals. The Space Physics cluster proposal is recognized as meritorious and there is opportunity build upon the strength in AMO physics. The department is encouraged to submit proposals to the dean in response to future RFP solicitations for new positions.
- 9. Central administration acknowledges that competitive startup packages are required to attract top faculty. When new positions are proposed, faculty should contact peer institutions to evaluate the startup funding levels needed to construct competitive offers. That information should be included in proposals that are in response to future RFP solicitations for new positions.
- 10. In response to the concerns identified during the external review visit, the provost has provided resources to stabilize the NTF. Central administration acknowledges that additional resources are needed over the longer term. The VPRI will evaluate the feasibility of a larger fraction of NTF F&A being returned to the NTF.
- 11. The department needs to confirm for research faculty that they have role statements that are aligned with their position descriptions and are the basis for merit review.
- 12. Institutional funding proposals among HEDP research faculty should be coordinated in order to be successful.
- 13. Central administration encourages the department to request needed administrative support positions in response to future RFP solicitations.
- 14. Central administration acknowledges that science faculty, and especially junior faculty, should be consulted with regard to implementation of UNR's High Performance Computing (HPC) initiative.
- 15. The department should review project wait times and the job scheduling system in the physics machine shop to assure junior faculty receive high priority. A recharge system to improve throughput and efficiency should be examined. It is acknowledged that startup costs could increase if recharge were implemented.
- 16. Central administration acknowledges that future renovation of the first floor of the Physics Building will be required as the department grows. The existing renovation plan should be reviewed holistically.
- 17. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17

B. Number of graduates from the program for the following years:

2014-15 6 2015-16 1 2016-17 4

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 74

#### **VI. Institutional Reports**

# Physics, Ph.D.

# I. Description of Program Reviewed

The University's Physics Ph.D. program instills experience with modern research methods, a broad knowledge of contemporary physics and the ability to conduct high-level independent research. The Department of Physics conducts theoretical and experimental research across range of fields. Research occurs in state-of-the-art University facilities and through scientific collaborations at research centers around the nation.

Its research specialties include:

- ♦ Atomic, molecular, and optical physics
- Plasma physics
- High energy density physics
- Atmospheric physics
- Elementary particle physics
- ♦ Gravitational physics

The program aims to prepare students for careers in scientific research or teaching. Formal course work provides a broad treatment of fundamental physics as well as an introduction to specialized physics topics. Original research, the central component of the Doctor of Philosophy program, is intended both to establish the student as a scientific researcher and to expand humanity's knowledge of the physical universe.

#### II. Review Process and Criteria

The physics programs were scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the department and its programs was developed by the department faculty and completed in Spring 2017. The report was provided to three reviewers before they conducted an oncampus visit on March 9-10, 2017. The external reviewers reviewed the programs and met with relevant faculty, staff, students and administrators to determine the program's program accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on September 21, 2017. A final MOU of findings and recommendations from the review from the provost and vice provost was prepared on September 29, 2017.

## III. Major Findings and Conclusions of the Program Review

- 1. The UNR Department of Physics has very productive faculty in terms of grants, publications, and students being graduated at both the undergrad and grad level.
- 2. The department has effectively handled a large increase in enrollment without an increase in instructional personnel.
- 3. The department is responsive to student needs in terms of academic advising and placement, and has a supportive departmental atmosphere.
- 4. There is a very high level of student satisfaction at both undergrad and grad levels, with high quality advising and faculty access.
- 5. All courses are taught by individuals with a Ph.D.
- 6. The department respects its instructors and treats them well.

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. In consultation with the Dean of the Graduate School, the department should work to improve recruitment of high quality graduate students. The department should utilize support offered by the Graduate School and consider implementing a recruiting weekend event. The recently implemented earlier application deadlines (from March 1 in the past) are an improvement, and the department should consider moving them even earlier as appropriate in relation to national norms in the field. (This may be as early as January 1-15.)
- 2. The Physics Chair should work with the Dean of the Graduate School to facilitate collaboration between ATMS faculty at UNR and DRI (and other faculty at UNR). Joint appointments are an option to consider. The chair should complete an MOU that confirms commitments from DRI to current ATMS faculty at UNR.
- 3. A review of best practices for advanced undergraduate class sizes and modes of instruction at peer and aspirant institutions, as well as at other science departments at UNR should occur. It is acknowledged that the use of graders and GTA-led recitation sections may be advantageous to undergraduate pedagogy, and that GTA experience may increase the employment competitiveness of graduate students.

# Physics, Ph.D.

- 4. The department should consult with the CCID program on strategies to improve training in scientific writing and communication, and to explore new ways to integrate writing into the undergraduate and graduate curriculum.
- 5. The department should also review the breadth of graduate course selections at peer/aspirant institutions and then respond with a proposal for augmented course offerings if a deficiency is identified.
- 6. A review of the level of rigor in instruction and textbook selection in core graduate courses taught by different individual faculty (e.g. E&M) should occur. Faculty should have a consensus on a set of acceptable textbooks and assessments needed to assure that SLOs are being met.
- 7. The purpose of the comprehensive exam should be clarified. Physics faculty should arrive at a consensus on whether to retain it or replace it with a qualifying exam.
- 8. Central administration acknowledges, despite two recent positions newly assigned to the Physics Department, that additional strategic hires would strengthen the department and that a strong physics program is central to UNR's R1 goals. The Space Physics cluster proposal is recognized as meritorious and there is opportunity build upon the strength in AMO physics. The department is encouraged to submit proposals to the dean in response to future RFP solicitations for new positions.
- 9. Central administration acknowledges that competitive startup packages are required to attract top faculty. When new positions are proposed, faculty should contact peer institutions to evaluate the startup funding levels needed to construct competitive offers. That information should be included in proposals that are in response to future RFP solicitations for new positions.
- 10. In response to the concerns identified during the external review visit, the provost has provided resources to stabilize the NTF. Central administration acknowledges that additional resources are needed over the longer term. The VPRI will evaluate the feasibility of a larger fraction of NTF F&A being returned to the NTF.
- 11. The department needs to confirm for research faculty that they have role statements that are aligned with their position descriptions and are the basis for merit review.
- 12. Institutional funding proposals among HEDP research faculty should be coordinated in order to be successful.
- 13. Central administration encourages the department to request needed administrative support positions in response to future RFP solicitations.
- 14. Central administration acknowledges that science faculty, and especially junior faculty, should be consulted with regard to implementation of UNR's High Performance Computing (HPC) initiative.
- 15. The department should review project wait times and the job scheduling system in the physics machine shop to assure junior faculty receive high priority. A recharge system to improve throughput and efficiency should be examined. It is acknowledged that startup costs could increase if recharge were implemented.
- 16. Central administration acknowledges that future renovation of the first floor of the Physics Building will be required as the department grows. The existing renovation plan should be reviewed holistically.
- 17. All colleges have been directed to ensure that formal mentoring plans and programs for junior faculty are in place by next fall. The dean has directed all College of Science chairs to prepare a formal mentoring plan for incorporation in the college's plan. This plan should address not only assistant professors on the tenure track but also associate professors who should seek promotion to full professor.

#### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 26

B. Number of graduates from the program for the following years:

2014-15 8 2015-16 4 2016-17 4

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 203

#### **VI. Institutional Reports**

# Theatre, BA

## I. Description of Program Reviewed

The department offers a Bachelor's in Theatre in two specializations:

#### Acting

Course work is enhanced with main stage acting experience where undergraduate students receive priority casting. Undergraduate actors profit from individualized mentoring by faculty directors amplifying personal growth and collaborative creation.

# Design/Technology

After completing basic training in the classroom, backstage, and in the modern, fully equipped lighting laboratory, scene shop, and costume shop spaces, students are asked to focus their study in two of three areas: scenery, lighting, and costumes. The Design/Technology Specialization provides dedicated undergraduate students with the opportunity to design for the main stage, allowing them to gain practical experience with budgeting, collaboration, and execution of design.

The core mission of the department of Theatre and Dance is to explore and reflect on performance practice and theory through active participation in theatrical production experiences. Minors are also offered in dance or theatre.

#### **II. Review Process and Criteria**

The Theatre and Dance Department was scheduled for regular program review as mandated by the Board of Regents and University policy. A self-study document for the program and department was developed by the Department faculty and completed in Spring 2017. The report was provided to two reviewers before they conducted an on-campus visit on March 30-31, 2017. The external reviewers reviewed the department and program and met with relevant faculty, staff, students and administrators to determine the department's accomplishments, examine strengths and weaknesses, and identify opportunities as its plans for the future. A final report was issued by the site visitors shortly after the review visit. In accordance with institution practice, responses to the review were solicited from the department and the dean. A final meeting of all parties took place on August 31, 2017. A final MOU of recommendations and findings from the review from the Provost and Vice Provost was prepared on October 2, 2017.

# III. Major Findings and Conclusions of the Program Review

- 1. General: Committed, highly qualified, and experienced faculty at all levels
- 2. Mutual respect of the faculty
- 3. Resiliency in the face of existential challenges since the last review
- 4. Positive student experience; students feel recognized by and respect for the faculty
- 5. Recent faculty and equipment improvements by the university indicate an investment in the department and in safety
- 6. A strong, active, and vibrant Theatre and Dance department is vital to our School of the Arts, college, university and Northern Nevada

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. A more visible presence of the department would aid in attracting majors in Theatre and Dance. The department should be included in the website presence of the School of the Arts, and should consider the possibility of advertising productions in public spaces such as the airport. If the CLA supports publicity staffing, then it should include a proposal in future RFP solicitations.
- 2. K-12 engagement is an investment in recruiting future majors and directly addresses the Core Theme 3 of the UNR mission. Central administration encourages engagement with the Damonte Ranch HS signature academy, Eve Allen's arts integration project, and the current effort to make visits part of the high school field trip menu.
- 3. Central administration acknowledges that concerns involving faculty instructional workloads are being reviewed by the department and college. Current 3+3 teaching load expectations may not be appropriate for Theatre and Dance. The department should align with best practices in similar departments at peer and aspirant institutions, and make a recommendation to the dean. Role statements should be clarified for each faculty member and should be equitable. This planning should inform the development of bylaws and a department strategic plan and the development of a Musical Theatre BA.
- 4. Central administration acknowledges concerns from external reviewers that a proposed Musical Theatre major has no clear implementation timeline or specified curriculum. It is acknowledged that the department and college have developed a planning process. It is expected that the department will report on this project within the next three years and before mid-way program review.

# Theatre, BA

- 5. Central administration does not support the development of a Theatre Studies BA at this time, due to constraints on space and student numbers.
- 6. Central administration does not support the development of a MA in Theatre Studies.
- 7. Central administration acknowledges that a search for a full-time Costume Shop Manager is underway.
- 8. Central administration acknowledges the need for an additional continuing lecturer with responsibilities for advising and core instruction.
- 9. The department should monitor and support progression of associate professors in required progress toward promotion. If UNR mentors are unavailable, then the department should consider the resources of the NCFDD https://www.unr.edu/provost/academic- resources/ncfdd for mentoring options for small departments with many junior faculty. Recruiting nationally recognized reviewers for local productions may attract attention to faculty effort. Central administration acknowledges that the CLA dean is implementing a new faculty professional development program to assist with mentoring of junior faculty.
- 10. The major and minor advising structure should be reviewed. Create a highly structured advising system with expectations for regular contact advising hours with each student each semester. The advising workload should be evaluated at the same time. The department should consider formalized mentor relationships with each student, possibly through the new THTR 494 Professional Foundations course.
- 11. Create a student handbook to provide rules and guidelines, including safety information. Handbooks from other departments throughout the US could be used as guides for getting started.
- 12. Consult with the Assistant Vice Provost for Accreditation and Assessment and the CO7 committee to clarify expectations for on program assessment and general education assessment.
- 13. The department should work with Facilities to review HVAC issues (temperature and air quality) in the Costume Shop ASAP, as they may be safety concerns. Recommendations should be forwarded to the CLA dean. Central Administration acknowledges that there is insufficient costume storage on campus.
- 14. Central administration acknowledges that students need access to additional rehearsal space. The department and CLA dean need to arrive at decisions and come to clarity on what is needed in terms of size and sound isolation.
- 15. Although accreditation buy the National Association of Schools of Theatre (NAST) and National Association of Schools of Dance (NASD) is a long-range goal, the department should continue to pattern itself on the standards.

### **IV. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 70

B. Number of graduates from the program for the following years:

2014-15 12 2015-16 12 2016-17 11

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 796

### **VI. Institutional Reports**



# Program Review Nevada State College

## **Degree Programs**

- I. List the existing programs and corresponding degree for all programs that were reviewed over this academic year of review.
  - Management, BAS
- II. List any programs and corresponding degree level for all programs that received Board approval for elimination or deactivation in this academic year of review.

None

- III. List all new programs and corresponding degree programs that received Board approval in this academic year of review.
  - Deaf Studies, BA

## **Certificates**

None

# Management, BAS

## I. Description of Program Reviewed

The Bachelor of Applied Science in Management program is anchored in a well-rounded business core; it provides a 4-year degree option for students who complete an Associate of Applied Science and wish to pursue a degree that prepares them for management/supervisory roles. The BAS program at NSC builds on the specialization earned through the AAS degree by providing students with an advanced curriculum that enhances students' managerial knowledge and skills. The curriculum was revised slightly starting in the 2015-16 academic year to more closely align with the Bachelor of Science in Business Administration program, adding courses in business strategy, psychology, and a management capstone. The program is defined by real-world examples and case studies that prepare students to meet the evolving demands of the modern business world.

Students who complete the BAS in Management master management principles as well as skills in statistical analysis and managerial accounting and finance. Students complete BUS/MGT 496, which includes semesterlong simulations that give students practice in making the types of decisions required of managers. The degree also requires two courses in psychology, which help students understand what motivates people and how individuals function in groups. These courses, along with a required course in professional writing, emphasize important "soft" skills that employers desire, improving students' communication skills and their ability to work productively with others in a diverse setting.

Students complete a senior capstone in management (MGT 494) that pushes them to apply what they have learned throughout the management curriculum. They also choose a 9-credit area of study based on their particular interests or career plans; for instance, a student planning on working in PR might choose communication courses focused on public relations campaigns and social media.

Courses are small, and faculty use technology to maximize student success, such as creating video lectures that allow faculty to offer a "flipped" classroom experience with more time spent in class on group activities and discussion.

Overall, the BAS-Management program aims to combine a knowledge of managerial and business concepts with real-world adaptability, preparing students for management positions in a range of industries.

#### II. Review Process and Criteria

### Process:

The Bachelor of Applied Science in Management was assessed according to a standardized procedure that governs the 10-year program review process in the Liberal Arts & Sciences (LAS) at Nevada State College. The review began by soliciting and compiling relevant materials, including faculty biographies, historical student evaluation data, and outcomes assessment reports. The Director of Institutional Research provided critical data regarding enrollment figures, graduation numbers, student demographics, and related metrics. A close examination of these data and materials culminated in a comprehensive report, which was reviewed by the department Chair, Dean, and Provost .

Criteria—The review relied on:

- Ten years of Institutional Research data, including headcounts, FTEs, retention and graduation numbers, average credits to degree completion, and average GPA at graduation. Headcounts and graduation numbers were disaggregated by self-reported student race/ethnicity.
- Student course evaluations, in sum and disaggregated by domains of instruction (e.g., feedback, real-world relevance, etc.).
- ♦ Faculty expertise and accomplishments in the field.
- Annual evaluation, hiring, and faculty development structures and processes.
- Outcomes assessment processes, data, and reports.
- Qualitative analyses of curricular strengths and weaknesses.
- Logistical components, including library resources, facilities, computer resources, and instructional equipment.
- Barriers to post-graduate success

# Management, BAS

## III. Major Findings and Conclusions of the Program Review

- 1. The major has successfully filled a niche; it provides a 4-year degree option for students who earn Associate of Applied Science degrees, who otherwise may not easily be able to pursue 4-year degrees without losing a large number of credits.
- 2. Since only students with an AAS degree are eligible for the major, the BAS-Management major remains small. However, it relies on courses offered for the much larger BS in Business Administration major, and thus does not require resources to be devoted to the BAS-Management specifically.
- 3. Roughly half of students in the program are from racial/ethnic minority groups.
- 4. Due to cutting non-essential services as a result of budget cuts during the recession of 2008-2011, NSC had little ability to provide alumni tracking; as a result, we have limited information about the long-term post-graduation outcomes of the BAS-Management graduates.
- 5. The curriculum is well designed to provide students with a broad overview of the field of management. Courses use innovative teaching techniques that provide experiential learning opportunities, including analysis of real-world business data.

## IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. Conduct a search for an additional faculty member during the 2017-18 academic year
- 2. Implement changes to course assignments and assignment instructions that were recommended in the 2016 outcomes assessment process.
- 3. Work with Career Services to track job placement of graduates.

# **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 30

B. Number of graduates from the program for the following years:

2014-15 9 2015-16 9 2016-17 4

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 430

### **VI. Institutional Reports**



# Program Review College of Southern Nevada

## **Degree Programs**

- I. List the existing programs and corresponding degree for all programs that were reviewed over this academic year of review.
  - Biological Sciences, AS
- II. List any programs and corresponding degree level for all programs that received Board approval for elimination or deactivation in this academic year of review.

None

- III. List all new programs and corresponding degree programs that received Board approval in this academic year of review.
  - Deaf Studies, BAS
  - Facility Maintenance and Manufacturing, AAS

## **Certificates**

 List the certificates (at least 30 credits and under 30 credits) that were reviewed over this academic year of review.

None

- II. List the certificate programs of at least 30 credits that received Academic Affairs Council (AAC) approval to be established in this academic year of review.
  - Cultural Resource Management, CA
  - Forensic Anthropology, CA
- III. List the certificate programs of at least 30 credits that received AAC approval for elimination or deactivation in this academic year of review.
  - Environmental Safety and Health—Occupational Safety Management, CA

# Program Review College of Southern Nevada

## **Certificates** (continued)

- IV. List the certificate programs of less than 30 credits ("skills certificates") that received AAC approval to be established in this academic year of review and the corresponding state, national and/or industry recognized certification or license for which the certificate program provides such preparation.
  - Administrative Assistant, Skills Certificate—International Association of Administrative Professionals
  - Floral Design, Skills Certificate—American Institute of Floral Designers
  - Floral Design: Special Events and Weddings, Skills Certificate—American Institute of Floral Designers: Certified Floral Designer
  - Office Assistant, Skills Certificate—International Association of Administrative Professionals
- IV. List the certificate programs of less than 30 credits ("skills certificates") that received AAC approval for elimination or deactivation in this academic year of review.

None

# **College of Southern Nevada**

# **Biological Sciences, AS**

## I. Description of Program Reviewed

The Associate of Science, Biological Sciences (BIOL-AS) emphasis is a two-year transfer degree for students planning to complete a baccalaureate degree in biology or a closely related field. Special program requirements envision transfer to University of Nevada, Las Vegas, University of Nevada, Reno or Nevada State College. However, graduates also transfer to various other four-year schools in the Southwest. It should be noted that the BIOL-AS is the secondary mission of the Department of Biological Sciences. The primary mission is to support the Ralph and Betty Englestad School of Health Sciences (HS) by teaching prerequisite courses (BIOL 189, BIOL 224, and BIOL 251) for the limited-entry programs.

### **II. Review Process and Criteria**

The program review at the College of Southern Nevada (CSN) is currently based on an analysis of a standardized set of data provided by Institutional Research. In addition, the Department of Biological Sciences uses the program review process to analyze its Program and Course Assessment activities. The review process is carried out by a committee of faculty members in Biological Sciences in concert with the Department Chair.

# III. Major Findings and Conclusions of the Program Review

Biological Sciences is effectively carrying out its three principal missions. However, numerous constraints place hard limits on certain kinds of performance gains. For example, limitation of lab space prevents further increases in sections of some Health Sciences prerequisite courses. The only realistic solution to this problem is additional space via capital improvements (e.g., a new Health Science building at the Henderson Campus). The graduation rate of the BIOL-AS is low. However, improving this rate is a complex problem that cannot be solved by changes in curriculum and instruction alone. Self-reporting of declared majors in BIOL 196 and BIOL 197 (both Special Program Requirements of the BIOL-AS) suggests that many students plan on attending a professional school (e.g., medical school) and have no intention of completing BIOL-AS. Likewise, an analysis of declared majors for students enrolled in BIOL 223 and BIOL 251 (both Health Science prerequisites), along with self-reporting by those students, suggests that more than one third of all students who have declared a BIOL-AS are using the program as a "placeholder" until they can gain entrance to a limited-entry Health Sciences program.

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

Next steps include the following: 1) enhance current program and course assessment activities to meet the requirements of the CSN assessment plan; 2) work on understanding the degree to which the number of students who have declared a BIOL-AS is "inflated," and attempt to get an "accurate" graduation rate (number of students who graduate/number of declared majors who intend to graduate); 3) once an "accurate" graduation rate has been established, devise measures to increase the number of graduates.

# **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 1,132

B. Number of graduates from the program for the following years:

2014-15 25 2015-16 36 2016-17 38

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 7,949

### **VI. Institutional Reports**



# Program Review Great Basin College

## **Degree Programs**

- I. List the existing programs and corresponding degree for all programs that were reviewed over this academic year of review.
  - Criminal Justice, AAS
  - Nursing, AAS
  - Nursing, BS
  - Radiology Technology, AAS
- II. List any programs and corresponding degree level for all programs that received Board approval for elimination or deactivation in this academic year of review.

None

III. List all new programs and corresponding degree for all programs that received Board approval in this academic year of review.

None

### **Certificates**

I. List the certificates (at least 30 credits and under 30 credits) were reviewed over this academic year of review.

None

- II. List the certificate programs of at least 30 credits that received Academic Affairs Council (AAC) approval to be established in this academic year of review.
  - Computer Technologies—Graphic Communications, C.A.
- III. List the certificate programs of at least 30 credits that received AAC approval for elimination or deactivation in this academic year of review.

None

IV. List the certificate programs of less than 30 credits ("skills certificates") that received AAC approval to be established in this academic year of review and the corresponding state, national and/or industry recognized certification or license for which the certificate program provides such preparation.

None

V. List the certificate programs of less than 30 credits ("skills certificates") that received AAC approval for elimination or deactivation n this academic year of review.

None

# **Great Basin College**

# **Criminal Justice, AAS**

## I. Description of Program Reviewed

The Associate of Applied Science degree program in Criminal Justice has two emphases, Corrections and Law Enforcement, both reviewed together. The Corrections emphasis has applications toward several State correctional centers in the GBC service area and a federal detention center in Pahrump. The Law Enforcement emphasis has greater enrollment and provides significant opportunities for employment and advancement.

#### II. Review Process and Criteria

The process and criteria conform to NSHE Code, Title 4, Chapter 14, Section 5. GBC policy 3.40 provides additional institutional guidelines followed for program reviews. Collection and analysis of student data; program content, outcomes, and student performance; future planning; and comments from an external reviewer were all reviewed and considered for the program.

# III. Major Findings and Conclusions of the Program Review

Enrollment in CRJ classes has generally been strong and graduation numbers have increased significantly since the last program review. The program is strong and relevant to the regional law enforcement profession. Many students participate part-time while working in the field, often for enhancing knowledge and skills for job advancement opportunities within several law enforcement agencies at various levels in the GBC service area.

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

For current officers in the field, work schedules can prohibit enrollment in some live classes. Retaining live course offerings while also providing online access is a focus moving forward. Lecture capture of the live sections will be used to enhance online courses where appropriate. Some overlap exists in content through the program. The new program coordinator is working with part time faculty to align program learning outcomes across the courses in the program. Also, the desire for a transfer degree to a Bachelor's degree program exists. Currently, students may transfer the AAS into GBC's BAS in Management and Supervision. An AA pattern of study in Criminal Justice will be developed to allow students to transfer into the BA in Social Science degree, opening up additional opportunities for students.

# **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 60

B. Number of graduates from the program for the following years:

2014-15 16 2015-16 10 2016-17 14

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 135

#### **VI. Institutional Reports**

# **Nursing, AAS**

## I. Description of Program Reviewed

Great Basin College offers a two-year program leading to an Associate of Applied Science Degree in Nursing. The program is approved by the Nevada State Board of Nursing, and accredited by the Accreditation Commission for Education in Nursing, Inc. ( ACEN). GBC is accredited by the Northwest Commission on Colleges and Universities (NWCCU).

The mission of Great Basin College's Associate Degree Nursing Program is to provide an accessible, student centered, post-secondary nursing education that prepares graduates for entry level nursing practice in a variety of structured healthcare settings. The curriculum integrates

courses in nursing with general education requirements. Laboratory and clinical experience are offered at the College, local hospitals, long-term care centers, and community health facilities.

Upon completion of the program, students are expected to:

- Provide safe, quality, evidence-based, patient centered nursing care in a variety of healthcare environments to diverse patient populations across the lifespan.
- Use clinical reasoning when engaged in the work of a professional nurse.
- ♦ Participate in quality improvement processes to improve patient care.
- Engage in teamwork with members of the interprofessional team, the patient, and the patient's support persons when managing patient care.
- ♦ Apply management, legal, ethical and professional guidelines in practice as a professional nurse.
- Use information management principles, techniques, and systems, and patient care technology to communicate, manage knowledge, mitigate error, and support decision-making.

### **II. Review Process and Criteria**

Great Basin College's AAS Nursing program is accredited through the Accreditation Commission for Education in Nursing (ACEN). ACEN supports the interests of nursing education, nursing practice, and the public by the functions of accreditation. Accreditation is a voluntary, peer-review, self-regulatory process by which non-governmental associations recognize educational institutions or programs that have been found to meet or exceed standards and criteria for educational quality. Accreditation also assists in the further improvement of the institutions or programs as related to resources invested, processes followed, and results achieved. There are six standards and criteria that must be met for the accrediting process.

A Substantive Change Report and current outcomes were used in the review of the standards.

- Standard 1- Mission and Administrative Capacity: The mission of the nursing education unit reflects the governing organization's core values and is congruent with its mission/goals. The governing organization and program have administrative capacity resulting in effective delivery of the nursing program and achievement of identified program outcomes.
- Standard 2- Faculty and Staff: Qualified and credentialed faculty are sufficient in number to ensure the achievement of the end-of program student learning outcomes and program outcomes. Sufficient and qualified staff are available to support the nursing program. Full- and part-time faculty include those individuals teaching and/or evaluating students in didactic, clinical, and/or laboratory settings.
- ♦ Standard 3- Students: Student policies and services support the achievement of the end-of-program student learning outcomes and program outcomes of the nursing program.
- Standard 4- Curriculum: The curriculum supports the achievement of the end-of-program student learning outcomes and program outcomes and is consistent with safe practice in contemporary healthcare environments.
- Standard 5- Resources: Fiscal, physical, and learning resources are sustainable and sufficient to ensure the achievement of the end-of-program student learning outcomes and program outcomes of the nursing program.
- Standard 6- Outcomes: Program evaluation demonstrates that students have achieved each end-of-program student learning outcome and each program outcome. The nursing program has a current systematic plan of evaluation.

# **Nursing, AAS**

# III. Major Findings and Conclusions of the Program Review

The systematic plan of evaluation shows that all standards are successfully met throughout the program. Data is aggregated and decision-making is based on evaluation of data collected at the end of each semester and/or academic year. Data collection tools provide documentation that course outcomes, program outcomes, and student learning competencies are successful met. Data aggregated and trended include ATI scores, NCLEX pass rates, attrition, employment rate, as well as graduate and employer satisfaction. Data collected within the program is sufficient for program decision-making for maintenance and improvement of student learning outcomes and program outcomes. As part of the TAACCCT grant, PeopleSoft Campus Solutions software is used to track student enrollment within the nursing program. Using PeopleSoft, each student under the grant is identified as they move through the program, gathering data about outcomes such as academic progress, rate of retention, support provided, and persistence.

Working with a third party evaluator (Pacific Research & Evaluation), the Nevada Community College Consortium has a strong and sophisticated 38 system in place to track outcomes and report outcomes across the project, and internal and intra college reporting processes, which will include the use of a shared website for sharing and reporting data. At the college level, all

program participants fill out forms authorizing the colleges to collect individual level data, as well as for follow up data collection after education and training programs are completed.

Analysis of NCLEX Mountain Measurements (electronic reports that provide a wealth of statistics about the performance of the students in our program) indicates that GBC graduates are meeting each category, in most cases above 60, which exceeds the national average.

For the past 5 years the first time pass rates for GBC AAS graduates on NCLEX are 100%, again, exceeding the national average pass rate.

Surveys sent to graduates reveal job placement 6 months post-graduation 100% for the past 5 years. Surveys also showed that a majority of graduates were satisfied or very satisfied with the program and that employers were very satisfied to satisfied with their new graduates.

## **Program Completion:**

Graduation Year	Entered	Attrition	Re-enter /Transfer
2015	20	1 (5%)	0
2016	20	3 (15%)	0
2017	31	5 (16%)	1
2018	34	7 (20.5%)	4

2016-18 Increase in recent attrition rates; students who leave the program for personal and or academic reasons. Slightly higher attrition likely due to new policy is for academic progress. Increase in attrition rate in the class of 2018 likely secondary to adjustments in entry requirements when we lowered admission scores. Increase in student number is also being reflected in attrition rates

### IV. Next Steps for this Program Based on Program Review Findings and Recommendations

Evaluation is an ongoing process within the nursing program. Data is aggregated and decision-making is based on evaluation of data collected at the end of each semester and/or academic year. Additionally, faculty meet monthly to discuss course progression and curriculum. Continue to monitor and evaluate using the Systematic Plan for Evaluation and make changes that are supported with curriculum and student data, Nevada State Board of Nursing requirements, and Accreditation Commission for Education in Nursing.

# **Great Basin College**

# **Nursing, AAS**

# **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 192

B. Number of graduates from the program for the following years:

2014-15 19 2015-16 16 2016-17 26

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 65

# **VI. Institutional Reports**

# **Nursing, BS**

## I. Description of Program Reviewed

A totally online program, the Registered Nurse to Bachelor of Science in Nursing Program is designed for non-traditional RN-BSN students with an associate degree who want to continue their education in nursing and still be engaged in practicing their profession. The program allows the flexibility to work toward a degree full-time or part-time and to adapt completion of course assignment times and locations convenient to the student's personal and professional lives. All practicum experiences are community-based and can happen in the students local area.

#### Mission

To prepare registered nurses for research and theory based professional practice roles as leaders and change agents in the transformation of nursing and health care for rural underserved populations.

The RN to BSN program incorporates a liberal education that supports integration of concepts from the social, natural sciences and the humanities that are essential to understanding the self and others, as well as the nature of health and disease (AACN, 2008). Translating research and evidence into practice is a cornerstone of BSN prepared practice. The graduate of the RN to BSN program can provide safe, quality care to individuals, families, groups, populations and communities experiencing common to complex health problems in structured and unstructured settings. The nurse prepared at this level:

- Applies organizational and systems leadership theories to the roles of designer and manager of care.
- Applies information management and effective application of patient care technology at all levels of care.
- Provides health promotion and disease prevention for groups and populations.
- Initiates and leads collaboration with other providers and disciplines to ensure quality and safety in health care delivery to underserved populations.

The RN to BSN program is built on competencies derived from the major concepts that the nursing faculty considers to be central to BSN practice. Those concept are: Collaboration, Leadership, Informatics, Evidence-based practice, Population-focused care and Quality improvement.

### **II. Review Process and Criteria**

Great Basin College's AAS Nursing program is accredited through the Accreditation Commission for Education in Nursing (ACEN). ACEN supports the interests of nursing education, nursing practice, and the public by the functions of accreditation. Accreditation is a voluntary, peer-review, self-regulatory process by which non-governmental associations institutions or programs as related to resources invested, processes followed, and results achieved. There are six standards and criteria that must be met for the accrediting process. These include: recognize educational institutions or programs that have been found to meet or exceed standards and criteria for educational quality. Accreditation also assists in the further improvement of the Full Monitoring Report submitted to Accreditation Commission for Education in Nursing.

Review of Standards.

- Standard 1- Mission and Administrative Capacity: The mission of the nursing education unit reflects the governing organization's core values and is congruent with its mission/goals. The governing organization and program have administrative capacity resulting in effective delivery of the nursing program and achievement of identified program outcomes.
- Standard 2- Faculty and Staff: Qualified and credentialed faculty are sufficient in number to ensure the achievement of the end-of program student learning outcomes and program outcomes. Sufficient and qualified staff are available to support the nursing program. Full- and part-time faculty include those individuals teaching and/or evaluating students in didactic, clinical, and/or laboratory settings.
- Standard 3- Students: Student policies and services support the achievement of the end-of-program student learning outcomes and program outcomes of the nursing program.
- Standard 4- Curriculum: The curriculum supports the achievement of the end-of-program student learning outcomes and program outcomes and is consistent with safe practice in contemporary healthcare environments.
- student learning outcome and each program outcome. The nursing program has a current systematic plan of evaluation.

# **Nursing, BS**

- Standard 5- Resources: Fiscal, physical, and learning resources are sustainable and sufficient to ensure the achievement of the end-of-program student learning outcomes and program outcomes of the nursing program.
- Standard 6- Outcomes: Program evaluation demonstrates that students have achieved each end-of-program student learning outcome and each program outcome. The nursing program has a current systematic plan of evaluation.

# III. Major Findings and Conclusions of the Program Review

The systematic plan of evaluation shows that all standards are successfully met throughout the program. Data is aggregated and decision-making is based on evaluation of data collected at the end of each semester and/or academic year. Data collection tools provide documentation that course outcomes, program outcomes, and student learning competencies are successful met. At the end of each course a systematic evaluation is completed by all nursing faculty in relation to assessments, content, instructional resources, teaching methods employed, and adequacy of practicum experiences. Surveys sent to employers for feedback regarding RN-BSN graduating nursing students. Employer surveys revealed employers were satisfied with the RN-BSN nursing graduates. Student learning outcomes student survey reflected the majority of students stated they met student-learning outcomes at a considerable degree to a great degree on a Likert scale.

Year	Admit	Attrition	<b>Full-Time Completed</b>	Part-Time Completed
2012	18	0	10	8
2013	25	4	8	13
2014	21	1	16	4
2015	17	0	15	2
2016	18	1		
2017	21			

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

Increase enrollment and recruiting strategies for this program. Continue to monitor and evaluate using the Systematic Plan for Evaluation and make changes that are supported with curriculum and student data, Nevada State Board of Nursing requirements, and Accreditation Commission for Education in Nursing. Additionally, faculty meet monthly to discuss course progression and curriculum.

## **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 78

**B.** Number of graduates from the program for the following years:

2014-15 16 2015-16 27 2016-17 23

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 67

## **VI. Institutional Reports**

## I. Description of Program Reviewed

Great Basin College (GBC) offers a two-year program Associate of Applied Science (AAS) degree in Radiology Technology. Since the introduction of the AAS in Radiology Technology in 2006, the program has graduated 97 students and has served the rural areas across Nevada with American Registry of Radiologic Technology (ARRT) certified radiologic technologists. The radiology program is accredited with the Joint Review Committee on Education in Radiologic Technology (JRCERT). GBC is accredited by the Northwest Commission on Colleges and Universities (NWCCU).

The mission of the AAS in Radiology Technology is to provide quality education to prepare the undergraduate Radiology Technology student for beginning practice in a variety of healthcare settings. The radiology is a hybrid delivery program which utilizes the integration of face to face courses along with online learning in radiology curriculum and general education. Laboratory and clinical experiences are completed at the college in our new live digital radiology room and in the second year of the program at clinical sites throughout Nevada: Elko, Winnemucca, Pahrump, Ely, Carson City and Fallon. These sites have been recognized by JRCERT.

Upon completion of the program the students will be expected to meet the program goals:

- 1. Students will be clinically competent.
- 2. Students will communicate effectively (orally and in writing).
- 3. Students will utilize critical thinking and problem solving skills.
- 4. Students will be able to discuss professional pathways available.
- 5. Students will practice professionalism.

The program goals are attached to learning outcomes and are assessed throughout the 22 month program. The program assessment plan is updated biannually and is shared with the AAS Radiology Technology Advisory Board, GBC Health Sciences and Human Services (HSHS) Advisory Board and with the HSHS department.

### **II. Review Process and Criteria**

The GBC AAS Degree in Radiology Technology program is accredited with the Joint Review Committee on Education in Radiologic Technology (JRCERT). "The JRCERT is the only agency recognized by the United States Department of Education (USDE) and the Council for Higher Education Accreditation (CHEA), for the accreditation of traditional and distance delivery educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry" (JRCERT, 2017). Accreditation through JRCERT is a voluntary program which promotes excellence in education and elevates the quality and safety of patient care through the use of a self-study review and on site evaluation of educational programs in radiology technology. The most recent review process was with the JRCERT accreditation process. The self-study was submitted in Fall of 2014 and the onsite review was conducted in January of 2015. In November of 2016, GBC AAS in Radiology Technology accreditation was granted for a total of eight years (until year 2023).

Please see attachment #1-JRCERT Letter dated November 17, 2016, in the link at the end of this report.

The standards reviewed were:

## 1. Integrity

- a. Objective 1.1: Adheres to high ethical standards in relation to student, faculty, and staff.
- b. Objective 1.2: Provides equitable learning opportunities for all students.
- Objective 1.3: Provides timely, appropriate, and educationally valid clinical experiences for each admitted student.
- d. Objective 1.4: Limits required clinical assignments for students to not more than 10 hours per day and the total didactic and clinical involvement to not more than 40 hours per week.
- e. Objective 1.5: Assures the security and confidentiality of student records, instructional materials, and other appropriate program materials.
- f. Objective 1.6: Has a grievance procedure that is readily accessible, fair and equitably applied.
- g. Objective 1.7: Assures that students are made aware of the JRCERT standards for an Accredited Educational Program in Radiography and the avenue to pursue allegations of non-compliance with the STANDARDS.
- h. Objective 1.8: Has publications that accurately reflect the program's policies, procedures, and offerings.

- i. Objective 1.9: Makes available to students, faculty, and the general public accurate information about admission policies, tuition and fees, refund policies, academic calendars, clinical obligations, grading system, graduation requirements, and the criteria for transfer credit.
- j. Objective 1.10: Makes the program's mission statement, goals, and student learning outcomes readily available to students, faculty, administrators, and the general public.
- k. Objective 1.11: Documents that the program engages the communities of interest for the purpose of continuous program improvement.
- Objective 1.12: Has student recruitment and admission practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.
- m. Objective 1.13: Has student recruitment and admission practices that are consistent with published policies of the sponsoring institution and the program.
- n. Objective 1.14: Has program faculty recruitment and employment practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.
- o. Objective 1.15: Has procedures for maintaining the integrity of distance education courses.

#### 2. Resources

- a. Objective 2.1: Has an appropriate organizational structure and sufficient administrative support to achieve the program's mission
- b. Objective 2.2: Provides an adequate number of faculty to meet all educational, program, administrative, and accreditation requirements.
- c. Objective 2.3: Provides faculty with opportunities for continued professional development.
- d. Objective 2.4: Provides clerical support services, as needed, to meet all educational, program, and administrative requirements.
- e. Objective 2.5: Assures JRCERT recognition of all clinical settings.
- f. Objective 2.6: Provides classrooms, laboratories, and administrative and faulty offices to facilitate the achievement of the program's mission.
- Gobjective 2.7: Reviews and maintains program learning resources to assure the achievement of student learning.
- h. Objective 2.8: Provides access to student services in support of student learning.
- i. Objective 2.9: Has sufficient ongoing financial resources to support the program's mission.
- Objective 2.10: For those institutions and programs for which the JRCERT serves as gatekeeper for Title IV financial aid, maintains compliance with US Department of Education policies and procedures.

# 3. Curriculum and Academic Practices

- a. Objective 3.1: Has a program mission statement that defines its purpose and scope and is periodically reevaluated.
- b. Objective 3.2: Provides a well-structured, competency-based curriculum that prepares students to practice in the professional discipline.
- c. Objective 3.3: Provides learning opportunities in current and developing imaging and/or therapeutic technologies.
- d. Objective 3.4: Assures an appropriate relationship program length and the subject matter taught for the terminal award offered.
- e. Objective 3.5: Measures the length of all didactic and clinical courses in clock hours or credit hours.
- f. Objective 3.6: Maintains a master plan of education.
- g. Objective 3.7: Provides timely and supportive academic, behavioral, and clinical advisement to students enrolled in the program.
- h. Objective 3.8: Documents that the responsibilities of faculty and clinical staff are delineated and performed.
- Objective 3.9: Evaluates program faculty and clinical instructor performance and shares evaluation results regularly to assure instructional responsibilities are performed.

## 4. Health and Safety

- Objective 4.1: Assures the radiation safety of students through implementation of published polices and procedures that are in compliance with Nuclear Regulatory Commission regulations and state laws as applicable.
- b. Objective 4.2: Has a published pregnancy policy that is consistent with applicable federal regulations and state laws, made known to accepted and enrolled female students.
- c. Objective 4.3: Assures that students, employee proper radiation safety practices.
- d. Objective 4.4: Assures that medical imaging procedures are performed under the direct supervision of a qualified radiographer until a student achieves competency.
- e. Objective 4.5: Assures that medical imaging procedures are performed under the indirect supervision of a qualified radiographer after a student achieves competency.
- f. Objective 4.6: Assures that students are directly supervised by a qualified radiographer when repeating unsatisfactory images.
- g. Objective 4.7: Assures sponsoring institution's policies safeguard the health and safety of students.
- h. Objective 4.8: Assures that students are oriented to clinical education setting policies and procedures in regard to health and safety.

#### 5. Assessment

- Objective 5.1: Develops an assessment plan that, at a minimum, measures the program's student learning outcomes in relation to the following goals: clinical competence, critical thinking, professionalism, and communication skills.
- b. Objective 5.2: Documents program effectiveness data:
  - i. 5 year average of credentialing examination pass rate
  - ii. 5 year average of job placement rate
  - iii. Program completion rate
  - iv. Graduate satisfaction
  - v. Employer satisfaction
- c. Objective 5.3: Makes available to the general public program effectiveness data on an annual basis.
- Objective 5.4: Analyzes and shares student learning outcome data and program effectiveness data to foster continuous program improvement.
- Objective 5.5: Periodically evaluates its assessment plan to assure continuous program improvement.

### 6. Institutional/Programmatic Data

- a. Objective 6.1: Documents the continuing institutional accreditations of the sponsoring institution.
- b. Objective 6.2: Documents that the program's energized laboratories are in compliance with applicable state and/or federal radiation safety laws.
- Objective 6.3: Documents that all faculty and staff possess academic and professional qualifications appropriate for their assignments.
- d. Objective 6.4: Establishes and maintains affiliation agreements with clinical settings.
- e. Objective 6.5: Documents that clinical settings are in compliance with applicable state and/or federal radiation safety laws.
- f. Objective 6.6: Complies with requirements to achieve and maintain JRCERT accreditation.

# IIII. Major Findings and Conclusions of the Program Review

The Joint Review Committee on Education in Radiologic Technology evaluated the Great Basin College, AAS Radiology Technology Degree, including the distance education delivery option. The program was evaluated according to the Standards for an Accredited Education in Radiology Technology (2014). Data from the submitted self-study completed by the program faculty and data collection from the site visit was analyzed and an initial accreditation for a period of five years was granted. The maximum duration that may be awarded by the JRCERT is eight years.

JRCERT, after review and evaluation of the findings of the site visit team and the program's response to the report of findings determined there was non-compliance with Standard Five: Objective 5.4- Analyzes and shares student learning outcome data and program effectiveness data to foster continuous program improvement. In response to the findings from the letter dated October 23, 2015, the program developed a radiology program specific advisory board. The first meeting was held May 17, 2016. The assessment plan and program data was shared with the HSHS Advisory Board, the Radiology Advisory Board and the HSHS department. A meeting minute format was developed from the example supplied by the JRCERT. These were submitted to the JRCERT on the requested review in October, 2016. During the October JRCERT Board Meeting, these minutes were reviewed and GBC AAS Radiology Technology Program received an extension of three more years to total the maximum award of eight years.

Please see attachment #3-JRCERT Letter dated October 23, 2015, in the link at the end of this report.

Program Effectiveness Data (PDF) was reviewed after fall of 2016 for this report. The PDF is published on the radiology website and is updated annually.

- 1. Students will pass the ARRT certification exam on the first attempt. The program must obtain a five year average of 75% or above on the outcome. For the five years, 2012 to 2016, the pass rate is 93.16%. Benchmark was met.
- 2. Of the students seeking employment, those students will be employed within twelve months. The program must obtain a five year average of 75% or above on the outcome. For the five years, 2012 to 2016, the employment rate is 89.8%. Benchmark was met.
- 3. Students will be qualified radiographers upon completion of the GBC program. As of 2014 we have met the benchmark of 75% or better response at a 3 or better on 1-5 scale. In 2015, we only had 4 graduates and they were continuing their education. In 2016, we have only had 2 employer responses out of 9 graduates. We plan to submit this again to try to elicit a better response. Benchmark was met.
- 4. Students will complete the program starting at the beginning of the fall semester to graduation. The program completion rate was 82% for the 2016 graduates. Benchmark was met.
- 5. Students will be retained from year 1 to year 2. The program retention rate was 82% 2015-2016. Benchmark was met.

Please see attachment #3-JRCERT Letter dated October 23, 2015, in the link at the end of this report...

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

The evaluation of the radiology technology program is an ongoing process with inclusion of the Dean of Health Sciences and Human Services, program faculty, clinical site personnel, and the AAS Radiology Technology Advisory Board. Program Effectiveness Data (PDF) is published and updated annually. The assessment plan of the program goals and learning outcomes is continually monitored and updated. An action plan of improvement is developed after careful review of evidence based data and input from all parties listed above. At this time, through this inclusive process, a new clinical form was piloted last year and has been accepted as an improvement by clinical site instructors. The AAS Radiology Technology Advisory Board meets biannually to continue to monitor the PDF, assessment plan, clinical forms and any other items or concerns. The program will continue to monitor this process.

# **Great Basin College**

# Radiology Technology, AAS

# **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 87

**B.** Number of graduates from the program for the following years:

2014-15 4 2015-16 9 2016-17 10

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 44

# **VI. Institutional Reports**

Click **here** for a copy of letters referenced and the institutional report (self study) summarized above.



# **Program Review Truckee Meadows Community College**

# **Degree Programs**

- I. List the existing programs and corresponding degree for all programs that were reviewed over this academic year of review.
  - Dental Hygiene, AS
  - Entrepreneurship, AA Emphasis
  - Veterinary Technology, AAS
- II. List any programs and corresponding degree level for all programs that received Board approval for elimination or deactivation in this academic year of review.
  - Administrative Professional, AAS
  - Architectural Design Technology, AAS
  - Architecture, AA
  - Early Childhood Education, AA
- III. List all new programs and corresponding degree for all programs that received Board approval in this academic year of review.
  - Construction and Design, AAS

### **Certificates**

- I. List the certificates (at least 30 credits and under 30 credits) that were reviewed over this academic year of review.
  - Entrepreneurship, CA
- II. List the certificate programs of at least 30 credits that received Academic Affairs Council (AAC) approval to be established in this academic year of review.
  - Industrial Maintenance, CA
- III. List the certificate programs of at least 30 credits that received AAC approval for elimination or deactivation in this academic year of review.
  - Administrative Professional, CA
  - Northern Nevada Law Enforcement Academy, Peace Officers Certification

# **Program Review Truckee Meadows Community College**

- IV. List the certificate programs of less than 30 credits ("skills certificates") that received AAC approval to be established in this academic year of review and the corresponding state, national and/or industry recognized certification or license for which the certificate program provides such preparation.
  - Graphic Software, Skills Certificate—Adobe Certified Associate (ACA)
  - Industrial Electricity I, Skills Certificate—Industrial Electricity I PMMI Mechatronics Certification Test
  - Programmable Logic Controllers (PLC) I, Skills Certificate—Programmable Logic Controllers (PLC) I Mechatronics Certification Test
- V. List the certificate programs of less than 30 credits ("skills certificates") that received AAC approval for elimination or deactivation in this academic year of review.

None

# **Truckee Meadows Community College**

# **Dental Hygiene, AS**

## I. Description of Program Reviewed

The Dental Hygiene (DH) Program, accredited by the Commission on Dental Accreditation (CODA), is a two-year associate degree program within the Sciences Division of TMCC. The program accepts 12 students each fall semester. Currently there are three full-time faculty, 11 part-time faculty, one dental clinic manager and one administrative assistant III, who make up our dental hygiene team. August 2016, the program received its fully accredited status with no reporting requirements. Program curriculum is rigorous and focuses on evidence-based content related to the practice of dental hygiene.

#### **II. Review Process and Criteria**

The program/unit review (PUR) process begins with preparation of a self-study by a committee of faculty and staff, with input from the supervising dean. The self-study describes the program and addresses issues in curriculum and student success, demographics and enrollment, and resources. It forms the basis for the program/unit's educational master plan and summarizes the results of course, discipline, and program assessment for a 5-7 year period in a single document. The report is reviewed by the Academic Standards and Assessment (ASA) Committee, which validates the work of the self-study and provides a broad institutional overview. Following a meeting with the self-study chair and dean, the ASA reports the results to the Vice President of Academic Affairs (VPAA), who prepares a report for the President indicating recommended strategies for the academic area to focus on. These strategies are linked to TMCC's mission through our Strategic Master Plan's core themes and provide direction for future initiatives within the academic area. As such, future resource allocation through the Resource Allocation Process are dictated by the recommended strategies. Upon approval of the President, the VPAA charges the department and dean to implement the recommended strategies.

In the years between PURs, academic areas are required to complete an Annual Progress Report (APR), which addresses their progress in attaining the recommended strategies. These reports are drafted by the Self-study Chairs/Department Chairs/Directors/Coordinators and then reviewed and approved by the dean and finally the VPAA, providing a continual focus on the recommended strategies for the academic area in the context of the Strategic Master Plan.

### III. Major Findings and Conclusions of the Program Review

### Executive Summary:

The DH program is a robust program that has exemplary student success indicators. The growth that will be afforded by expanded space as well as the addition of a BS will serve our students and community well. The faculty and staff have done an excellent job to ensure achieving accreditation status for the program. The future is bright for the TMCC DH program. achieving accreditation status for the program. The future is bright for the TMCC DH program.

TMCC's Dental Hygiene program should be commended for: its retention and graduation rates, it's dedicated faculty and staff, achieving accreditation "A" status with no reporting from CODA, increasing number of sections offered, and completing all recommendations from their last APR and PUR. Although the PURC notes that only 8% of the DH students are male and 45% of the TMCC student population is males, it should be noted that only 4% of all dental hygienists are male; hence, our program has a 200% representation of males in relation to the national employment of males in the profession.

#### Strengths:

The program is very solid and structured for student achievement. The approval of the \$88.25 differential fee will help the program with equipment maintenance and replacement costs. The collaboration with WDCE for non-credit offerings is excellent. The program work with their advisory board to ensure the highest quality program that is pertinent to workforce needs. Department members are actively involved in student recruitment. The articulation with CSN for students to complete and online BSDH has been renewed. The recommendation of the development of a TMCC BSDH is rapidly moving forward and the institution may see an offering as early as Fall 2018. In addition to what is in this document, the funding of a relocation and expansion of the program space has been funded and plans are in progress for this exciting development.

## Weaknesses:

The offering of a BSDH will negate the negative of the 112 credits required for an Associate's Degree. The success of the program, including retention, graduation, employment rates and the high medium salary of more than \$70,000, make the 1:5 ratio a challenge, as we would like to accept more students to this program - with the proposed expanded dedicated space, this may also be a possibility .

# **Truckee Meadows Community College**

# **Dental Hygiene, AS**

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

Summary of Actions:

This program should be continued. The recommendations to be pursued include: Developing a BSDH, reorganize and improve space, Clinic Manager to move from differential tuition pay to state funds, Use differential tuition fees for equipment maintenance and replacement, continue to seek scholarship donors for students.

### Timelines:

The BSDH is already in progress. Clinic Manager to move from differential tuition pay to state funds – Approved and In progress, Use differential tuition fees for equipment maintenance and replacement – YES - Ongoing, continue to seek scholarship donors for students - Ongoing

## Resources Needed:

The funding for the recommendations has already been allocated and/or sourced from external donors.

# **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 25

**B.** Number of graduates from the program for the following years:

2014-15 11 2015-16 12 2016-17 11

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 287

# **VI. Institutional Reports**

# **Entrepreneurship, AA Emphasis and CA**

## I. Description of Program Reviewed

The Entrepreneurship Program is housed under the Business Division and is a vital support mechanism for Reno's small business economy. With the economy still recovering from the great recession these programs offer entrepreneurial minded individuals the opportunity to explore creating and owning their own businesses. TMCC's program is supported by local Reno entrepreneurial groups like EDAWN, EA (Entrepreneurial assembly) and UNR. There are two entrepreneurship programs offered at TMCC, an Entrepreneurship Certificate of Achievement and an Associate of Arts degree entrepreneurship emphasis.

The certificate allows the new entrepreneur the opportunity to get grounding in the fundamentals of being an entrepreneur and suits entrepreneurial minded individuals who want to start their business and/or bring new ideas to existing businesses.

Students completing the certificate will:

- ♦ Develop a business plan, including the creation, development and presentation of innovative ideas.
- Possess effective networking skills.
- Possess skills and knowledge in each of the major business functions (accounting, marketing, economics, and finance) requisite for the owning and operating of a small business venture.

The emphasis prepares students to start their own business ventures or act and participate in any size organization with an entrepreneurial spirit. Students who successfully complete this degree will be eligible for transfer to upper division status in the University of Nevada, Reno's (UNR) College of Business. Students completing the emphasis will:

- ♦ Graduate and/or transfer to a four-year institution.
- Demonstrate their proficiency and knowledge of the fundamentals of small business management.
- Assist in the development of entrepreneurial enterprises in the Reno community.

#### **II. Review Process and Criteria**

The program/unit review (PUR) process begins with preparation of a self-study by a committee of faculty and staff, with input from the supervising dean. The self-study describes the program and addresses issues in curriculum and student success, demographics and enrollment, and resources. It forms the basis for the program/unit's educational master plan and summarizes the results of course, discipline, and program assessment for a 5-7 year period in a single document. The report is reviewed by the Academic Standards and Assessment (ASA) Committee, which validates the work of the self-study and provides a broad institutional overview. Following a meeting with the self-study chair and dean, the ASA reports the results to the Vice President of Academic Affairs (VPAA), who prepares a report for the President indicating recommended strategies for the academic area to focus on. These strategies are linked to TMCC's mission through our Strategic Master Plan's core themes and provide direction for future initiatives within the academic area. As such, future resource allocation through the Resource Allocation Process are dictated by the recommended strategies. Upon approval of the President, the VPAA charges the department and dean to implement the recommended strategies.

In the years between PURs, academic areas are required to complete an Annual Progress Report (APR), which addresses their progress in attaining the recommended strategies. These reports are drafted by the Self-study Chairs/Department Chairs/Directors/Coordinators and then reviewed and approved by the dean and finally the VPAA, providing a continual focus on the recommended strategies for the academic area in the context of the Strategic Master Plan.

# III. Major Findings and Conclusions of the Program Review

Strengths:

There are many external positive trends driving interest in entrepreneurship including the view of Reno as an "entrepreneurial hot spot," which has attracted many startups to the region. It has been shown that children who grow up in families and communities of entrepreneurs are more likely to choose that path for themselves. This renewed focus on entrepreneurship should drive interest in entrepreneurship education. As we discuss with students: people don't usually fail in their business because they don't know their area of specialization; they fail because they don't know how to successfully run a business. Another strength is the quality of professional entrepreneurs who are willing to teach classes in our program.

# **Entrepreneurship, AA Emphasis and CA**

A third strength is the ability for our students to take our ENT 200, 230, and 280 and receive credit toward the UNR minor in Entrepreneurship for UNR's ENT 401, 402, and 403, respectively, and then take only three upper division ENT classes to earn their minor. In addition to the UNR articulation, we now have a fully articulated ENT AA with Sierra Nevada College. Although there has been a slow start to this, we will again offer one of their 300-level classes on our Meadowood site to promote the co-enrollment opportunity for students. Developing Entrepreneurship degree emphases within other disciplines is an excellent way to grow enrollment in classes. To date, Culinary, Massage Therapy, and Personal Training have been approved. There are many CTE programs that can benefit from this strategy, as their graduates are predominately self-employed in their careers. Students enrolled full time in the programs are predominately successful, but more mentoring must take place with our part-time students.

#### Weaknesses:

The chicken or egg issue - we only have a 0.5 FTE teaching, working with the community, and working to grow enrollment for this program. The problem is that it truly takes a full time commitment to achieve desired enrollment goals, but the enrollment in the program doesn't warrant the hiring of a full-time faculty member in Entrepreneurship. Also, many would-be entrepreneurs believe they can't learn entrepreneurship, that it should be somehow an intrinsic ability. This belief should be addressed through "educating the target markets."

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

## Summary of Actions:

Continue program as the strategies that have begun are helping grow the program. Additionally, the future strategies planned of working with WCSD to build on the momentum of the highly successful summer 2016 jump start class and work with additional programs to create ENT emphases also have merit. The strategies to increase student success, which include program specific outreach, mentoring, and required program advisor meetings, all have merit and should be implemented as the timelilne states in the PUR document.

Monitor the impact of TMCC's proposed EATS Building. If the project comes to fruition, Entrepreneurship will have an elevated profile and play and important factor in the project.

#### Timelines:

- ♦ Work to develop cross-discipline ENT emphases: ongoing
- Program specific student mentoring: Spring 2017 Spring 2018 implementation (evaluate impact after two years)
- Program specific mandatory meeting with program advisory: Spring 2017 Fall 2018 implementation (evaluate impact after two years)
- Outreach to newly declared ENT students each semester: Spring 2017 Spring 2019 (evaluate impact after two years)

## Resources Needed:

We can achieve the above recommended implementations using funds within our current budget.

### **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 2

**B.** Number of graduates from the program for the following years:

2014-15 0 2015-16 0 2016-17 0

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 116

# **VI. Institutional Reports**

# **Veterinary Technology, AAS**

## I. Description of Program Reviewed

The Veterinary Technician Program at Truckee Meadows Community College was initiated after an assessment of the veterinary community in 2002 where a demand for licensed veterinary technicians was evident. The program was granted granted full accreditation November 12, 2006, by the American Veterinary Medical Association – Committee on Veterinary Technician Education and Activities (AVMA-CVTEA). As the American Association of Veterinary State Boards (AAVSB) requires students applying to take the Veterinary Technician National Examination (VTNE) to show a degree, only the Associate of Applied Science degree in Veterinary Technology is offered. Students are eligible to obtain a Veterinary Technician in Training (VTIT) qualification from the Nevada State Board of Veterinary Medical Examiners after the first year in the program and are able to perform the duties of a Veterinary Technician under direct supervision in their second year. Upon graduation and successful completion of the VTNE, students become licensed in their state of choice.

#### II. Review Process and Criteria

The program/unit review (PUR) process begins with preparation of a self-study by a committee of faculty and staff, with input from the supervising dean. The self-study describes the program and addresses issues in curriculum and student success, demographics and enrollment, and resources. It forms the basis for the program/unit's educational master plan and summarizes the results of course, discipline, and program assessment for a 5-7 year period in a single document. The report is reviewed by the Academic Standards and Assessment (ASA) Committee, which validates the work of the self-study and provides a broad institutional overview. Following a meeting with the self-study chair and dean, the ASA reports the results to the Vice President of Academic Affairs (VPAA), who prepares a report for the President indicating recommended strategies for the academic area to focus on. These strategies are linked to TMCC's mission through our Strategic Master Plan's core themes and provide direction for future initiatives within the academic area. As such, future resource allocation through the Resource Allocation Process are dictated by the recommended strategies. Upon approval of the President, the VPAA charges the department and dean to implement the recommended strategies.

In the years between PURs, academic areas are required to complete an Annual Progress Report (APR), which addresses their progress in attaining the recommended strategies. These reports are drafted by the Self-study Chairs/Department Chairs/Directors/Coordinators and then reviewed and approved by the dean and finally the VPAA, providing a continual focus on the recommended strategies for the academic area in the context of the Strategic Master Plan.

# III. Major Findings and Conclusions of the Program Review

Executive Summary:

Vet Tech is a robust program that has developed with the input of the veterinarian community and has excellent employment outcomes (post-completion objectives) for graduates. The program has well qualified dedicated faculty and has received and used Perkins funding to purchase needed equipment. The partnerships with WCSD is a positive for recruitment and the faculty are involved in other recruitment efforts. This program adds value to the institution, its students, and the community. This is an excellent program that is dealing with challenges in retention, competition, and gender representation.

Vice President of Academic Affairs' Findings: I generally concur with the Dean's and PURC's statements of strengths and weaknesses and would like to highlight a few:

#### Strengths

- 1. The program has a strong and active advisory board from which it seeks input regarding continuous improvement.
- 2. The staff is dedicated and well qualified.
- 3. All graduates have found employment. All post-completion objectives indicators are positive.
- 4. Collaboration with high schools.
- AVMA-CVTEA accreditation status.
- 6. Vast majority of students in the program as full-time students.
- 7. Retention rates.

# **Truckee Meadows Community College**

# **Veterinary Technology, AAS**

#### Weaknesses:

- 1. Although males are underrepresented nationally in Vet Tech programs, our program has a 91% female population.
- 2. Competing with online programs.
- 3. No suitable major to declare prior to being accepted into the Vet Tech program; hence, financial aid issues.
- 4. Persistence.

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

Summary of Recommended Actions:

The Vice President of Academic Affairs concurs with the recommendation of the Dean of Sciences to continue the program and develop a feasibility study regarding the creation of a Vet Tech Assistant program and would also like to see further exploration of imbedding math. Faculty should explore ways to meet the online demand noted in the study. Student retention rates should be studies and strategies should be developed to increase retention.

#### Timeline:

The work to determine if it is feasible to develop and offer a VTA program, explore ways to meet online demand, improving retention rates, and imbed math can take place over the 2017-18 academic year.

### Resources Needed:

No significant resources have been identified in relation to the above mentioned items. If it is feasible and desirable to start a VTA program, then a needs assessment would be produced.

# **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 47

**B.** Number of graduates from the program for the following years:

2014-15 10 2015-16 13 2016-17 6

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 192

# **VI. Institutional Reports**



# Program Review Western Nevada College

#### **Degree Programs**

- I. List the existing programs and corresponding degree for all programs that were reviewed over this academic year of review.
  - Associate of Arts Degree Program (AA)
  - Graphic Communications, AAS
- II. List any programs and corresponding degree level for all programs that received Board approval for elimination or deactivation in this academic year of review.

None

III. List all new programs and corresponding degree for all programs that received Board approval in this academic year of review.

None

#### **Certificates**

- List the certificates (at least 30 credits and under 30 credits) that were reviewed over this academic year of review.
  - Graphics Communications, CA
- II. List the certificate programs of at least 30 credits that received Academic Affairs Council (AAC) approval to be established in this academic year of review.
  - Mechatronics Technology, CA
- III. List the certificate programs of at least 30 credits that received AAC approval for elimination or deactivation in this academic year of review.

None

IV. List the certificate programs of less than 30 credits ("skills certificates") that received AAC approval to be established in this academic year of review and the corresponding state, national and/or industry recognized certification or license for which the certificate program provides such preparation.

None

IV. List the certificate programs of less than 30 credits ("skills certificates") that received AAC approval for elimination or deactivation in this academic year of review.

None

# **Associate of Arts Degree Program (AA)**

## I. Description of Program Reviewed

The Associate of Arts degree at Western Nevada College is designed for students who plan to transfer and pursue a baccalaureate degree in a wide variety of fields. Students may complete an associate of arts degree in four semesters via multiple tracks on multiple campuses.

#### II. Review Process and Criteria

The academic program review process is initiated through the Program Assessment and Review Committee (a WNC standing college committee). The process involves program self-assessment, curriculum review, formal report, internal and external reviewers, presentation of findings to the college community, student panel interviews, annual and five-year assessment plans, and five-year action plan.

# III. Major Findings and Conclusions of the Program Review

- 1. Replace the Associate of Arts mission statement and program outcomes as detailed in sections 1.A and 1.B. College and Program Mission (1.A)
- 2. Develop AA program 'Capstone Requirement' and qualifying courses.
- 3. Develop a formal role for academic faculty advising especially related to placement and transfer: Faculty Advisement recommendation.
- 4. Develop and implement exit surveys for program graduates.
- 5. Clarify roles within program review process and intent of language.
- 6. Identify ways to advise students appropriately with regard to foreign language requirements in transfer degrees.

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

The WNC Liberal Arts Division took steps in Spring 2017 to respond to review recommendations. The mission and outcomes for the program have been updated. Program requirements were formally distinguished from general education with the inclusion of a 'Liberal Arts Requirement.' Faculty groups continue to explore formalizing an academic faculty advising framework. Exit surveys for program graduates have been developed as part of a subsequent review. A recommendation on updating program review timelines to fit institutional needs has been submitted to the program review committee (PARC). Foreign language courses at the 200+level were included in the Liberal Arts Program Requirement to encourage early completion for students planning to transfer into BA programs with related requirements.

## **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 1,221

B. Number of graduates from the program for the following years:

2014-15 196 2015-16 276 2016-17 271

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 4,263

# **VI. Institutional Reports**

# **Graphic Communications, AAS and CA**

# I. Description of Program Reviewed

To meet the needs of students in the community and to aid in furthering the growth and development of Northern Nevada's workforce, the Graphic Communications Program (Program) provides an industry-standard education for students who are interested in entry-level positions in the graphic design field with an Associate of Applied Science degree. The Program also provides training for those who need general skills in graphic design with the Certificate of Achievement. Additionally, those who are already in the industry, but are in need of upgrading skills and knowledge in current software, enroll in our classes. Courses in the Graphic Communications Program teach concepts applied to many areas of graphic communications including graphic design, advertising design, web design, and animation. Class projects are designed to allow students to build professional portfolios to market themselves for employment.

#### II. Review Process and Criteria

The academic program review process is initiated through the Program Assessment and Review Committee (a WNC standing college committee). The process involves program self-assessment, curriculum review, formal report, internal and external reviewers, presentation of findings to the college community, student panel interviews, annual and five-year assessment plans, and five-year action plan.

## III. Major Findings and Conclusions of the Program Review

WNC's Graphic Communications Program graduates emerge with relevant skills and gain employment. Student satisfaction and instructor engagement is extremely high. The entire GRC AAS degree will be available online beginning the Fall of 2017. The next step for the program will be to create a pathway for WNC students wishing to transfer into the University of Nevada, Reno's new BA in Graphic Design.

# IV. Next Steps for this Program Based on Program Review Findings and Recommendations

- 1. Program should change name to Graphic Design to align with program titles in high schools and four-year NSHE institutions.
- 2. Develop pathways to four-year institutions. If pathway is through an AA degree, track students pursuing Graphic Design route.
- 3. All videos and classes will feature closed captioning by spring 2018
- 4. Technology items requested in Perkins Grant proposal including large format printer and tablet based design tools.
- 5. Plans to increase program awareness and potential of career pathway.

# **V. Descriptive Statistics**

A. Number of students with a declared major in the program area:

2016-17 50

B. Number of graduates from the program for the following years:

2014-15 21 2015-16 15 2016-17 11

C. Headcount of students enrolled in any course related to the program (duplicated):

Fall 2016 128

### **VI. Institutional Reports**