EXECUTIVE SUMMARY

Item Name: 2015-2016 Academic Strategic Plan (NAU)

☐ Action Item  □ Discussion Item  □ Information Item

Issue: The board is asked to approve the 2015-2016 Academic Strategic Plan for Northern Arizona University.

Background

ABOR Policy 2-223.A requires each university to submit an annual Academic Strategic Plan to the Academic Affairs Committee for approval. The Plan is intended to provide information on the key academic initiatives planned by the institution and describe how they support both the University's strategic plan and the system-wide strategic plan of the Arizona Board of Regents.

Statutory/Policy Requirements

ABOR Policy 2-223.A – The Academic Strategic Plan

Strategic Implications

The Academic Strategic Plan serves as a primary mechanism by which the board provides oversight and direction for the academic initiatives and academic mission of each university.

Discussion

The 2015-2016 Academic Strategic Plan from Northern Arizona University includes a discussion of initiatives to improve learning and educational attainment and requests for two new programs.

Outline of Academic Strategic Plan

Part I – Narrative Overview
   A. Initiatives to Improve Learning and Educational Attainment
   B. Academic Programs and Organization Unit Overview

Part II – Academic Programs
   A. New Programs
      • Astronomy and Planetary Science, PhD
      • Parks and Recreation Management, MS

Contact Information:
Laura Huenneke, Provost, NAU          928.523.2230  Laura.Huenneke@nau.edu
Stephanie Jacobson, ABOR              602-229-2529  stephanie.jacobson@asu.edu
EXECUTIVE SUMMARY

Part III. Academic Units – none submitted at this time
   - Academic Units may be modified on an addendum to the Academic Strategic Plan at a subsequent Academic Affairs Committee meeting.

Recommendation to the Board

It is recommended that the board approve the 2015-2016 Academic Strategic Plan for Northern Arizona University.
EXECUTIVE SUMMARY

Part I: Narrative Overview

A. Overview of Initiatives to Improve Learning and Educational Attainment

i. During 2014-15, Northern Arizona University has concentrated on assessment and continued improvements in our student success initiatives. Programs are designed to serve specific populations among our students (e.g., veterans, out-of-state, first-generation). Whether administered by the University College or Enrollment Management and Student Affairs, programs are assessed annually with a consistent rigorous (propensity analysis) approach. We continue to focus upon systematic improvement of course design in key introductory or "gateway" courses (from Supplemental Instruction to the active-learning focus of the First Year Learning Initiative), and are tracking improvement in student success in all such courses.

ii. In 2013-14, our focus on the 2020 goals led us to the understanding that more than half our recent baccalaureates did not start within our first-time full-time (freshman) cohort; that is, they started as part-time or as transfer students. Thus in the current year we have devoted additional attention to serving the needs of these students, whether they come to the Flagstaff campus or to one of our Extended Campuses programs. The Transfer and Commuter Connections program provides peer mentors, a drop-in or call-in resource center, and events planned specifically to ease the transition into NAU. A Transfer Improvement Group is identifying and addressing issues that are challenging for prospective or enrolled transfer students (for example, through the creation of on-line tools for assessing how one's earned credits will apply to an NAU program.)

iii. Our programs at the Phoenix Biomedical Campus continue to expand. The Master’s in Physician Assistant Studies program (the only such program at a public institution in Arizona) has now graduated its first cohort, and the program is in the process of completing the review for full accreditation (to replace the original provisional accreditation status). The first Phoenix cohort of Doctor of Physical Therapy students will graduate this summer, increasing NAU's annual production of this high-value professional degree. Finally, this year saw the recruitment and admission of the first cohort of our new Doctor of Occupational Therapy program, also unique in public Arizona institutions.

B. Academic Programs and Organization Unit Overview

i. We propose to add a Ph.D. program in Astronomy on the Flagstaff campus, building on a foundation of strong research performance by existing faculty and on the existence of a large and vibrant northern Arizona professional astronomy community. Undergraduate research and the existing master's program in the department lead to excellent graduate school and career placement for our graduates. Since 1991, the department has partnered with Lowell Observatory in
hosting the National Undergraduate Research Observatory, bringing students from a consortium of colleges and universities for research experiences and projects. Flagstaff's recognition as the first International Dark Skies City grew out of the array of observatory facilities in the northern Arizona region, including Lowell Observatory and the US Naval Research Observatory. Last year NAU became an official partner in Lowell Observatory's buildout and operation of the Discovery Channel Telescope in Happy Jack. The university is also working with the City of Flagstaff, Coconino County, Lowell Observatory, and the Economic Collaborative of Northern Arizona (ECoNA) in proposing a Coconino County site for the construction of the Cherenkov Telescopic Array, a major international observatory project.

The new Ph.D. program in Astronomy and Planetary Sciences will leverage the state-of-the-art astronomical resources found in Arizona, especially unique facilities near Flagstaff, and deliver a graduate education distinct from those offered in Arizona's other state universities. Specifically, the Department of Physics and Astronomy will partner with Lowell Observatory, United States Geological Survey (USGS) Astrogeology Science Center, United States Naval Observatory, and the Naval Research Laboratory, as well as the Discovery Channel Telescope (DCT) and the Naval Precision Optical Interferometer (NPOI), all in or near Flagstaff. The new program will focus on the use of telescopes to study the origin and evolution of planetary systems. NAU and its Flagstaff partners have a strong presence in the use of telescopes to study planetary systems. Astronomers at ASU and UA largely use telescopes to study galaxies and cosmology, whereas planetary scientists at these same schools use spacecraft to study objects in our Solar System. The NAU program will complement existing strengths by focusing on the use of telescopes to investigate solar system planets and Kuiper Belt objects. In addition, the new program will have another distinctive feature — a strong curricular focus on developing cutting-edge hardware and software skills that meet the needs of universities and companies in Arizona and across the United States that work in astronomy, planetary science, and space science research.

NAU’s location in Arizona will make for strong applicant pools in the new PhD program. Students across the nation are aware of clear, dark skies and preponderance of astronomical facilities in Arizona. Flagstaff is the first International Dark Sky city and that attracts students to our area to study Astronomy. NAU’s unique location in Flagstaff enabled the Department to build one of the largest undergraduate programs in Astronomy in the United States; the American Institute of Physics routinely ranks NAU among the top five institutions in B.S. degrees awarded in Astronomy. Although ASU and UA undergraduate programs are somewhat smaller than NAU’s undergraduate program, their PhD programs are highly competitive and admit only a fraction of applicants; their large applicant pools show that there is a strong demand to study Astronomy and Planetary Science in Arizona. The new Ph.D. program will
leverage NAU's unique location in Flagstaff, and recruit students with B.S. degrees in Astronomy, Planetary Science, and Physics from across the nation. The new program will bring top-notch graduate students to the NAU campus and raise the already high standard for our undergraduate program.

Arizona is home to numerous telescopes and the largest collection of professional astronomers in the world. It is also home to numerous optics and aerospace companies. The new program will produce highly trained PhDs who will help meet the state's high-tech employment needs related to Astronomy, Planetary Science, and Space Science. Engaging our community partners (Lowell, USGS, the Naval Research Observatory, etc.) in the program will not only increase the pool of research mentors for our students, but will prepare the graduates for careers in this strong sector of Arizona's economy.

ii. The proposed on-line Master of Science in Parks and Recreation Management (PRM) will prepare graduate students for administrative and management positions well into the 21st century. Graduates of this program will learn to apply current management skills and theories and their impact on an ever-changing social paradigm. Professional issues focus on park and recreation management best practices, diversity issues, staffing and personnel, related research and the shift to a service-driven global economy. The proposed on-line degree would provide a unique opportunity for citizens of Arizona and the United States to continue their education without having to disrupt their employment, family life and geographic location. The PRM faculty created the first and only Council on Accreditation Parks, Recreation, Tourism and Related Professions (COAPRT) accredited on-line undergraduate degree in 2003; this bachelor's program currently has approximately 150 online students. The PRM program has established a professionally recognized national reputation for the online Bachelor of Science; it is built on the fact that the majority of working professionals in the parks and recreation profession have some college credits, but at an early age started working in the profession and at some point, their careers reach a dead end without a bachelor's degree in parks and recreation. The on-line bachelor's has served this population well. However, when these individuals wish to advance into management positions, a graduate degree in parks and recreation management is often an essential component. The development of an online Master of Science in Parks and Recreation Management will build on our nationally-recognized undergraduate program, offering a more advanced opportunity to the same diverse and place-bound professional population.

There are no online parks and recreation management graduate degrees currently available in Arizona or the Southwest. States, counties, and municipalities (as well as federal land agencies) all employ parks and recreation managers who are prospective students for such a degree. National and state labor statistics document more than 345,000 such workers in the US, and nearly
EXECUTIVE SUMMARY

6800 in Arizona, with a projected increased employment base of 14% over the next decade.

C. Northern Arizona University is not proposing any new academic programs that will require program fees.
<table>
<thead>
<tr>
<th>Name of Proposed Degree (degree type and major)</th>
<th>College/School (location)</th>
<th>Program Fee Required? (Yes or No)</th>
<th>Additional State Funds Required? (Yes or No)</th>
<th>Brief Description/Justification (max 100 words)</th>
<th>Projected 3rd Year Enrollment &amp; Implementation Date</th>
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| Astronomy and Planetary Science, PhD | College of Engineering, Forestry and Natural Sciences | No | No | Students in this program will carry out investigations in planetary science with an emphasis on telescopic observations of solar system objects, an area for which NAU and Flagstaff have a longstanding international reputation of discovery. NAU will partner with Lowell Observatory, USGS, and the Naval Observatory, and thereby open up access to local and unique state-of-the-art facilities like the Discovery Channel Telescope and the Naval Optical Interferometer for student research. The curriculum will have a focus on developing student skills with cutting-edge hardware and software to help meet the needs of universities and companies in Arizona and the United States. | Year 1: 5  
Year 2: 10  
Year 3: 15  
Implementation Date: Fall 2016 |
| Parks and Recreation Management, MS | College of Social and Behavioral Sciences | No | No | Students in this program will be prepared for administrative and management positions well into the 21st century. Graduates of this program will learn to apply current management skills and theories. Graduates of this program would | Year 1: 15  
Year 2: 25  
Year 3: 35  
Implementation Date: Fall 2015 |
learn to apply current management skills and theories and their impact on an ever-changing social paradigm. Professional issues focus on park and recreation management best practices, diversity issues, staffing and personnel, related research and the shift to a service-driven global economy. The program will provide a unique opportunity for citizens of Arizona and the United States to continue their education without having to disrupt their employment, family life and geographic location. The PRM faculty created the first and only Council on Accreditation Parks, Recreation, Tourism and Related Professions (COAPRT) accredited online undergraduate degree in 2003 and currently has approximately 150 online students.

Table 2 - High Demand Programs Proposed for Elimination

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<tr>
<th>Program</th>
<th>College/School (location)</th>
<th>Justification/Brief Description (max 100 words)</th>
<th>Impact on Current Students (max 100 words)</th>
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