UNIVERSITY OF WYOMING

Board of Trustees

Committee on Academic and Student Affairs

Wednesday, May 12th, 2021
3:00pm-5:00pm

Board of Trustees
Committee on Academic and Student Affairs
May 12th, 2021
3:00pm-5:00pm

AGENDA

1. Consideration and Action-Master List of Degrees *(Ahern/Barrett)*

2. Consideration and Action: Proposed Name-Department of Civil and Architectural Engineering and Construction Management *(Denzer)*

3. Consideration and Action: Request for Authorization-M.S. in Environment, Natural Resources, and Society (ENRS) *(Koprowski)*

4. Consideration and Action: Request for Authorization-BAS Health Sciences Admin (Additional concentration) *(Pickett)*

5. Consideration and Action: Request for Authorization-Plant Production & Protection, with Concentrations and Minors *(Kniss)*

6. Information and Discussion: BFA Visual Communications Design *(Russell)*

7. Information and Discussion: Green Dot *(Chestnut)*

8. Information and Discussion: Summer/Fall Student Experience *(Alexander/Chestnut)*

ACADEMIC AND STUDENT AFFAIRS

COMMITTEE MEETING MATERIALS

AGENDA ITEM TITLE: Master List of Degrees (Sullivan/Alexander)

☒ PUBLIC SESSION
☐ EXECUTIVE SESSION

PREVIOUSLY DISCUSSED BY COMMITTEE:
    ☐ Yes
    ☒ No

FOR FULL BOARD CONSIDERATION:
    ☒ Yes
    [Note: If yes, materials will also be included in the full UW Board of Trustee report.]
    ☐ No

☒ *Attachments/materials are provided in advance of the meeting.*

EXECUTIVE SUMMARY:
Per UW Regulation 2-119, at its annual meeting in May, the Board of Trustees shall approve the master list of Academic Programs offered by the University of Wyoming. The list may be amended by the Board at any meeting.

WHY THIS ITEM IS BEFORE THE COMMITTEE:
University of Wyoming Regulation 2-119 requires that the Board approve the Master List of Degrees and Majors annually in May. The Academic and Student Affairs committee will report to the Board on recommended action for approval the master list.

ACTION REQUIRED AT THIS COMMITTEE MEETING:
Consideration for approval the Master List of Degrees and Majors.

PROPOSED MOTION:
"I move that the Academic and Student Affairs Committee approves the 2021 Master List of Degrees and Majors and moves for full Board consideration."

UNIVERSITY OF WYOMING
MASTER LIST OF DEGREES AND MAJORS
as authorized by the Trustees
May 2021
Prepared by the Office of Academic Affairs

By way of explanation, the degree title is listed in **bold italics** (for example, ***Bachelor of Arts, Bachelor of Science in Chemical Engineering***). The list of majors for a specific degree in a specific college is listed below the degree title. Information in *italics* and parentheses ( ) following a major is explanatory data, and not part of the official major name. Majors with brackets {} require the insertion of a secondary program of study.
Proposed new Degrees and Certificates have been highlighted in green. Programs in red are listed as Inactive Admission Status. Their status will be determined at a later date, once departments are merged and curriculum is changed. Degrees and Certificates proposed to be deleted from previous Master Lists are highlighted in yellow and crossed out. The proposed deletions are programs that were duplicated in other departments or that UW has simply ceased to offer over time and all eliminated programs have gone through the process as outlined in the University regulations for eliminating programs. As such, the Master List of Degrees and Majors has been corrected to reflect current offerings.

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

Bachelor of Science
> Agricultural Business
> Agricultural Communications
> ~~Agroecology~~ (replaced with Plant Production and Protection)
> Animal and Veterinary Science
> Microbiology
> Molecular Biology
> Plant Production and Protection (pending BOT approval May 21)
> Rangeland Ecology and Watershed Management

Bachelor of Science in Family and Consumer Sciences
Master of Arts
> Molecular Biology

Master of Science
> Agricultural and Applied Economics
> Animal and Veterinary Science
> Entomology
> Family and Consumer Sciences
> Food Science and Human Nutrition (*interdisciplinary*)
> Molecular Biology [*]
> Plant Sciences
> Rangeland Ecology and Watershed Management
> Soil Science

Doctor of Philosophy
> Animal and Veterinary Science
> Entomology

* = Molecular Biology is listed under both the Master of Science and Master of Arts categories, but is only counted as one master's program.

COLLEGE OF AGRICULTURE & NATURAL RESOURCES (cont.)

Doctor of Philosophy (cont.)
>Molecular Biology
>Plant Sciences
>Rangeland Ecology and Watershed Management
>Soil Sciences

COLLEGE OF ARTS & SCIENCES

Bachelor of Arts
>African American and Diaspora Studies
>American Studies
>Anthropology
>Art
>Art Education
>Art History
>Chemistry
>Communication
>Criminal Justice
>English
>French
>Gender and Women's Studies
>Geology and Earth Sciences
>German
>History
>International Studies
>Journalism
>Mathematics
>Music
>Native American and Indigenous Studies
>Philosophy
>Physics
>Political Science
>Religious Studies
>Sociology
>Spanish
>Statistics
>Studio Art
>Theatre and Dance

Bachelor of Fine Arts
>Art @
>Studio Art @
>Theatre and Dance @
>Visual Communication Design

Bachelor of Music
>Jazz Performance
>Music Education

@ = Bachelor of Fine Arts programs are previously counted under the Bachelor of Arts category in the College of Arts and Sciences.

COLLEGE OF ARTS & SCIENCES (cont.)

Bachelor of Music (cont.)
>Music Performance

Bachelor of Science
>Astronomy/Astrophysics
>Biology
>Botany
>Chemistry *
>Chemistry (ACS approved) #
>Communication *
>Environmental Geology/Geohydrology
>Geography
>Geology
>~~Journalism~~ *
>Mathematics *
>Physics *
>Physiology
>Political Science *
>Psychology
>Statistics *
>Wildlife and Fisheries Biology and Management (*professional*)
>Zoology

Master of Arts
>American Studies (*interdisciplinary*)
>Anthropology
>Communication
>English
>History
>International Studies (*interdisciplinary*)
>Mathematics
>Philosophy
>Political Science
>~~Psychology~~
>Sociology
>Spanish

Master of Arts in Teaching
>~~History~~ &
>Mathematics &

Master of Fine Arts in Creative Writing
Master of Music
Master of Music Education
Master of Public Administration
Master of Science
>Botany
>Chemistry
>Geology
>Geophysics

* = This major counted under a previously listed undergraduate degree in the College of Arts & Sciences.
# = This listing not counted as a separate major
& = This major counted under a previously listed graduate degree in the College of Arts & Sciences.

COLLEGE OF ARTS & SCIENCES (cont.)

Master of Science (cont.)
        Mathematics [&]
        Physics
        Psychology
        Statistics
        Zoology and Physiology

Master of Science in Teaching
        ~~Chemistry~~ [&]
        Mathematics [&]
        Natural Science (*interdisciplinary*)
        Physics [&]

Doctor of Philosophy
        Anthropology
        Botany
        Chemistry
        Geology
        Geophysics
        Mathematics
        Physics
        Psychology
        Statistics
        Zoology and Physiology

& = This major counted under a previously listed graduate degree in the College of Arts & Sciences.

COLLEGE OF BUSINESS

Bachelor of Science in Business
        Accounting
        ~~Business Administration (online only)~~
        Business Economics
        Entrepreneurship
        Finance
        Management of Human Resources
        Marketing
        Professional Selling

Bachelor of Science in Economics

Master of Business Administration
        Business Administration
        Business Administration – Executive [#]
        Business Administration – Energy Management [#]
        Business Administration – Finance [#]

Master of Science
        Accounting
        Economics
        Finance

= This listing not counted as a separate major

COLLEGE OF BUSINESS (cont.)

Doctor of Philosophy
      Economics
      Management and Marketing

COLLEGE OF EDUCATION

Bachelor of Applied Science
      Career and Technical Education
Bachelor of Arts
      Elementary Education
      Elementary Education with concurrent major in Special Education (K-12)
      English Education with concurrent major in English [*]
      Mathematics Education with concurrent major in Mathematics [*]
      Modern Languages Education with concurrent majors in French, German or Spanish [*]
      Science Education with concurrent majors in Biology, Chemistry, Earth Science or Physics [*]
      Social Studies Education with concurrent majors in History or Political Science [*]
Bachelor of Science
      Agricultural Education with concurrent majors in Animal & Veterinary Science, Agricultural Business or Agricultural Communication
Master of Arts
      Major: Education
      Areas of Concentration:
            Curriculum & Instruction [^]
            Educational Leadership [^]
            Higher Education Administration [^]
            Literacy Education [^]
            Special Education [^]
Master of Science
      Major: Counseling
      Areas of Concentration:
            Mental Health Counseling [^]
            School Counseling [^]
      Major: Education
      Areas of Concentration:
            Learning Design & Technology [^]
Doctor of Education
      Major: Education
      Areas of Concentration:
            Curriculum & Instruction [^]
            Educational Leadership [^]
            Higher Education Administration [^]
            Learning Design & Technology [^]
            Mathematics Education [^]

[*] = The College of Education groups Secondary Education as one for reporting requirements but breaks the degrees out separately for accreditation purposes
[^] = This is not a separate major and is considered a concentration within that major (ex. Master of Arts with a concentration in Curriculum & Instruction or a Doctor of Philosophy with a concentration in Curriculum Studies)

COLLEGE OF EDUCATION (cont.)

Doctor of Philosophy
   Major: Counselor Education and Supervision
   Major: Curriculum and Instruction
   Areas of Concentration:
      Curriculum Studies ^
      Literacy Education ^
      Mathematics Education ^
      Science Education ^

^ = This is not a separate major and is considered a concentration within that major (ex. Master of Arts with a concentration in Curriculum & Instruction or a Doctor of Philosophy with a concentration in Curriculum Studies)

COLLEGE OF ENGINEERING AND APPLIED SCIENCE

Bachelor of Science in Architectural Engineering
Bachelor of Science in Chemical Engineering
Bachelor of Science in Civil Engineering
Bachelor of Science in Computer Engineering
Bachelor of Science in Computer Science
Bachelor of Science in Construction Management
Bachelor of Science in Electrical Engineering
Bachelor of Science in Energy Systems Engineering
Bachelor of Science in Mechanical Engineering
Bachelor of Science in Petroleum Engineering
Master of Science
   Architectural Engineering
   Atmospheric Science
   Chemical Engineering
   Civil Engineering
   Computer Science
   Electrical Engineering
   Environmental Engineering
   Mechanical Engineering
   Petroleum Engineering
Doctor of Philosophy
   Atmospheric Science
   Chemical Engineering
   Civil Engineering
   Computer Science
   Electrical Engineering
   Mechanical Engineering
   Petroleum Engineering

COLLEGE OF HEALTH SCIENCES

Bachelor of Science
   Kinesiology and Health Promotion

COLLEGE OF HEALTH SCIENCE (cont.)

Bachelor of Science (cont.)
      Medical Laboratory Science
      Physical Education Teaching
      Speech, Language and Hearing Sciences
Bachelor of Science in Dental Hygiene
Bachelor of Science in Nursing
Bachelor of Social Work
Master of Science
      Health Services Administration
      Kinesiology and Health
      Nursing
      Speech-Language Pathology
Master of Social Work
Doctor of Nursing Practice
Doctor of Pharmacy

COLLEGE OF LAW

Juris Doctor

HAUB SCHOOL OF ENVIRONMENT & NATURAL RESOURCES

Bachelor of Science
      Environment and Natural Resources/ {affiliated major}
      Environmental Systems Science
      Outdoor Recreation & Tourism Management
Master of Science
      Environment, Natural Resources and Society (ENRS) (Pending BOT approval May 21)

SCHOOL OF ENERGY RESOURCES

Bachelor of Science
      Energy Resource Management and Development
      Energy Land and Water [#]
      Professional Land Management [#]

= This listing not counted as a separate major

CROSS-COLLEGE INTERDISCIPLINARY GRADUATE DEGREES

Juris Doctor/Master of Arts in Environment and Natural Resources [#]
Juris Doctor/Master of Public Administration [#]

= This listing not counted as a separate major

ACADEMIC AFFAIRS

Bachelor of General Studies
Master of Arts
    Geography/Water Resources [#]
Master of Science
    Agricultural and Applied Economics/Water Resources [#]
    Biomedical Sciences
    Botany/Water Resources [#]
    Civil Engineering/Water Resources [#]
    Economics/Water Resources [#]
    Geology/Water Resources [#]
    Geospatial Information Science and Technology (GIS&T)
    Natural Science (interdisciplinary) [*]
    Rangeland Ecology and Watershed Management/Water Resources [#]
    Soil Science/Water Resources [#]
    Zoology and Physiology/Water Resources [#]
Master of {affiliated degree}/Environment and Natural Resources [#]
Doctor of Philosophy
    Biomedical Sciences
    Ecology
    Hydrologic Science
    Molecular and Cellular Life Sciences
    Neuroscience

= This listing not counted as a separate major
*** =** This major counted under a previously listed graduate degree in the College of Arts & Sciences.

UW CASPER

Bachelor of Applied Science
    Organizational Leadership
    Health Services Administration (Pending BOT approval May 21)

Aggregate list of certificates offered at UW
May 2021

Graduate Certificates
American Studies
Community College Leadership
<mark>Early Childhood Mental Health</mark>
Energy Business
English as a Second Language Endorsement and Certificate
Financial Planning
Geographic Information Science (GIS)
K-12 Special Education
Literacy Certificate/Wyoming Reading Endorsement
Music Performance
Online Instruction Certificate
Certificate in Play Therapy
Reclamation and Restoration Ecology
Remote Sensing
School District Superintendent
School Principalship
School Social Work
<mark>Special Education Certificate</mark>
Teachers of American Indian Children
Teaching Elementary School
Teaching Middle School Math
Teaching Middle School Science
Teaching Secondary Content
Unmanned Aerial Systems (drones)

Undergraduate Certificates
American Sign Language
Cadastral Surveying
Computer Science Education
Construction Management
Cybersecurity
Early Childhood Program Director
Geographic Information Science (GIS)
Music Audio Technology Certificate
Music Entrepreneurship Certificate
Remote Sensing

ACADEMIC AND STUDENT AFFAIRS

COMMITTEE MEETING MATERIALS

AGENDA ITEM TITLE: <u>Department name change to: Department of Civil and Architectural Engineering and Construction Management</u>, *Denzer, Barrett*

☒ PUBLIC SESSION
☐ EXECUTIVE SESSION

PREVIOUSLY DISCUSSED BY COMMITTEE:
    ☒ Yes
    ☐ No

FOR FULL BOARD CONSIDERATION:
    ☒ Yes
    [Note: If yes, materials will also be included in the full UW Board of Trustee report.]
    ☐ No

☒ *Attachments/materials are provided in advance of the meeting.*

EXECUTIVE SUMMARY:
The Department of Civil & Architectural Engineering is requesting a name change to Department of Civil and Architectural Engineering and Construction Management.

- The proposed name will accurately reflect the identity of the Department. The B.S. program in Construction Management was approved by Trustees in November 2018. It is now well-enrolled and partly-staffed with new faculty. All indicators point to success.
- For the B.S. program in Construction Management, we will seek "candidate status" for accreditation with the American Council for Construction Education (ACCE) in Fall 2020. This change will help satisfy ACCE requirement 2.1.2.1: "The educational unit is a distinct and identifiable entity within the educational institution."
- "Department of Civil and Architectural Engineering and Construction Management" is the typical naming convention for other departments with the same profile (University of Cincinnati; Milwaukee School of Engineering).

WHY THIS ITEM IS BEFORE THE COMMITTEE:
"Existing Degree Program Change Request Title Change, Degree Designation, or CIP Change" process requires Board of Trustee approval for department name change.

ACTION REQUIRED AT THIS COMMITTEE MEETING:
Consideration for approval.

PROPOSED MOTION:
"I move that the Academic and Student Affairs Committee approves to change the name of the Department of Civil & Architectural Engineering to the Department of Civil and Architectural Engineering and Construction Management and moves for full Board consideration."

University of Wyoming

Existing Degree Program Change Request
Title Change, Degree Designation, or CIP Change

Directions: Complete this form and proposal template to request a change to the title (name) of an existing degree program or to request a change to the Classification of Instructional Programs (CIP) code of an existing degree program. The degree program must already be on an institution's program inventory.

- A degree program title consists of the following two parts:

  1. degree designation, such as Bachelor of Science (BS), Master of Arts (MA), or Doctor of Philosophy (PhD); and,
  2. name of the discipline, such as History, Mechanical Engineering, or Zoology.

- The Classification of Instructional Programs (CIP) is the taxonomic coding scheme used for instructional programs in higher education. Its purpose is to facilitate the organization, collection, and reporting of fields of study and program completions. The academic unit should consult with the Office of the Registrar and Office of Institutional Analysis prior to submitting the proposal to determine whether a change to the CIP code used to classify the program is recommended. For more information, visit CIP Code Information

Process:
1. Faculty of the unit develop a rational for the change.
2. The dean of the academic unit approves the rationale and change and submits the proposal to the Provost.
3. The Provost routes the proposal to the Faculty Senate for consideration by the Graduate Council or Academic Planning Committee.
4. The Provost approves the rationale and change.
5. The Provost reports the proposal to the Academic and Student Affairs Committee of the Board of Trustees.
6. The Board's Academic and Student Affairs Committee will recommend the change to the full Board of Trustees for consideration and action.
7. The proposers hold an implementation meeting with the Registrar, Admissions, OIA, and Advising Managers, and other appropriate units to implement the change. Implementation meetings gather people from all of the units that will take part in ensuring a new or restructured academic program runs smoothly.

Guidance: Name and identity are closely related. A program "brand" as represented by the name has value and so careful planning for a name or designation change is a worthwhile investment. Programs with a long history and many alumni and past employees may find that these groups express strong attachment to the existing name. Thus, the rationale for the name change should be made with full consideration for the impact on the historic connections and with a view to the long-term future. New names should be designed to reflect the nature of the program for many years to come. Ideally, consultation with and support from the program's students in course and alumni should be evident in the proposal.

Programs should also demonstrate that they have consulted with other departments and colleges on campus that may be impacted by the change. Additionally, they should demonstrate they have discussed the change with their Wyoming community college colleagues.

Program names that narrow the program scope or reflect short-term sub-areas or trends in research tools or methodology should be avoided. Proposals should be explicit about all the academic programs and structures that are included in a name change request. For example, list all departments, majors, degrees, certificates, centers, subject listings, minors or other academic elements that are included in the request.

Some common justifications for a change in major name or CIP code are that the new name more accurately reflects the curriculum than the old name; that the activities of the program faculty and the training they offer are more accurately reflected by the new name; and that the name of the discipline has changed and consequently the major should be renamed to reflect this change in the discipline.

Administrative Information
Complete all info in this box, and then complete the appropriate request on p. 3 or 4

1. Proposing Unit: Department of Civil & Architectural Engineering

2. Current Degree Program Title: We have 6 degree programs; no changes proposed.

3. Current Degree Program CIP Code: No changes proposed

4. Contact Person: *Provide contact information for the person who can answer specific questions about the degree program and change proposal.*

    Name: Anthony Denzer

    Title: Department Head

    E-mail: tdenzer@uwyo.edu

    Phone: 307-399-7376

Request Change in **Name of Department**

Current Name: **Department of Civil & Architectural Engineering**

Proposed Name: **Department of Civil and Architectural Engineering and Construction Management**

Implementation Date (MM/DD/YYYY): **07/01/2020**

Reason for Change:
- The proposed name will accurately reflect the identity of the Department. The B.S. program in Construction Management was approved by Trustees in November 2018. It is now well-enrolled and partly-staffed with new faculty. All indicators point to success.
- For the B.S. program in Construction Management, we will seek "candidate status" for accreditation with the American Council for Construction Education (ACCE) in Fall 2020. This change will help satisfy ACCE requirement 2.1.2.1: "The educational unit is a distinct and identifiable entity within the educational institution."
- "Department of Civil and Architectural Engineering and Construction Management" is the typical naming convention for other departments with the same profile (University of Cincinnati; Milwaukee School of Engineering).
- There are no serious logistical issues.
- The faculty voted unanimously in favor of this change (5/5/20).
- Dean Wright has been consulted and is supportive.
- No curriculum changes are associated with this. There are no effects on students in the program.

ACADEMIC AND STUDENT AFFAIRS

COMMITTEE MEETING MATERIALS

AGENDA ITEM TITLE: <u>M.S. in Environment, Natural Resources, and Society (ENRS)</u>
Koprowski, Ahern

☒ PUBLIC SESSION
☐ EXECUTIVE SESSION

PREVIOUSLY DISCUSSED BY COMMITTEE:
    ☒ Yes
    ☐ No

FOR FULL BOARD CONSIDERATION:
    ☒ Yes
    [Note: If yes, materials will also be included in the full UW Board of Trustee report.]
    ☐ No

☒ *Attachments/materials are provided in advance of the meeting.*

EXECUTIVE SUMMARY:
The Haub School completed a feasibility study and pro-forma budget for an M.S. in Environment, Natural Resources, and Society. The proposed program seeks to fill the need of employers who are seeking employees with an interdisciplinary experience and essential skills in leadership, teamwork, collaboration, critical thinking, problem solving, and communication. The program proposes to provide an interdisciplinary experience in social science, law and policy, environmental science, natural resource economics, natural resource management, and environmental problem solving.

WHY THIS ITEM IS BEFORE THE COMMITTEE:
University of Wyoming Regulation 2-119 requires that the Board approve all new degree programs and lays out the process for that approval. The Academic and Student Affairs committee will report to the Board on recommended action for approval of the new degree program.

ACTION REQUIRED AT THIS COMMITTEE MEETING:
Request Academic and Student Affairs Committee approval of the M.S. in Environment, Natural Resources, and Society (ENRS) degree.

PROPOSED MOTION:
"I move that the Academic and Student Affairs Committee approves the Haub School's M.S. in Environment, Natural Resources, and Society (ENRS) and moves for full Board consideration."

M.S. in Environment, Natural Resources, and Society (ENRS)

The Haub School submitted a feasibility study and pro-forma budget for an M.S. in Environment, Natural Resources, and Society to be reviewed by the Academic Planning Committee during fall semester 2020.

The proposed program seeks to fill the need of employers who are seeking employees with an interdisciplinary experience and essential skills in leadership, teamwork, collaboration, critical thinking, problem solving, and communication. The program proposes to provide an interdisciplinary experience in social science, law and policy, environmental science, natural resource economics, natural resource management, and environmental problem solving.

In a 2019 survey of Haub School alumni, 99 of 161 respondents supported establishing a standalone master's degree of the type proposed and 97 of 161 respondents supported a certificate or minor in natural resource collaboration. The interdisciplinary structure of ENRS will include opportunities for students to study in the areas of environmental science, environment studies, natural resource conservation, and outdoor recreation and tourism. The Gray Associate Demand Statistics scores for National, Laramie 360, Colorado, and Wyoming for these four disciplines indicate strong to moderate demand with scaled overall scores of 2-30.

The program estimates student demand to increase from eight students in the first year to 16 students per year after 4 years. Being a two-year program the total enrollment in the program is estimated to be about 30 students.

The cost of the program is estimated to be low. Several of the courses are one or two credit courses and will be taught by the current faculty and adjunct faculty in the Haub School. No new faculty are proposed to be hired and existing faculty can cover the additional courses being proposed. The proposed budget shows the increase in student tuition covering all costs for the program. In year four, the proposed budget shows a surplus of $244,000.00.

If this proposal would have come to the Academic Planning Committee two years ago, the decision to approve the program would have been quite easy. The proposal was one that provided all the necessary information along with a solid rationale. There seems to be at least moderate demand for the program. With no new resources being requested the risk seems low for the University.

With the current budget reduction at the University of Wyoming, the Academic Planning Committee is hesitant to recommend a new program with limited enrollment when the university is currently identifying several low enrollment programs to be eliminated. The prospects for further budget cuts to come are also of concern. Having mentioned our concerns with the budget issues, the Academic Planning Committee did vote to approve the M.S. in Environment, Natural Resources, and Society. The vote was seven in favor of the proposal, zero negative votes, and three members of the committee absent. Our committee has not received any additional guidelines to evaluate new programs in light of the current budget situation and the program does meet our criteria for approval.

MASTER OF SCIENCE IN ENVIRONMENT, NATURAL RESOURCES, AND SOCIETY FEASIBILITY STUDY

Contacts:

Doug Wachob, Interim Dean

Robert Godby, Interim Associate Dean

Steve Smutko, Chair Graduate Program Committee

UNIVERSITY OF WYOMING | Haub School of Environment and Natural Resources

Executive Summary

Degree Title
Environment, Natural Resources, and Society (ENRS)

Level of Degree
Master of Science

Delivery Mode
On campus

Estimated Startup Cost of Degree

Projected financial results for new program	FY 21-22	FY 22-23	FY 23-24	FY 24-25
Total expenses	$55,000	$90,000	$90,000	$90,000
Total new revenues generated by program	$141,128	$194,189	$279,624	$334,433
New program's total surplus or deficit	**$86,128**	**$104,189**	**$189,624**	**$244,433**
Operating margin (surplus or deficit / revenues)	0.61	0.54	0.68	0.73

Anticipated Launch Date
Spring 2021

We propose a phased launch with the following timeline:
- Spring and summer 2020 – seek degree approval, design new courses, develop admission policies
- Fall 2020 – review student applications for admission, course action review
- Spring 2021 – admit students to funded track 1 and 2 projects, design and develop certificates
- Fall 2021 – admit students to funded track 1 and 2 projects, certificates review and approval process, deliver new courses
- Fall 2022 – offer certificates, admit students to all three tracks including concentration track

Description
We propose that our ENRS degree will train graduate students at the interdisciplinary intersection of:
- Socio-ecological systems
- Environmental, natural resource, and social sciences (e.g. economics, ecology, policy, management)
- Collaboration, community-engaged practice, and interdisciplinary methodologies

Further, we propose ENRS will immerse students in applied, practical experience and develop strong skills in communication, teamwork, critical thinking, problem-solving, and collaboration. The key component of the ENRS degree is the opportunity for graduate students to weave a subset of disciplines and topics into relevant research and coursework, resulting in broad understanding while simultaneously developing areas of specialization.

Broadly defined, ENRS will train graduate students at the interdisciplinary intersections of natural resource management, social science, policy, environmental science, natural resource economics, collaboration and environmental problem solving. We propose ENRS will explicitly provide interdisciplinary content and essential skill development in environmental and natural resource fields that will prepare students for the workforce.

Feasibility Study for MS in Environment, Natural Resources, and Society

Curriculum Tracks

We propose to develop three ENRS tracks that students may apply to:

- Traditional thesis research track with individual, plan A thesis and program of study (faculty-grant supported)
- Team-based research track (3-5 students/project) each with individual thesis and program of study, coordinated around a group project (typically supported by faculty-grants), Plan A thesis or Plan B thesis project required.
- Concentration track focused on coursework and completion of certificates (self-supported), Plan B thesis project required.
- Future options may include distance delivery tracks including certificates for degree and non-degree seeking students

Skill, Knowledge, and Outcome Objectives

We propose that ENRS graduate students will:

- Develop an interdisciplinary and collaborative mindset
- Experience critical engagement with community stakeholders and decision-makers
- Excel in team-based collaborative environments
- Gain experience in relevant and emergent research methods and practices
- Develop the focused, expansive, and adaptable skillsets required to succeed and lead in a wide variety of ENRS careers
- Demonstrate excellent written, oral, and digital communication across a range of audiences and purposes, including expertise in public engagement
- Apply conceptual, critical, and creative thought to relevant environmental and natural resource issues
- Analyze and evaluate complex systems to contribute to inclusive, sound, and well-informed decisions

Required Core ENR Courses

ENRS will require a 32 (plan A) or 30 (plan B) credit program of study. Required courses (15 or 13 cr.) include:

- ENR 5XXX Introduction to Environment, Natural Resources, and Society (2 cr.)
- ENR 5000 Approaches to ENR Problem Solving (3 cr.)
- ENR 5900 Environmental Assessment (3 cr.), prerequisite ENR 5000
- ENR 5921 Collaborative Practicum (3 cr.)
- ENR 596X Plan A thesis research (4 cr.) or ENR 5961 Plan B project (2 cr.)

Elective Courses

Seventeen credits will be available for electives, which will be selected in consultation with the student, advisor, and committee. We propose to offer ten new topic and method elective courses in nontraditional format (1-2 cr. mini course, online, workshop, intensive, or hybrid delivery). The purpose of the variety of elective course offerings is to provide for the opportunity to achieve disciplinary specialization and essential skill development while accommodating student schedules that enable them to focus on their research.

Student Demand Statistics and Employment Projections

Analyses of Gray Associates data support the demand for a master's degree in ENRS. The interdisciplinary structure of ENRS will include opportunities for students to study in the areas of environmental science, environment studies, natural resource conservation, and outdoor recreation and tourism. The scores for these four disciplines indicate strong to moderate demand with scaled overall scores of 2-30. U.S. Bureau of Labor Statistics employment projections indicate robust job growth for environmental and social scientists by 2028 and modest

job growth for conservation scientists and natural science managers. The 2028 projection trends are all positive with relatively robust number of annual job openings.

No Additional Resources Requested

The Haub School has 22 faculty, having added several faculty positions in the last three years. We also have ten adjunct instructors who teach ENR courses on a regular basis. We will contract with additional adjunct instructors for specific courses as necessary. No additional faculty are requested. The Haub School has five staff positions to assist with administration and support. No additional staff are requested. Senior administration consists of a dean and associate dean. No additional senior administrators are required. Existing technology within UW and the Haub School will support the needs of ENRS. No additional expenditures for technology are requested. Existing library and digital resources will support the needs of ENRS. No additional expenditures for library or digital resources are requested. We will request university support in the form of graduate assistantships, scaled to enrollment. See Appendix 1 Budget Projection for details.

Summary

In summary, ENRS will immerse students in applied, practical experience and develop strong skills in communication, teamwork, critical thinking, problem-solving, and collaboration. ENRS will train graduate students at the interdisciplinary intersections of natural resource management, social science, policy, environmental science, natural resource economics, and environmental problem solving. The Haub School is well positioned to support and deliver this degree as our faculty possess a diverse suite of expertise in these disciplines and our staff and administrators stand ready to support its implementation.

The curriculum tracks and creatively scheduled courses will enable students to weave a subset of disciplines and topics into relevant research and coursework, resulting in broad understanding while simultaneously developing areas of specialization. Our learning objectives for ENRS align well with employer demand.

Student demand and employment projections indicate ENRS should be a popular degree. We are not requesting additional faculty, staff or administration lines to support the degree, and we are not requesting substantial financial investments on the part of the university. However, we are requesting additional graduate assistantships that would be scaled to enrollment.

ENRS will be an innovative degree that will advance UW's graduate offerings. The interdisciplinary and innovative structure of the degree will attract and explicitly provide interdisciplinary content and essential skill development in environmental and natural resource fields that will prepare graduate students for today's workforce.

Table of Contents

For Review: Feasibility Study for Master of Science in Environment, Natural Resources, and Society
Haub School of Environment and Natural Resources

Overview and Description of Degree, Purpose, Strategic Plan Overlay

Description
Broadly defined, we propose that our Environment, Natural Resources, and Society (ENRS) degree will train graduate students at the interdisciplinary intersection of:
- Socio-ecological systems
- Environmental, natural resource, and social sciences (economics, ecology, policy, management)
- Collaboration, community-engaged practice, and interdisciplinary methodologies

Overall Objectives
The dynamic and rapidly changing environmental and natural resource fields demand professionals to have an integrated understanding across a broad array of disciplines, with one or more areas of significant specialization. Our overall objective is to train and develop essential skills in our graduate students that will prepare them to become collaborative, interdisciplinary leaders in environmental and natural resource fields such as natural resource management, planning, and administration across sectors including nonprofit, for profit, government, and academic.

Research Objectives
We propose that our graduate research experience will stimulate:
- Applied, team-based, interdisciplinary research on pressing state and regional environmental issues
- Interdisciplinary research publication
- Positive impact to Wyoming communities and constituencies
- Research collaboration among UW faculty

Pedagogical Objectives
We propose to structure our educational experiences to provide:
- Continuous, high-quality faculty-to-student and peer-to-peer learning
- Place-based, field-based, and/or community-based learning opportunities
- Program flexibility and learning opportunities to fulfil a diverse set of student learning needs, contexts, and residency situations
- Opportunities for UW faculty across campus to collaborate on interdisciplinary graduate instruction

Fit with Haub School Current Programs
ENRS is built on the interdisciplinary model of our existing Haub School undergraduate and graduate degrees. We currently offer a dual Juris Doctorate (JD)/Master of Arts (MA) in Environment and Natural Resources (ENR) that requires concurrent matriculation in the College of Law's JD degree. We also offer a concurrent graduate major in ENR that may be added to a master's degree in another program. Both of these programs are strongly interdisciplinary and require two core courses with elective courses from across campus to fit the student's program of study. ENRS will follow this coursework model. These two existing programs provide an interdisciplinary extension to the JD and other master's degrees, while ENRS will provide a stand-alone Master of Science degree from the Haub School without required matriculation in another program. This will enable our faculty to direct student research and coursework to achieve more individualized training and skill development

for our students and produce more interdisciplinary research than is currently possible in the existing dual/concurrent graduate structure.

Rationale and Need for ENRS

National research and our own student, alumni, and employer surveys clearly show that employers in environmental fields seek to hire employees with interdisciplinary experience and essential skills in leadership, communication, teamwork, critical thinking, problem-solving, and collaboration. Inquiries to the Haub School from prospective students indicate significant interest in this type of program. Our recent Haub School alumni survey included questions about characteristics of a graduate degree our alumni would like to see us offer. Responses indicated applied experiences with an interdisciplinary focus were very attractive. We also conducted individual interviews with leaders of government, non-profit, and academic programs. Their top recommendations were to provide students with essential skills in communication, applying knowledge in the real-world, and how to operate outside of academia. All of these recommendations are central components of the ENRS degree.

We currently have strong and numerous partnerships with Wyoming and regional communities and stakeholders that provide the foundation for developing research projects and educational experiences that arise directly from the needs of our partner communities in Wyoming and beyond. Our partners and constituencies are increasingly requesting our faculty to conduct applied research around pressing environmental and natural resources issues. ENRS students would significantly increase our capacity to conduct applied research in partnership with communities and stakeholders.

Strategic Plan Alignment

ENRS will contribute to all three academic goals in UW's Breaking Through Strategic Plan. Goal 1 – Driving Excellence: ENRS, as an interdisciplinary degree, will focus on collaboration among UW programs and also train students in collaborative practice, an area of excellence already well-established in the Haub School. Goal 2 – Inspiring Students: ENRS will provide high-impact learning experience through student engagement in real-world enterprises. Goal 3 – Impacting Communities: A central premise of ENRS is to engage with communities and develop solutions to environment and natural resource issues. ENRS will also directly support Haub School Strategic Goal 1 – Educate future leaders through interdisciplinary teaching and research, and Strategic Goal 3 – Engage with Wyoming communities.

Learning Outcomes

Skill and Knowledge Learning Outcomes

We developed the ENRS learning objectives based on interaction with environment and natural resource employers and leaders. For example, we conducted a Wyoming employer survey in 2016 where 66 respondents ranked skills they sought in employees. Their top ten skills fell into the 'essential skill' categories of communication, teamwork, critical thinking, problem solving, and similar skills. Only beyond the top ten did the employers lists include knowledge or technical skills. Consistently, employers are seeking employees with the following characteristics that we propose ENRS graduates will possess:

- Develop an interdisciplinary and collaborative mindset
- Experience critical engagement with community stakeholders and decision-makers
- Excel in team-based collaborative environments
- Gain experience in relevant and emergent research methods and practices
- Develop the focused, expansive, and adaptable skillsets required to succeed and lead in a wide variety of ENRS careers
- Demonstrate excellent written, oral, and digital communication across a range of audiences and purposes, including developing expertise in public engagement
- Apply conceptual, critical, and creative thought to relevant environmental and natural resource issues
- Analyze and evaluate complex systems that contribute to inclusive, sound, and well-informed decisions

Curriculum Map and Program Structure

Curriculum Tracks

We propose three ENRS tracks that students may apply to:

- Individual research track with individual Plan A thesis and program of study
- Team-based research track coordinated around a group project, 3-5 students per project each with individual thesis (Plan A or B) and program of study
  - Students in traditional and team-based tracks would typically be supported by faculty grants
- Concentration track focused on coursework, plan B thesis project, and completing one of three certificates
  - Concentration track students would typically be self-supported
  - The Haub School currently offers a Collaborative Practice minor
  - Environmental Management and ENR Policy Certificates will be proposed for later approval
- Future tracks may include distance delivery tracks

Table 1: Curriculum Tracks – students may apply to one of three different tracks

Track	Individual Research	Team Research	Concentration
Target student population	Traditional academic, NGO, and agency careers	Variety of ENR professional careers	Env. mgmt., policy, or collaborative practice careers
Thesis options	Individual plan A thesis	Individual Plan A or B thesis - common project	Plan B thesis
Cohort mode	Individual research and program of study	Team coordinated around interdisciplinary project with individual program of study	Individual program of study
Funding model	Faculty grant funded	Faculty grant funded or self-pay	Self-pay
Residency	On campus	On campus	Low or hybrid residency
Thesis credits	Plan A 4 cr.	Plan A 4 cr., Plan B 2 cr.	Plan B 2 cr.
Required courses	ENR 5000, 5900, 5XXX, 5921 - 11 cr.		
Elective courses	Electives Total – 17 cr. from topics, methods, minor/certificates		
Elective minor or concentration	Optional Collaborative Practice Minor – 12 cr. (existing) or Optional ENR Policy Certificate – 12 cr. (future) or Optional Environmental Management Certificate - 12 cr. (future)		
Total credits	**32 cr.**	**Plan A 32cr., Plan B 30cr.**	**30 cr.**

Required and Elective Courses

ENRS will require a 30 or 32 credit program of study. Students will be required to take 13 or 15 core ENR courses. We propose revisions to existing courses to include greater emphasis on theories of environment, natural resources, collaborative practice, transdisciplinarity and environmental leadership.

Seventeen credits will be available for electives, which will be selected in consultation with the student, advisor, and committee. Optionally, 12 credits of the elective requirement could be fulfilled with either the Collaborative Practice Minor, future ENR Policy Certificate, or future Environmental Management Certificate. As with many graduate degrees, students will be able to include topic and methods elective courses from a wide variety of UW departments in their programs of study. We will offer ten new elective courses in nontraditional format (1-2 cr.

mini course, online, workshop, intensive, hybrid delivery, etc.); examples are described below. These will be creatively scheduled in short blocks (days to weeklong), during summer, J-term, weekends, or evenings. The purpose is to achieve disciplinary specialization and essential skill development while accommodating student schedules to allow focus on their research. Some courses will be offered in alternate years.

Table 2: Course List   *denotes existing course, **denotes new course

Required Courses	Credits
ENR 5XXX Introduction to ENRS**	2
ENR 5000 Approaches to ENR Problem Solving*	3
ENR 5900 Environmental Assessment*	3
ENR 5921 Collaborative Practicum*	3
ENR 596X Plan A Thesis **	4
ENR 5961 Plan B Project*	2
Required Credits	**13 or 15**

Elective Courses – students will select 17 credits from this list

Topics in Environment, Natural Resources, and Society

ENR 5890 Critical Social Theories of ENRS**	1-2
ENR 5870 NEPA for Environmental Managers**	1-2
ENR 5870 Environmental Justice**	1-2
ENR 5890 Private Lands Conservation**	1-2
ENR 5870 Communicating Across Environments**	1-2
ENR 5890 Systems Thinking**	1
ENR 5270 Writing and Reviewing Science*	3
ENR 5750 ENR Law and Policy*	3
ENR 5450 Negotiation*	3
ENR 5600 Campus Sustainability*	3
ENR 5310 Environmental Anthropology*	3
ENR 5030 Ecology of Knowledge*	3
ORTM 5890 Recreation Management and Planning*	1-2
Topic courses from outside Haub School	Varies

Methods in Environment, Natural Resources, and Society

ENR 5890 Mixed Research Methods for ENRS**	1-2
ENR 5890 Decision Analysis for ENR Mgmt. and Policy**	1-2
ENR 5890 Applied Economic Frameworks for ENRS**	1-2
ENR 5890 Field Methods in ENRS**	1-2
ENR 5890 Data Visualization and Communication*	1-2
ENR 5525 Environmental Data Analysis*	3
ENR 5050 Techniques in Environmental Data Management*	3
ENR 5550 Negotiation Analysis*	3
ENR 5920 Collaborative Practice Methods*	3
Method courses from outside Haub School	Varies
Elective Credits	**17**
Total Credits	**30 or 32**

New Course Descriptions

We are proposing to develop the following courses (1 or 2 credits) in a nontraditional format to allow for schedule flexibility that will provide graduate students with greater time to work in field and in communities on their research. We are proposing courses in the following major categories: Topics in Environment, Natural Resources and Society; Methods in Environment, Natural Resources and Society; and coursework for minors or certificates. We propose that the following classes initially be offered under ENR 5890 Special Topics or ENR 5870 Graduate Seminar. Following initial offering, we intend to submit courses that will be consistently offered to the Course Action Review Committee for inclusion in the course catalog.

Topics in Environment, Natural Resources, and Society

Introduction to Environment, Natural Resources, and Society
Instructor: Corrie Knapp and other Haub School faculty
Description: A week-long intensive prior to start of fall semester would combine guest speakers, field trips, and key historical and cultural bodies of literature that inform our practice of environmental management. The goal would be both to introduce students to the Wyoming context and its environmental management issues, but also to give students a common grounding in literature relevant to the field. In addition to the initial week-long section of the course, the students would attend a seminar style paper discussion group that would run through the semester.
Credits: 2
Delivery Mode: Fall semester, field and on-campus

Critical Social Theories of Environment, Natural Resources, and Society
Instructor: Rachael Budowle
Description: It is critical that environmental and natural resource professionals consider, question, and reflect on the assumptions and frameworks they bring into conservation, management, and research contexts. This class will be a primer on a number of relevant theoretical lenses that address power relations, social structure, and natural resources.
Credits: 1-2
Delivery Mode: Fall or spring semester, on-campus

National Environmental Policy Act for Environmental Managers
Instructor: Temple Stoellinger
Description: This class will help students understand both the theory and practice of NEPA across federal agencies and in different contexts. We will also explore current issues that are influencing how NEPA is practiced and applied.
Credits: 1-2
Delivery Mode: Fall semester, spring semester, J-term, or May-term; on-campus/online hybrid

Environmental Justice
Instructor: Matt Henry
This class examines a wide range of cultural and artistic representations to understand how cultural beliefs, thought systems, and even the imagination shape environmental values and decision-making. This class explores cultural, political, economic, and social factors contributing to the uneven distribution of environmental harms along the lines of race, class, gender, and ethnicity. The class also considers how communities are organizing, planning, and expressing their visions for a "just transition."
Credits: 1-2
Delivery Mode: Fall or spring semester, on-campus

Private Lands Conservation
Instructor: Drew Bennett
Description: This course introduces students to foundational concepts and emerging tools in private lands conservation including legal concepts of property, conservation easements, and governmental incentive programs. The course has an emphasis on conservation finance and applied perspectives on how conservation projects are structured

and implemented. Students will apply course concepts to real world examples to understand the strength and weaknesses of conservation approaches.
Credits: 1-2
Delivery Mode: Fall semester, spring semester, J-term, or May-term; on-campus/online hybrid

Communicating Across Environments
Instructor: Rick Fisher, Maggie Bourque, and Emilene Ostlind
Description: Workshop-style writing seminar that covers both theory and practice of interdisciplinary, collaborative, and eco-composition practices and products. This workshop would be scheduled at crucial moments for graduate students, aiming to inform and norm their writing and communication practices in service of their thesis projects. Focal points may include developing narrative strategies for a range of communication media (podcast, video, magazine articles, etc.) to draw readers in and share complex information to diverse audiences.
Credits: 1-2
Delivery Mode: J-term, May-term, or summer; on-campus

Systems Thinking
Instructor: Corrie Knapp
Description: This class will introduce students to systems thinking and approaches for using systems diagrams and logic in their own final projects.
Credits: 1
Delivery Mode: J-term or May term, online or on-campus/online hybrid

Methods in Environment, Natural Resources, and Society

Mixed Research Methods in ENRS
Instructor: Abby Sisneros-Kidd, Rachael Budowle, and Corrie Knapp
Description: This course will examine data collection and analysis methods used in social science and ethnographic research. The focus will be on mixed method designs for integration of quantitative and qualitative data at appropriate stages of the research process.
Credits: 1-2
Delivery Mode: May term or August before fall semester classes start, field or on-campus

Decision Analysis for Environment and Natural Resources Management and Policy
Instructor: Steve Smutko
Description: This course helps students understand how to provide structure to complex decision problems. Students will learn how to evaluate courses of action amid uncertainty using multi-attribute utility analysis to make trade-offs among conflicting objectives.
Credits: 1-2
Delivery Mode: Anytime, on-campus or on-line

Applied Economic Frameworks for ENRS
Instructor: Rob Godby
Description: The course would provide a basic overview of economic frameworks of analysis and the use of economic methods to develop economic, environmental, and natural resource policy. Will also include a description of natural resource policy frameworks.
Credits: 1-2
Delivery Mode: Fall or spring semester, on-campus

Field Methods in ENRS
Instructor: Abby Sisneros-Kidd and Rachael Budowle

Description: This course will examine data collection techniques used in social science, recreation ecology, and ethnographic research. Methods to be explored include survey and interview techniques, environmental rapid assessment techniques (e.g. campsite and trail use), GPS-based tracking, and more.
Credits: 1-2
Delivery Mode: May term or August before fall semester start, field or on-campus

Coursework for Minors and Certificates

We are also proposing that courses within the existing Collaborative Practice Minor (12 cr.), which has been approved by Graduate Council and AVP for Graduate Studies, be utilized by graduate students that choose to add a minor in Collaborative Practice. All courses below are existing and 3 credits each. Departments teaching specific electives have agreed to allow minor students to enroll.

Required Courses
- ENR 5450 Negotiation
- ENR 5920 Principles and Methods in Collaborative Practice
- ENR 5921 Collaborative Practicum

Elective Courses – 1 required
  Process Competency Electives
- COJO 5620 Intergroup Communication
- COJO 5250 Seminar in Org. Communication
- COJO 5230 Media, Science, and Society
- POLS 5685 Program Eval and Policy Analysis

- POLS 5080 Organizational Development
- POLS 5540 Public Policy Perspectives
- ENR 5550 Negotiation Analysis

Context Specific Electives
- LAW 6660 Environmental Law
- LAW 6800 Public Lands Law
- LAW 6860 Water Rights and Policy
- REWM 5250 Water Resources Seminar
- ENR 5000 Approaches to Env. Problem Solving

We will propose two new certificates for approval at a later date: an ENR Policy Certificate and an Environmental Management Certificate. We intend to design the certificates to serve both on campus and distance students as well as non-degree seeking professionals who are not matriculated into ENRS.

Assessment Plan

Phase I. Amend Learning Outcomes / Evaluate Objectives

Working with the instructional faculty for ENR core and elective courses, the Haub School Associate Dean will lead a process of amending the existing learning outcomes (as needed) and evaluating 2-3 learning objectives to be met in each ENR core and elective course.

Phase II. Direct Assessment of Student Learning

At three stages of their Haub School academic experience, students will submit statements documenting their learning in relationship to the student learning outcomes.

Narrative Justification (Pre)
As the ENR major and minor are interdisciplinary and provide students with opportunities to choose elective courses from extensive menus, every graduate student will be required to submit a "Narrative Justification" document stating his/her rationale for choosing to pursue ENRS, as well as justifying his/her selection of elective coursework. The Narrative Justification is due by finals week of the student's first semester in the Haub School (discussions during advising at mid-semester are crucial).

Statement of Learning - Core Courses (Mid)
Students will submit a two-page Statement of Learning describing the conceptual and content-based understandings they have formed after two semesters of ENRS-related coursework. This statement is meant to act

as a formative assessment after students have completed some core courses, providing an opportunity to clarify or amend his/her narrative justification in relationship to the ENR learning outcomes and core courses. The Statement of Learning prompt will be generated by faculty and based upon the Phase I outcomes and objectives.

Integrative Perspective (Post)
As a required component of an exit interview, students submit (online) a statement of Integrative Perspective, reflecting on their learning as a whole throughout their graduate work. The Integrative Perspective will focus on the application of learning across disciplines and will be informed by the Phase I outcomes and objectives.

Direct Assessment of Thesis Projects
A core group of Haub School faculty appointed by our Graduate Program Committee will develop rubrics for assessing thesis quality on metrics related to applicable ENRS learning outcomes such as writing quality, originality, and interdisciplinary perspective. Thesis assessment will be conducted every three to five years.

Surveys
Advising staff or faculty will conduct in-person exit surveys of all graduating students at the end of their final semester. Alumni surveys will be conducted every three years by advising staff. Employer surveys will be conducted by advising staff responsible for professional and applied experience on an ad-hoc basis.

Evaluation of Assessment by Graduate Program Committee
A core group of Haub School staff/faculty (instructors in the graduate programs, faculty advisors, and academic advisors) appointed by our Graduate Program Committee will develop rubrics for assessing the students' statements of learning, measured against each ENRS learning outcome. This group will compile outcomes from Phase I and II direct assessments and report to the Graduate Program Committee at three- to five-year intervals.

Degree Program Evaluation

On five-year intervals, the Graduate Program Committee will review and consider assessment information gathered from all phases of assessment outlined in the assessment section above, including student statements, thesis assessments, surveys, teaching evaluations, and other direct assessment of student work. The committee shall produce a summary report with recommendations for adjustments or revisions of the ENRS degree to the Haub School Associate Dean, Dean and faculty.

Substantive Change Determination

ENRS as proposed will not require substantive change as defined by Higher Learning Commission (HLC) for the following reasons:

- There is not a significant departure from normal offerings as ENRS is modeled after similar graduate and undergraduate interdisciplinary offerings by Haub School.
- Only approximately 30 percent (10-15 credits) of new coursework is being considered.
- Most courses will be offered on-campus with less than 30 percent being considered for distance delivery.
- We do not anticipate a significant financial investment since no additional positions nor non-personnel costs are requested. See Appendix 1 Budget Projection for details.
- Dr. Anne Alexander, HLC Accreditation Liaison Officer confirmed that ENRS will not be a substantive change to UW's offering.

New Resources Required

Faculty and Instructional Staffing

The Haub School has 22 faculty, having added several faculty positions in the last three years. We also have ten adjunct instructors who teach courses on a regular basis. We will contract with other adjunct instructors for specific courses as necessary. No additional faculty are requested.

Program Administration and Staff Support

The Haub School has five staff positions to assist with administration and support. No additional staff are required. Senior administration consists of a dean and associate dean. No additional senior administration is requested.

Technology

Existing technology within UW and the Haub School will support the needs of ENRS. No additional expenditures for technology are requested.

Library and Digital Resources

Existing library and digital resources will support the needs of ENRS. No additional expenditures for library or digital resources are requested.

Marketing

The Haub School is already in the practice of preparing student recruiting materials (e.g. web, social media, print materials, events, UW admissions). Recently, we have provided funding to and worked with UW Communications to promote our degrees as a part of overall UW recruiting. We intend to continue both our in-house recruiting efforts and to work with UW Communications to specifically recruit students to ENRS. We continuously receive inquiries from prospective students about ENRS just through word of mouth. We regularly receive inquiries about the ENR concurrent major. We believe even a modest recruiting campaign will bring in a significant number of applications once ENRS is approved. See Appendix 1 Budget Projection for details.

Support

No additional support is expected to be required for this degree. We will request university support in the form of graduate assistantships, scaled to enrollment. See Appendix 1 Budget Projection for details.

Executive Summary of Demand Statistics

Market Area and Primary Target Markets

We anticipate that ENRS will attract graduate students primarily with environmental and natural resource interests in the Rocky Mountain West. However, based on the demographics of currently enrolled students in our concurrent ENR major and JD/MA in ENR, ENRS will likely draw student applicants regionally, nationally, and internationally.

Educational Market and Student Demand Statistics

Our analyses of Gray Associates data support the demand for a master's degree in ENRS (Table 3). In our 2019 survey of Haub School alumni, 99 of 161 respondents supported a establishing a standalone master's degree of the type proposed here and 97 of 161 respondents supported a certificate or minor in natural resource collaboration. The interdisciplinary structure of ENRS will include opportunities for students to study in the areas of environmental science, environment studies, natural resource conservation, and outdoor recreation and tourism. The national, Laramie 360, Colorado, and Wyoming scores for these four disciplines indicate strong to moderate demand with scaled overall scores of 2-30.

Table 3: Gray Associates Demand Statistics

	CIP Code	Scaled Overall Score			
		National	Laramie 360	Colorado	Wyoming
Environmental Science, Environmental Collaboration	3.0104	30	15	16	22
Environmental Studies	3.0103	11	18	12	24
Natural Resources Conservation, General	3.0101	2	14	20	8
Parks, Recreation, and Leisure Studies	31.0101	17	16	17	13

https://graydata.grayassociates.com

Employment Trends and Projections

The U.S. Bureau of Labor Statistics employment projections for 2028 indicate robust job growth for environmental and social scientists and modest job growth for conservation scientists and natural science managers (Table 4). The 2028 projection trends are all positive with relatively robust number of annual job openings.

Table 4: U.S. Bureau of Labor Statistics – Employment Projections

Occupation	# Jobs 2018	# Jobs 2028	# Increase	% Increase	Avg Annual Openings	Average Salary
Environmental scientists	122,700	131, 900	9,200	7.5%	14,700	$75,580
Social scientists	314,000	350,100	35,700	11.4%	31,200	$78,650
Conservation scientists	23,800	24,700	900	3.7%	2,600	$61,310
Natural sciences managers	63,500	67,200	3,700	5.9%	6,100	$123,860

https://www.bls.gov/emp/tables/occupational-projections-and-characteristics.htm

Admissions Process

To apply to ENRS, we propose all applicants submit an application portfolio that includes:

- One- to two-page statement of purpose that
    - Describes why they wish to attend ENRS, their motivation and background for applying, and what about ENRS is attractive to their career aspirations.
    - Identifies the track they are applying for: individual research track, team-based research track, or concentration track
    - Outlines their plan for study: Plan A or B individual or group project
    - Names faculty they want to work with and why
    - If applying to a team track, states why they feel well-suited to a particular team project
- Three letters of reference
    - Letters should specifically address aspects of suitability for ENRS or applicant experience
- Transcripts and a current CV
- Responses to two essay questions to be defined by faculty
- GRE scores (no minimum scores will be published)

- o Alternatively, a statement of professional experience for applicants who have been out of school for a period of time and/or for whom GRE would be a perceived barrier
- Interviews may be used once a final list of preferred applicants is defined but we do not recommend interviewing all applicants. Interviews could also be used to identify the best applicants for specific team projects.

Summary

In summary, ENRS will immerse students in applied, practical experience and help them to develop strong skills in communication, teamwork, critical thinking, problem-solving, and collaboration. ENRS will train graduate students at the interdisciplinary intersections of natural resource management, social science, policy, environmental science, natural resource economics, and environmental problem solving. The Haub School is well positioned to support and deliver this degree as our faculty possess a diverse suite of expertise in these disciplines.

The three curriculum tracks and creatively scheduled courses will enable students to weave a subset of disciplines and topics into relevant research and coursework, resulting in broad understanding while simultaneously developing areas of specialization. Our learning objectives for ENRS align well with employer demand.

Student demand and employment projections indicate ENRS should be a popular degree. We are not requesting additional faculty lines to support the degree and no other substantial financial investments on the part of the university, other than additional graduate assistantships that would be scaled to enrollment.

ENRS will be an innovative degree that will advance UW's graduate offerings. The interdisciplinary and innovative structure of the degree will attract and explicitly provide interdisciplinary content and essential skill development in environmental and natural resource fields that will prepare graduate students for today's workforce.

Appendix 1: Budget Projection

Haub School ENRS Budget Projection	Fiscal Year				
	FY 21-22	**FY 22-23**	**FY 23-24**	**FY 24-25**	
Revenue					
Cummulative Total NEW Laramie campus headcount enrollment	**8**	**18**	**24**	**30**	*Cumulative enrollment; Note that this is a two year program, so total enrollment never exceeds 30*
NEW Resident enrollment (# of new students entering the program	4	5	7	8	
NEW Non Resident Enrollment (# of new students entering the pro	4	5	7	8	
NEW Resident distance enrollment (ONLY use this field if the Progr	*0*	*0*	*0*	*0*	*On campus degree*
NEW Non Resident distance enrollment (ONLY use this field if the P	*0*	*0*	*0*	*0*	*On campus degree*
Resident (credit hours delivered outside of NEW Program)	**60**	**75**	**105**	**120**	*MS credits are split 50/50 in & out of new program*
Resident (credit hours delivered in NEW Program)	**60**	**75**	**105**	**120**	*MS credits are split 50/50 in & out of new program*
Resident Distance (credit hours delivered in NEW Program through	**0**	**0**	**0**	**0**	*An on-campus MS, distance courses may included*
Non Resident (credit hours delivered outside of NEW Program)	**60**	**75**	**105**	**120**	*MS credits are split 50/50 in & out of new program*
Non Resident (credit hours delivered in NEW Program)	**60**	**75**	**105**	**120**	*MS credits are split 50/50 in & out of new program*
Non-Resident Distance (credit hours delivered in NEW Program thr	**0**	**0**	**0**	**0**	*On-campus degree but courses can be taken online*
Total Resident credit hours generated**	**120**	**150**	**210**	**240**	
Total Non Resident credit hours generated**	**120**	**150**	**210**	**240**	
Per Credit Tuition*					
Resident (Posted Tuition Rate)	$271	$282	$293	$305	
Nonresident (Posted Tuition Rate)	$811	$843	$877	$912	
Prior Year's Non Resident Discount Rate (updated annually by the b	0%	0%	0%	0%	*No standard discount for grad students*
Estimated Actual Non Resident Per Credit Tuition	**$811**	**$843**	**$877**	**$912**	
Total Resident Tuition generated outside of NEW Program	**$16,260**	**$21,138**	**$30,777**	**$36,581**	
Total Resident Tuition in NEW Program	**$16,260**	**$21,138**	**$30,777**	**$36,581**	
Total Non Resident Tuition outside of NEW Program	**$48,660**	**$63,258**	**$92,104**	**$109,472**	
Total Non Resident Tuition in NEW Program	**$48,660**	**$63,258**	**$92,104**	**$109,472**	
Total Distance Tuition in NEW Program					
Total Tuition from NEW Enrollment	**$131,733**	**$170,761**	**$247,809**	**$294,234**	
	FY 21-22	**FY 22-23**	**FY 23-24**	**FY 24-25**	
Fees					
Program Per Credit Hour	$0	$0	$0	$0	
Program Fee Revenue	**$0**	**$0**	**$0**	**$0**	
Advising Fee Per Credit Hour	$0.00	$0.00	$0.00	$0.00	*No advising fee for grad students*
Advising Fee Revenue	**$0**	**$0**	**$0**	**$0**	
Mandatory Fee (Per Full Time Student)	$705.47	$705.47	$705.47	$705.47	
Mandatory Fee Revenue	**$5,644**	**$12,698**	**$16,931**	**$21,164**	
Distance Fee	$0	$0	$0	$0	*This degree is on-campus*
Total New Revenue Generated Within New Program	**$70,564**	**$97,094**	**$139,812**	**$167,216**	
Total New Revenue Generated Outside of the Program	**$70,564**	**$97,094**	**$139,812**	**$167,216**	
Total Distance Revenue Generated					
Total Distance Revenue Remaining with College	**$0**	**$0**	**$0**	**$0**	*This degree is on-campus*
Total Distance Revenue Remaining with Provost	**$0**	**$0**	**$0**	**$0**	*This degree is on-campus*
Total New Revenue Generated	**$141,128**	**$194,189**	**$279,624**	**$334,433**	
New Program Expense Assumptions					
Compensation and benefits					
Faculty	**$0**	**$0**	**$0**	**$0**	*No new faculty*
Other administrative staff	$0	$0	$0	$0	
Graduate Assistants	$25,000	$50,000	$50,000	$50,000	
Supplies	$0	$0	$0	$0	
Travel	$0	$0	$0	$0	
Marketing	$10,000	$20,000	$20,000	$20,000	
Software	$0	$0	$0	$0	
Community College articulation	$0	$0	$0	$0	
New course development	$20,000	$20,000	$20,000	$20,000	*Based on est. of $5000/new course supplemental pay*
Capital expense	$0	$0	$0	$0	
Other (specify)	$0	$0	$0	$0	
Projected Financial Results for New Program	**FY 21-22**	**FY 22-23**	**FY 23-24**	**FY 24-25**	
Total Expenses	$55,000	$90,000	$90,000	$90,000	
Total New Revenues Generated by NEW Program	$141,128	$194,189	$279,624	$334,433	
New Program's Total Surplus or Deficit	**$86,128**	**$104,189**	**$189,624**	**$244,433**	
Operating margin (surplus or deficit / revenues)	0.61	0.54	0.68	0.73	
* UW's Board of Trustees' current working policy is to raise tuition by 4% each year					

Haub School ENRS Budget Projection	Fiscal Year				
	FY 21-22	**FY 22-23**	**FY 23-24**	**FY 24-25**	
Revenue					
Cummulative Total NEW Laramie campus headcount enrollment	8	18	24	30	*Cumulative enrollment; Note that this is a two year*
NEW Resident enrollment (# of new students entering the program	4	5	7	8	*program, so total enrollment never exceeds 30*
NEW Non Resident Enrollment (# of new students entering the prog	4	5	7	8	
NEW Resident distance enrollment (ONLY use this field if the Progra	0	0	0	0	*On campus degree*
NEW Non Resident distance enrollment (ONLY use this field if the P	0	0	0	0	*On campus degree*
Resident (credit hours delivered outside of NEW Program)	60	75	105	120	*MS credits are split 50/50 in & out of new program*
Resident (credit hours delivered in NEW Program)	60	75	105	120	*MS credits are split 50/50 in & out of new program*
Resident Distance (credit hours delivered in NEW Program through	0	0	0	0	*An on-campus MS, distance courses may included*
Non Resident (credit hours delivered outside of NEW Program)	60	75	105	120	*MS credits are split 50/50 in & out of new program*
Non Resident (credit hours delivered in NEW Program)	60	75	105	120	*MS credits are split 50/50 in & out of new program*
Non-Resident Distance (credit hours delivered in NEW Program thr	0	0	0	0	*On-campus degree but courses can be taken online*
Total Resident credit hours generated**	**120**	**150**	**210**	**240**	
Total Non Resident credit hours generated**	**120**	**150**	**210**	**240**	
Per Credit Tuition*					
Resident (Posted Tuition Rate)	$271	$282	$293	$305	
Nonresident (Posted Tuition Rate)	$811	$843	$877	$912	
Prior Year's Non Resident Discount Rate (updated annually by the b	0%	0%	0%	0%	*No standard discount for grad students*
Estimated Actual Non Resident Per Credit Tuition	$811	$843	$877	$912	
Total Resident Tuition generated outside of NEW Program	$16,260	$21,138	$30,777	$36,581	
Total Resident Tuition in NEW Program	$16,260	$21,138	$30,777	$36,581	
Total Non Resident Tuition outside of NEW Program	$48,660	$63,258	$92,104	$109,472	
Total Non Resident Tuition in NEW Program	$48,660	$63,258	$92,104	$109,472	
Total Distance Tuition in NEW Program					
Total Tuition from NEW Enrollment	**$131,733**	**$170,761**	**$247,809**	**$294,234**	

	FY 21-22	FY 22-23	FY 23-24	FY 24-25	
Fees					
Program Per Credit Hour	$0	$0	$0	$0	
Program Fee Revenue	$0	$0	$0	$0	
Advising Fee Per Credit Hour	$0.00	$0.00	$0.00	$0.00	*No advising fee for grad students*
Advising Fee Revenue	$0	$0	$0	$0	
Mandatory Fee (Per Full Time Student)	$705.47	$705.47	$705.47	$705.47	
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Capital expense	$0	$0	$0	$0	
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Projected Financial Results for New Program	FY 21-22	FY 22-23	FY 23-24	FY 24-25
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Operating margin (surplus or deficit / revenues)	0.61	0.54	0.68	0.73

* UW's Board of Trustees' current working policy is to raise tuition by 4% each year

ACADEMIC AND STUDENT AFFAIRS

COMMITTEE MEETING MATERIALS

AGENDA ITEM TITLE: <u>Bachelor's in Applied Science (BAS) new concentration option in Health Services Administration</u>, *Pickett, Barrett*

☒ PUBLIC SESSION
☐ EXECUTIVE SESSION

PREVIOUSLY DISCUSSED BY COMMITTEE:
    ☒ Yes
    ☐ No

FOR FULL BOARD CONSIDERATION:
    ☒ Yes
    [Note: If yes, materials will also be included in the full UW Board of Trustee report.]
    ☐ No

☒ *Attachments/materials are provided in advance of the meeting.*

EXECUTIVE SUMMARY:
The Bachelor's in Applied Science (BAS) is an already existing degree program at UW. This proposal is to add a new concentration option in Health Services Administration. For over a decade, the University of Wyoming has had the BAS with a concentration in Organizational Leadership. That program has grown significantly and is now one of UW's largest online degree programs with more than 100 majors. The core idea behind the BAS degree is to help persons who already have an associate's degree build on that and advance further in their chosen field. The proposed program is designed to build on an associate's degree in a healthcare field by, first, incorporating a suite of five courses drawn from the School of Pharmacy's Master of Science in Health Services Administration. Those courses, amounting to 14 credit hours, will go through the course change process so they can be cross-listed at the 4000/5000 levels. Second, the core components of the BAS in Organizational Leadership are retained so that students become better prepared to assume supervisory and other leadership roles in an organization. By having the program as a BAS, community college coursework in a more applied setting can still be accepted for credit.

WHY THIS ITEM IS BEFORE THE COMMITTEE:
University of Wyoming Regulation 2-119 requires that the Board approve all new degree programs and lays out the process for that approval. The Academic and Student Affairs committee will report to the Board on recommended action for approval of the new degree program.

ACTION REQUIRED AT THIS COMMITTEE MEETING:
Consideration for approval of the Bachelor's in Applied Science (BAS) degree to add a new concentration option in Health Services Administration.

PROPOSED MOTION:
"I move that the Academic and Student Affairs Committee approves the new concentration option in Health Services Administration for the Bachelor's in Applied Science (BAS) degree and moves for full Board consideration."

Feasibility Study for the Bachelor's in Applied Science with a Concentration in Health Services Administration

<u>Executive Summary</u>

Degree or Certificate Title: Concentration in Health Services Administration

Level of Degree or Certificate: Bachelor's

Delivery Mode(s): Online

Estimated Startup Cost of Degree: $5,000 (for marketing and recruitment)

Anticipated Launch Date: Fall 2021

The Bachelor's in Applied Science (BAS) is an already existing degree program at UW. This proposal is to add a new concentration option in addition to the current one in Organizational Leadership. For over a decade, the University of Wyoming has had the BAS with a concentration in Organizational Leadership. That program has grown significantly and is now one of UW's largest online degree programs with more than 100 majors. Given that the program is only open to students who already have an associate's degree (since it is designed to stack on top of applied two-year degrees), and thus only has juniors and seniors in it, the student numbers are especially strong. The core idea behind the BAS degree is to help persons who already have an associate's degree build on that and advance further in their chosen field. In May of 2020, the UW Board of Trustees voted to move the administrative home of the BAS to UW-Casper. In exploring additional possible areas of concentration for the BAS, the dean of UW-Casper met with the dean of the College of Health Sciences and formed a small working group with the dean of the School of Pharmacy and the director of the Master's in Science in Health Services Administration. That group, also drawing on the expertise of the then Interim Director of the BAS, developed a draft curriculum and gathered data as to likely student and employment demand. With that as background, UW-Casper, in collaboration with the School of Pharmacy and the College of Health Sciences, presents the following proposal that outlines the design, curriculum, delivery, and rationale for a BAS with a concentration in Health Services Administration.

The proposed program is designed to build on an associate's degree in a healthcare field by, first, incorporating a suite of five courses drawn from the School of Pharmacy's Master of Science in Health Services Administration. Those courses, amounting to 14 credit hours, will go through the course change process so they can be cross-listed at the 4000/5000 levels. Second, the core components of the BAS in Organizational Leadership are retained so that students become better prepared to assume supervisory and other leadership roles in an organization. By having the

program as a BAS, community college coursework in a more applied setting can still be accepted for credit.

According to the Bureau of Labor Statistics (BLS), "Employment of medical and health services managers is projected to grow 32 percent from 2019 to 2029, much faster than the average for all occupations." Pay in the field is also significant, with the BLS reporting median pay as $100,980 per year (2019 data). Bachelor's degrees are the typical entry-level education in the field.

Overview and Description of Degree or Certificate, Purpose, Strategic Plan Overlay

The proposed concentration in Health Services Administration retains the majority of the current Bachelors of Applied Science, but adds in 14 credit hours (five courses) focused on Health Services Administration. The proposed concentration is designed for persons working in the healthcare field who want to pursue a bachelor's degree to advance their career potential, yet do not want to do so in a clinical area, such as nursing or medical laboratory sciences. The proposed concentration coursework is drawn from UW's existing Master's in Science in Health Service Administration program. That program has a course on the history of the United States health care system, in addition to 4 different 'tracks.' The introductory course from each track, as well as the course on the history of the health care system, would go through the course action process in order to be cross-listed at the 4000 and 5000 levels. It thus would give students a grounding in the history of the US healthcare system, a course in leadership in health service settings, along with a survey of economic/healthcare outcomes, healthcare quality, and regulatory/compliance issues.

The combination of the five proposed health service administration courses with the core elements of the current Organizational Leadership option is a powerful one. Students in the new concentration will take multiple courses on leadership, the creation and use of information in organizations, and communication. They will emerge from the program better equipped to pursue roles with greater responsibilities in the health services field.

The BAS in Health Services Administration concentration develops in its student population qualities necessary for success in a rapidly changing healthcare environment. Students learn the basic principles in the field and understand the importance of looking at all sides of an issue. Employers are looking for entry level employees that have a broad understanding of the health services area that can be applied across different fields as well as integrate the information across the fields. Students in this program also will be prepared to successfully transfer to graduate programs in pursuit of related degrees. This includes UW's MS in Health Services Administration; graduates from the program will be well aware of that option and will have two courses within it completed already.

The proposed Bachelors of Applied Science with a concentration in Health Services Administration aligns closely with the University's mission. Healthcare services are an important part of Wyoming's economy, especially in the Casper community. By helping to train the next generation of health service administrators, the program fits UW's land-grant mission to promote economic and community development. The program will be online and largely asynchronous, and thus is readily accessible to people across the state (and beyond). The core health service administration courses are based on rigorous scholarship and the application of knowledge, which are also parts of the University's mission.

The new concentration also fits well with the UW-Casper mission and strategic plan. UW-Casper is focused on growth, especially in areas that will promote the economic diversification and development of Wyoming. Also, while the BAS is entirely online, over the next couple of years

UWC will be working to create in-person course options within the BAS for those in central Wyoming who want to be able to take a course or two each semester with peers pursuing the same degree. Given that Casper has the largest medical sector of any community in the state, this concentration in particular is a good fit for UWC.

The addition of this program supports part of the strategic plan of the School of Pharmacy, which has identified the following that relate to this program:

1) Attract, develop, and retain the best students - this applies to the School of Pharmacy, medical laboratory program, and the MS Health Services Administration programs. By participating in the BAS program, we can identify UW students who would be a good match to apply for either the graduate program or the pharmacy school dependent on the coursework they have completed in their undergraduate curriculum

2) Work with Community Colleges to identify and co-develop educational programs to meet the needs of the state. In working on the new BAS concentration it helps the School meet this goal as well.

Learning Outcomes

The learning objectives for this certificate program identify four broad areas of core competency including:
> Healthcare Quality
> Healthcare Leadership
> Biopharmaceutical regulations
> Health Economics.

Students will gain a basic understanding of each of the core areas and demonstrate an understanding of the guiding principles. In addition, the integration of the four areas through an overall Evolution course helps students problem-solve today's issues facing healthcare based on examples that have been presented in the classroom. Each graduate will be able to discuss the core principles of the four areas listed and fully understand how to integrate specific competencies among and between these areas. As students' progress in their coursework, they are provided real world situations that they can then apply today.

Curriculum Map and Program Structure

Below please find a degree check-list. There are a few points worth noting. First, BAS degrees, since they are designed to "stack" on applied associates degrees which do not have the full complement of general education and hence do not satisfy the Wyoming Common Core, have to build more USP coursework into the upper division level than other programs. Second, some elements of the Organizational Leadership concentration were retained for the proposed Health Services Administration one. The Organizational Leadership track is designed to prepare students for supervisory roles in whatever field they are in (e.g., fire science, government, etc.). Since the proposed concentration is designed to do the same in health-care settings, the proposed

curriculum also kept requirements pertaining to, for instance, how organizations create and use information, improved communication skills, problem solving and analysis, and courses directly from the Organizational Leadership track.

BACHELOR OF APPLIED SCIENCE CHECK-LIST (2020-2021)

Health Services Administration Concentration

CAREER/AAS SPECIALTY component: 40-60 credits

Degree received_____ Awarding institution_____

No. major hours (min. 40)_____ Work experience_____

PROFESSIONAL CONCENTRATION component: 41 credits

    1. Discovering and Utilizing Ideas and Information (3 credits)

        AGRI 3000 Discovering/Utilizing Ideas and Information

        (Required Course)   Grade:_____ Completion date:_____

    2. Communicating in Writing and Speaking (2 courses, 6 credits)

        COJO 3010 Business and Professional Communication   Grade:_____ Completion date:_____

        COJO 3190 Cross-Cultural Communication   Grade:_____ Completion date:_____

        ENGL 4010 Technical Writing in the Professions   Grade:_____ Completion date:_____

        AGRI 4600 Developing Organization Leadership (Required) Grade:_____ Completion date:_____

    3. Analysis and Problem Solving (1-2 courses, 3-6 credits)

        AGRI 4990 Organizational Problem Solving in

         the Social Sciences   Grade:_____ Completion date:_____

        PHCY 4441 Intro to Health Leadership (3 credits, required) Grade:_____ Completion date:_____

    4. Organizational Leadership (4 courses from one Option, 12 credits)

        Option A:

AGEC 4660 Community & Economic Develop.   Grade:_____ Completion date:_____

AGEC 3750 Natural Resource Economics   Grade:_____ Completion date:_____

AGEC 4720 Water Resource Economics   Grade:_____ Completion date:_____

CHST 4650 Women, Gender & Migration   Grade:_____ Completion date:_____

FCSC 4117 Community Leadership: Working with

   Services & Systems (Required course)   Grade:_____ Completion date:_____

FCSC 4985 Seminar: Dev. In Community Leadership Grade:____ Completion date: _____

POLS 4420 Seminar in Public Administration   Grade:_____ Completion date:_____

POLS 4465 Survey of the Non-Profit Sector   Grade:_____ Completion date:_____

POLS 4685 Program Evaluation and Policy Analysis Grade:_____ Completion date:_____

POLS 4710 American Political Issues   Grade:_____ Completion date:_____

Option B: This area of emphasis guides students through an examination of how managers create value by understanding and developing employee and customer relationships. We **strongly suggest** that students complete ACCT 1010 and ECON 1010, both of which are available from, and articulated with, the community colleges throughout Wyoming before taking these courses. The area of emphasis consists of the following additional courses:

MGT 3110 Business Ethics   Grade:_____ Completion date:_____

MGT 3210 Management & Organizations   Grade:_____ Completion date:_____

MKT 3210 Introduction to Marketing   Grade:_____ Completion date:_____

MGT 4410 Human Resource Management   Grade:_____ Completion date:_____

NOTE: Students with this option may not take more than 30 hours (total) in business and must obtain a "C" or better in each of the courses listed above in order to advance to the next course.

5. Contemporary Society (2 courses, 6 credits)

A & S 3105 From Gilgamesh to the Bomb   Grade:_____ Completion date:_____

COJO 3160 Theory of Language and Society   Grade:_____ Completion date:_____

CRMJ 3200 Ethics and Administration of Justice   Grade:_____ Completion date:_____

CRMJ 3500 Drugs and the Criminal Justice System   Grade:_____ Completion date:_____

CRMJ/CHST 4860 Social Inequality, Crime, Criminal

Justice and the Law   Grade:_____ Completion date:_____

ENR 4890 Special Topics   Grade:_____ Completion date:_____

HIST 4340 History of American Women   Grade:_____ Completion date:_____

HIST 4490 Modern America, 1960-present   Grade:_____ Completion date:_____

HIST 4545 Multicultural West   Grade:_____ Completion date:_____

6. Career Focus (11 credits) (Required)

PHCY 4050 Evolution of American Health (2 credits)   Grade:_____ Completion date:_____

PHCY 4141 Health Econ and Outcomes (3 credits)   Grade:_____ Completion date:_____

PHCY 4241 Biopharmaceutical Reg. Com (3 credits)   Grade:_____ Completion date:_____

PHCY 4341 Intro to Healthcare Quality (3 credits)   Grade:_____ Completion date:_____

UNIVERSITY STUDIES requirements: 32 credits

First Year Seminar   (3)_____ Q: Basic Math   (3)_____

COM1::Communication   (3)_____ COM2: Communication 2* (3)_____

COM3: Communication 3*   (3)_____ V: US/WY Constitution: (3)_____

PN: Science: (3)_____ PN: Science   (3)_____

HC: Human Culture (3)_____ HC: Human Culture   (3)_____

* = May be embedded in approved 2015 USP courses in the above categories or courses in the major.

ELECTIVE component: 22-30 credits

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

UPPER DIVISION requirement (3000 level or above): 42 hours (30 of which must be earned from UW)

(3)_____   (3)_____   (3)_____   (3)_____

(3)_____   (3)_____   (3)_____   (3)_____

(3)_____   (3)_____   (3)_____   (3)_____

(3)_____   (3)_____   (3)_____   (3)_____

Students in the BAS must earn a "C" or better in all courses from the checklist, and must retake the course(s) where a D or an F are earned.

A minimum of 120 hours is required for completion of the BAS degree.   10/07/2020

Course Descriptions:

The following five courses, amounting to 14 credit hours, are all required in the proposed new concentration. There are 5000-level equivalents already at UW. All of these courses will be delivered on-line, mostly in an asynchronous format, although individual instructors may choose to build in limited synchronous dimensions, as is the case in the current MS in Health Services Administration degree.

PHCY 4050, Evolution of the American Healthcare System (2 credit hours)

Course Description: This course explores the predictable response to a crisis in health care that has led to a paradigm change in the way health services are delivered. The professionalization of health care over the past century, and the development of the modern hospital over the past half century. The implications of computerized health information, and the trend toward empowerment of patients through the democratization of health services.

PHCY 4141, Introduction to Health Economics and Outcomes (3 credit hours)

Course Description: This course considers the role of the range of outcomes used by clinicians and health care systems in assessing treatment modalities. The framework for conducting and assessing outcomes research will be emphasized.

PHCY 4241, Biopharmaceutical Regulation (3 credit hours)

Course Description: This course considers the role of regulatory agencies that prescribe conduct in the healthcare industries and professions, focusing on the Food and Drug Administration. The functioning of other agencies, such as the federal Drug Enforcement Administration, state boards of pharmacy and state departments of health are also considered.

PHCY 4341, Introduction to Healthcare Quality (3 credit hours)

Course Description: This course will provide an overview of healthcare quality and performance measurement. It will also provide a review of quality improvement strategies used in various healthcare settings.

PHCY 4441, Introduction to Health Institution Leadership (3 credit hours)

Course Description: Introduction to Health Institution Leadership is designed to provide development of the health institution leader through analysis of theory and application to practice by extensive use of case studies and models. Organizational, team and individual dimensions of leadership are examined. Leadership for optimization of human and other resources as well as effective use of data analytics are explored.

Assessment Plan:

 The opportunity to develop a sound foundation in both current and emerging healthcare trends is an important aspect of this certificate program. Assessing student knowledge through examination, discussion boards, and papers provides faculty the opportunity to tailor information back to the students. The underlying theme of lifelong learning skills necessary to stay current with emerging healthcare trends will also be assessed. Students are assessed not only on the knowledge from books and lectures but also in keeping up with current events in health care.

The assessment process for the overall BAS degree program is currently in revision. UW-Casper is hiring a new BAS director and one charge to that person will be to work closely with the University's assessment coordinator to improve assessment for the degree. Still, a charge to the director will be to build an assessment piece into the final, writing intensive course (AGRI 4600), monitor job placement rates, and otherwise build a comprehensive process for evaluating learning in the program.

Degree Program Evaluation

Evaluation of the BAS concentration in health services administration will be completed in multiple stages. The evaluation process will include both a formative and summative process. Initial formative surveys and evaluations will be created for those students who are in the initial years of the program. This allows us to gain insights into the curriculum and specific learning objectives for each course. As students matriculate, we will include summative evaluations regarding the entire program and include a survey of alumni every few years. In addition, employers will be asked to provide their feedback as to the preparedness of the students.

New Resources Required

Given that the coursework and instructional capacity already exist at UW, the additional resources required are minimal.

Faculty and instructional staffing: no new faculty positions will be needed to support the new concentration. The courses that faculty already teach for the MS in Health Services will be taught on their regular schedule. Faculty will receive an additional stipend, per course, since they will have more students and have to handle the logistics of a portion of the class being undergraduates and the rest being graduate students. Most of the faculty who teach in the graduate program are part-time faculty. One potential staffing issue is if the new concentration gains enough students, it will create pressure on UWC to add to its academic advising capacity. It would likely take more than 40 students in the concentration to create this issue, however, although the exact number depends on enrollment in the currently existing Organizational Leadership track in the BAS.

Program administration and staff support: the BAS, as noted above, is administered by UW-Casper. The BAS Director will continue to run the program. The approval of this program will simply add an area of concentration to the BAS degree portfolio.

Technology: no additional technology resources are foreseen.

Library and digital resources: no additional library or digital resources are foreseen.

Marketing: UW-Casper and the School of Pharmacy will collaborate in the marketing of this program. If this proposal is approved, UWC will seek a small grant (less than $10,000) from the Central Wyoming Board of Cooperative Educational Services (BOCES) to pay for an initial run of marketing. Given the geographical boundaries of the Central Wyoming BOCES, however, such marketing will need to be focused on Natrona County. Still, Casper College has one of the two largest health services enrollments among the state's community colleges, and Casper itself has the largest healthcare sector of the state, so it is an important market for the program. UWC will redirect current marketing dollars to target markets beyond Natrona County. In addition, the new BAS director will be given the charge to work with the state's other community college to promote awareness of the new concentration.

Substantive Change Determination:

A Notice of Intent (NOI) for the new concentration has been submitted to the Higher Learning Commission. They have reviewed it and concluded this new concentration does not constitute a Substantive Change.

Executive Summary of Demand Statistics

Since the program is fully online and is designed for those already employed, the market area is literally nationwide. That said, the primary target market is Wyoming. The Casper area will be an initial focus, given the size of the medical community there. This will particularly be the case if the BOCES grant comes through, although that will also free up resources to better market across the state.

Gray Associates data (see Appendix B for the full report) shows strong student demand. For the 'online Laramie 360' analysis, their data shows student demand at a 19, which is a high score. The overall score in the market area is a 16. What is holding back the overall score is a competitive intensity score of -10. The University of Denver and the University of Northern Colorado have face-to-face programs. Over the last three years that Gray Associates has data for (16-17-18), those two programs graduated on average 177 students a year, combined. Given the focus on Wyoming, as far as program promotion, the 'online Wyoming' analysis may be more appropriate. In that slicing of the data, student demand drops to a 12 but the competitive intensity also decreases, so the overall score rises to an 18. The 'online Casper 60' analysis has the same scores as the overall state data. Western Governor's University started a similar program in recent years. In 2017 they had 23 graduates. In 2018 (the most recent year that data is available), the program had 170 graduates. The same year Colorado State University graduated 195 students from their bachelor's of healthcare administration program. While we do not anticipate similar growth or demand (in part due to competitors like CSU and WGU), we do expect more than adequate demand and program growth.

According to the Bureau of Labor Statistics (BLS), the 2019 median pay for healthcare administrators is approximately $101,000 per year. The typical entry-level education is a bachelor's degree, in line with what is proposed here. Job growth over the next 10 years is forecast to be 32%, which the BLS characterizes as "much faster than average" across all fields.

	Casper College	Laramie County Community College	Northern Wyoming Community College	Eastern Wyoming College	Northwest College	Western Wyoming Community College
Health Services/Allied Health/Health Sciences 2017-2018	19	27	42			
Health Services/Allied Health/Health Sciences 2016-2017	15	10	18			
Health Services/Allied Health/Health Sciences 2015-2016	15	1	6			
Health Services/Allied Health/Health Sciences 2014-2015	15		10			
Health Services/Allied Health/Health Sciences 2013-2014	13		5			
Veterinary/Animal 2017-2018				22	3	
Veterinary/Animal 2016-2017				11	7	
Veterinary/Animal 2015-2016				10	7	
Veterinary/Animal 2014-2015				15	3	
Veterinary/Animal 2013-2024				11	3	
Clinical/Medical 2017-2018	16					
Clinical/Medical 2016-2017	18					
Clinical/Medical 2015-2016	10					
Clinical/Medical 2014-2015	10					
Clinical/Medical 2013-2014	15					
Nursing/Registered Nurse 2017-2018	44	70	58	12	26	31
Nursing/Registered Nurse 2016-2017	35	78	54		22	38
Nursing/Registered Nurse 2015-2016	41	72	55		25	13
Nursing/Registered Nurse 2014-2015	47	78	54		24	32
Nursing/Registered Nurse 2013-2014	48	87	47		20	25
Nursing Education 2017-2018						
Nursing Education 2016-2017						
Nursing Education 2015-2016						6
Nursing Education 2014-2015						3
Nursing Education 2013-2014						3
Nursing Administration , Nursing Research, and Clinical Nursing 2017-2018						4
Nursing Administration , Nursing Research, and Clinical Nursing 2016-2017						1
Nursing Administration , Nursing Research, and Clinical Nursing 2015-2016						
Nursing Administration , Nursing Research, and Clinical Nursing 2014-2015						
Nursing Administration , Nursing Research, and Clinical Nursing 2013-2014						
Physical Therapy Technician/Assistant 2017-2018		19				
Physical Therapy Technician/Assistant 2016-2017		18				
Physical Therapy Technician/Assistant 2015-2016		21				
Physical Therapy Technician/Assistant 2014-2015		19				
Physical Therapy Technician/Assistant 2013-2014		20				
Pre-Occupational Therapy Studies 2017-2018	8					
Pre-Occupational Therapy Studies 2016-2017	3					
Pre-Occupational Therapy Studies 2015-2016	4					
Pre-Occupational Therapy Studies 2014-2015	9					
Pre-Occupational Therapy Studies 2013-2014	9					
Pre-Physical Therapy Studies 2017-2018	3					2
Pre-Physical Therapy Studies 2016-2017	2					
Pre-Physical Therapy Studies 2015-2016	2					2
Pre-Physical Therapy Studies 2014-2015	1					3
Pre-Physical Therapy Studies 2013-2014	1					3
Emergency Medical Technology/Technician (EMT Paramedic) 2017-2018	5	4				
Emergency Medical Technology/Technician (EMT Paramedic) 2016-2017	3	3				
Emergency Medical Technology/Technician (EMT Paramedic) 2015-2016	7	5				
Emergency Medical Technology/Technician (EMT Paramedic) 2014-2015	5	2				
Emergency Medical Technology/Technician (EMT Paramedic) 2013-2014	5	2				
Pharmacy Technician/Assistant 2017-2018	1					
Pharmacy Technician/Assistant 2016-2017	5					
Pharmacy Technician/Assistant 2015-2016	5					
Pharmacy Technician/Assistant 2014-2015	11					
Pharmacy Technician/Assistant 2013-2014	1					
Pre-Pharmacy Studies 2017-2018	1				2	1
Pre-Pharmacy Studies 2016-2017	2				2	1
Pre-Pharmacy Studies 2015-2016	2	2			1	1
Pre-Pharmacy Studies 2014-2015	1					1
Pre-Pharmacy Studies 2013-2014	4				4	3
Physical Education Teaching and Coaching 2017-2018	2			1		
Physical Education Teaching and Coaching 2016-2017	1	1				
Physical Education Teaching and Coaching 2015-2016	3					
Physical Education Teaching and Coaching 2014-2015	6	3				
Physical Education Teaching and Coaching 2013-2014	6			1		
Health and Physical Education/Fitness 2017-2018					5	
Health and Physical Education/Fitness 2016-2017		3	1		5	
Health and Physical Education/Fitness 2015-2016					1	
Health and Physical Education/Fitness 2014-2015			1		2	
Health and Physical Education/Fitness 2013-2014			1		5	
Medical Radiologic Technology/Science 2017-2018						9
Medical Radiologic Technology/Science 2016-2017						11

Medical Radiologic Technology/Science 2015-2016			7
Medical Radiologic Technology/Science 2014-2015			2
Medical Radiologic Technology/Science 2013-2014			11
Radiologic Technology/Science 2017-2018	20	29	
Radiologic Technology/Science 2016-2017	21	15	
Radiologic Technology/Science 2015-2016	13	14	
Radiologic Technology/Science 2014-2015	13	13	
Radiologic Technology/Science 2013-2014	16	12	
Respiratory Care Therapy/Therapist 2017-2018	11		
Respiratory Care Therapy/Therapist 2016-2017	11		
Respiratory Care Therapy/Therapist 2015-2016	7		
Respiratory Care Therapy/Therapist 2014-2015	5		
Respiratory Care Therapy/Therapist 2013-2014	9		

CIP Number & Title	CIP Description	Online-Laramie 360-Bachelor					Competitor info	Online-Wyoming-Bachelor					Online-Casper 60-Bachelor					Online-Laramie 360-Certificate					Competitor info	Online-Wyoming-Certificate					Online-Casper 60-Certificate				
		Student Demand	Competitive Intensity	Employment Demand	Degree Fit	Overall		Student Demand	Competitive Intensity	Employment Demand	Degree Fit	Overall	Student Demand	Competitive Intensity	Employment Demand	Degree Fit	Overall	Student Demand	Competitive Intensity	Employment Demand	Degree Fit	Overall		Student Demand	Competitive Intensity	Employment Demand	Degree Fit	Overall	Student Demand	Competitive Intensity	Employment Demand	Degree Fit	Overall
51.000 Health Services/Allied Health (part of Health Services/Allied Health/Health Services, General division of CIP Codes)	A general, introductory, undifferentiated, or joint program in health services occupations that prepares individuals for either entry into specialized training programs or for a variety of concentrations in the allied health area. Includes instruction in the basic sciences, research and clinical procedures, and aspects of the subject matter related to various health occupations	11	-2	2	2	13	2 institutions: University of Denver & University of Northern CO Combined averaging 147 completions over the last 3 reporting years (16-17-18) Both programs are f2f	2	5	2	2	11	4	4	2	2	12	-4	4	2	2	4	no certificates offered in the Laramie 360 region using this CIP Code	-4	4	2	2	4	-6	5	2	2	3
51.0701 Health/Health Care Facilities Administration/Management (part of Health and Medical Administrative Services division of CIP Codes)	A program that prepares individuals to develop, plan, and manage health care operations and services within health care facilities and across health care systems. Includes instruction in planning, business management, financial management, public relations, human resources management, health care systems operations and management, health care resources allocation and policy making, health law and regulations, and applications to specific types of health care services	19	-10	5	2	16	***Western Governors University just started the program in 2017 with 23 grads, in 2018 170 grads. Program is online. CSU program is also online in 2018 had 195 online completions, 2019 data not available yet in Database***	12	0	4	2	18	12	0	4	2	18	-2	2	5	2	7	no certificates offered in the Laramie 360 region using this CIP Code	4	3	4	2	13	2	4	4	2	12
51.0702 Hospital and Health Care Facilities Administration/Management (part of Health and Medical Administrative Services division of CIP Codes)	A program that prepares individuals to apply managerial principles to the administration of hospitals, clinics, nursing homes, and other health care facilities. Includes instruction in facilities planning, building and operations management, business management, financial management and insurance, fund-raising and marketing, public relations, human resources management and labor relations, health care facilities operations, principles of health care delivery, and applicable law and regulations.	2	-5	4	4	5	Only 2 completions in 2018 in Laramie 360 region. CIP Code not currently used within region	-6	5	4	4	7	-6	5	4	4	8	-2	4	4	4	10	no certificates offered in the Laramie 360 region using this CIP Code	-4	4	4	4	8	-6	5	5	4	4
51.2211 Health Services Administration (part of public health division of CIP Codes 51.22)	A program that prepares individuals to apply managerial principles to the administration of hospitals, clinics, nursing homes, and other health care facilities. Includes instruction in facilities planning, building and operations management, business management, financial management and insurance, fund-raising and marketing, public relations human resources management and labor relations, health care facilities operations, principles of health care delivery, and applicable law and regulations	2	-5	4	4	5	The are no programs of any significance in the Laramie 360 region. Only 2 completions in 2018	-6	1	-2	2	-5	-6	1	2	2	-1	-2	4	-1	2	3	no certificates offered in the Laramie 360 region using this CIP Code	-4	4	-2	2	0	-6	5	2	2	3

Quick Summary of what the numbers are indicating:

BAS - Health Service Administration Budget Projection	Fiscal Year				
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	
Revenue					
Cummulative Total NEW UW-C headcount enrollment	15	25	35	50	*Cumulative enrollment*
NEW Resident enrollment (# of new students entering the program each year)	13	22	31	45	
NEW Non Resident Enrollment (# of new students entering the program each year)	2	3	4	5	
Resident (credit hours delivered outside of NEW Program)	299	506	713	1,035	
Resident (credit hours delivered in NEW Program)	104	154	217	315	
Non Resident (credit hours delivered outside of NEW Program)	46	69	92	115	
Non Resident (credit hours delivered in NEW Program)	16	21	28	35	
Total Resident credit hours generated**	403	660	930	1,350	
Total Non Resident credit hours generated**	62	90	120	150	
Per Credit Tuition*					
Resident (Posted Tuition Rate)	$145	$151	$157	$163	
Nonresident (Posted Tuition Rate)	$603	$627	$652	$678	
Estimated Actual Non Resident Per Credit Tuition	$603	$627	$652	$678	
Total Resident Tuition generated outside of NEW Program	$43,355	$76,305	$111,821	$168,814	
Total Resident Tuition in NEW Program	$15,080	$23,223	$34,033	$51,378	
Total Non Resident Tuition outside of NEW Program	$27,738	#########	#########	#########	
Total Non Resident Tuition in NEW Program	$9,648	#########	#########	#########	
Total Tuition from NEW Enrollment	$95,821	$155,969	$224,118	$321,936	
	FY 21-22	FY 22-23	FY 23-24	FY 24-25	
Total New Revenue Generated Within New Program	$24,728	$36,393	$52,294	$75,118	70/30
Total New Revenue Generated Outside of the Program	$71,093	$119,576	$171,824	$246,818	70/30
Total New Revenue Generated	$95,821	$155,969	$224,118	$321,936	
New Program Expense Assumptions					
Compensation and benefits					
Faculty	$5,000	$5,000	$5,000	$5,000	*five staff but no new staff*
Other administrative staff	$3,585	$3,585	$3,585	$3,585	*this is to cover the % of director salary* this program wouldn't pay for it all though*
Graduate Assistants	$0	$0	$0	$0	
Supplies	$0	$0	$0	$0	
Travel	$0	$0	$0	$0	
Marketing	$4,000	$10,000	$10,000	$10,000	*1st yr: website & POP 2nd thru 4th outside advertising*
Software	$0	$0	$0	$0	
Community College articulation	$0	$0	$0	$0	
New course development	$7,500	$7,500	$7,500	$7,500	*$1.5K for each course that will be upgraded*
Capital expense	$0	$0	$0	$0	

Other (specify)	$0	$0	$0	$0

Projected Financial Results for New Program	FY 21-22	FY 22-23	FY 23-24	FY 24-25
Total Expenses	$20,085	$26,085	$26,085	$26,085
Total New Revenues Generated by NEW Program	$95,821	$155,969	$224,118	$321,936
New Program's Total Surplus or Deficit	**$75,736**	**$129,884**	**$198,034**	**$295,851**
Operating margin (surplus or deficit / revenues)	0.79	0.83	0.88	0.92

* UW's Board of Trustees' current working policy is to raise tuition by 4% each year

footnote: on old students

spreadsheet to brent to what we are going to make

ACADEMIC AND STUDENT AFFAIRS

COMMITTEE MEETING MATERIALS

AGENDA ITEM TITLE: <u>Name change Bachelor of Science (BS) Plant Production and Protection (from Agroecology)</u> *Kniss, Barrett*

☒ PUBLIC SESSION
☐ EXECUTIVE SESSION

PREVIOUSLY DISCUSSED BY COMMITTEE:
 ☒ Yes
 ☐ No

FOR FULL BOARD CONSIDERATION:
 ☒ Yes
  [Note: If yes, materials will also be included in the full UW Board of Trustee report.]
 ☐ No

☒ *Attachments/materials are provided in advance of the meeting.*

EXECUTIVE SUMMARY:
The Department of Ecosystem Science & Management is our partner in the Agroecology degree program. For reasons more fully explained in an attached justification document, we are requesting that the new degree program be managed solely within the Department of Plant Sciences. We have discussed the changes with the ESM department, and they are overwhelmingly supportive of the change, including the separation from their department. This change request has not been made lightly – it has been in discussion for at least 10 years, and was a topic of discussion of two separate faculty curriculum retreats held by the Department faculty. These discussions intensified over the last several years. The Agroecology degree was adopted at UW over 25 years ago. As Wezel & Soldat (2007) note, the word agroecology "can be interpreted as a scientific discipline, as a movement, or as a practice." When our agroecology degree was launched, it was a relatively obscure term, and so defining it simply as the scientific discipline combining ecology and agriculture made sense. Recently, however, public use of the term has evolved to much more commonly refer to a movement or a practice; and in some cases even a revolution.

WHY THIS ITEM IS BEFORE THE COMMITTEE:
University of Wyoming Regulation 2-119 requires that the Board approve all new degree programs and lays out the process for that approval. The Academic and Student Affairs committee will report to the Board on recommended action for approval of the new degree program.

ACTION REQUIRED AT THIS COMMITTEE MEETING:
Consideration for approval of the degree title change to Bachelor of Science (BS) Plant Production and Protection and approval and sole management of degree by the Department of Plant Sciences.

PROPOSED MOTION:
"I move that the Academic and Student Affairs Committee approves to change the degree title to Bachelor of Science (BS) Plant Production and Protection and approve sole management of the degree by the Department of Plant Sciences and moves for full Board consideration."

During a meeting on August 28, 2019, the Plant Sciences faculty voted unanimously to petition the College of Agriculture and Natural Resources and the Department of Ecosystem Science and Management to move the Agroecology B.S. degree solely within the Department of Plant Sciences. The reasons for this request are provided below.

Proposal: To move responsibility and direction of the Agroecology B.S. degree solely to the Department of Plant Sciences, instead of the current joint-degree partnership with the Department of Ecosystem Science and Management (ESM).

Justification:
The Agroecology B.S. degree was initiated 25 years ago as the primary undergraduate degree from the Department of Plant, Soil, and Insect Sciences (PSIS). Not long after the new degree program was launched, that department was split into two departments: Plant Sciences (disciplines of crop science, weed science, and plant pathology) and Ecosystem Science & Management[1] (disciplines of rangeland science, soil science, hydrology, and entomology). Following the departmental split, the Agroecology degree program became inter-departmental by necessity, since it was jointly managed by faculty in the two new departments.

From the outset, Agroecology (AECL) curriculum was developed as a hybrid between Agronomy and Ecology; it was an attempt to fill the need for what is now more commonly known as sustainable agriculture. The current curriculum encompasses the whole of the system of plant production and protection, including production strategies and pest management. Because the curriculum was primarily rooted in agronomic and horticultural production systems, over time a majority of the student advising and mentoring and most of the AECL courses have been handled by Plant Sciences faculty. Shifts in the disciplinary focus among new faculty in both departments has resulted in fewer ESM faculty directly contributing to the aspects of plant production and protection that are relevant to the Plant Sciences vision of what our undergraduate curriculum should become. This is not a critique or criticism of either department – in contrast, this is exactly what academic departments must do to stay relevant. This shift in priorities is the natural evolution of the disciplinary focus in both departments.

Times have changed, plant production has changed, and the Agroecology B.S. curriculum must adapt to these changes. Over the past several years, Plant Sciences faculty have discussed changes needed in our curriculum to better serve current and future students. Some of these changes have been implemented simply by changing course content or adding elective courses.

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[1] Ecosystem Science and Management is the current name of the department, but at the time of the split this department was named Renewable Resources.

However, feedback from former and potential students, employers, and advising staff has also necessitated an evaluation of our curriculum as a whole.

Based on these curriculum discussions, the Plant Sciences faculty has decided that to successfully move into the future, substantial changes in the focus and requirements of our degree are necessary, including a change to the B.S. degree program. We feel a revised curriculum focused on plant production and protection in the unique Wyoming environment can be best implemented by being nimble and flexible in our ability to adapt to a changing agricultural environment. Having full control of our own B.S. curriculum will improve our ability to meet this goal.

In addition to increased flexibility and adaptability of the program, students and professional advising staff will no longer be uncertain regarding who to direct questions about the program, since it will reside solely within the Plant Sciences department. The degree program will still include fundamental coursework taught by the ESM department (particularly in entomology and soil science), just as we require fundamental courses taught by other departments (Agricultural Economics, Chemistry, Statistics, etc.). We feel this change will retain the many benefits our students receive from ESM faculty expertise, but allow the Plant Sciences department to move forward in a way that best serves the interests of our students.

Respectfully submitted on behalf of the faculty of the Department of Plant Sciences by:

Karen Panter, Ph.D.   Andrew Kniss, Ph.D.
Associate Head   Head

Proposed B.S. in Plant Production and Protection

		USP	Credit hours	
Core (required of ALL degree recipients)				
AECL 1000	Introduction to Agroecology	PN	4	
LIFE 1010	General Biology	PN	4	
CHEM 1000	Introductory Chemistry	PN	4	
MATH 1400	College Algebra	Q	3	
AGEC 1020	Principles of Microeconomics	H	3	**18**
(choose one from ANSC 1010, ENTO 1000, ENTO 1001)				
ANSC 1010	Introduction to Animal Science		4	
ENTO 1001*	Insect Biology	PN	4	**4**
*ENTO 1000 required, but ENTO 1001 preferred if available				
SOIL 2010	Introduction to Soil Science		4	
LIFE 2023	Biology of Plants and Fungi		4	
CHEM 2300	Organic Chemistry		3	**11**
(choose one from STAT 2050, LIFE 2100)				
STAT 2050	Fundamentals of Statistics	Q	4	
LIFE 2100	Intro to Research and Analysis	Q	4	**4**
AECL 3030	Ecology of Plant Protection		3	
LIFE 3050	Genetics		4	**7**
(choose one from PLNT 3000, SOIL 4140, or SOIL 4160)				
PLNT 3000	Irrigated Agriculture		3	
SOIL 4140	Soil Microbiology		4	
SOIL 4160	Soil Fertility and Fertilizers		3	**3**
AECL 4990	Agroecology Seminar	COM3	3	**3**

Practical Experience (must take 6 credit hours from the following):				**6**
AECL 4920	Research Apprenticeship	1-2	(max 4)	
AECL 4930	Agroecology Internship	1-3	(max 6)	
AECL 4960	Agroecology Field Studies	2	(max 2)	
AGRI 4520	Field Practicum: Extension Work	1-4	(max 4)	
PLNT 4820*	Plant Sciences Seminar	1	(max 3)	
PLNT 4900	Undergraduate Teaching Practicum	1-2	(max 4)	

*CARF for PLNT 4820 in progress, currently offered as PLNT 4790

Plant Science Electives: **15**

(Select 15 credit hours from AECL or PLNT, at least 12 of which are upper division)

Supporting Electives: **9**

(Select 9 upper-division credit hours from the following)
        AGEC, ANSC, BIOL, BOT, ENR, ENTO,
        FDSC, MICR, MOLB, REWM, SOIL, GIST

Additional University Studies:		**15**
	FY	3
	V	3
	C1	3
	C2	3
	H	3
Free Electives:		**25**

TOTAL CREDIT HOUR REQUIREMENT FOR DEGREE: **120**

Horticulture Minor				**20**	
AECL	1000	Introduction to Agroecology	4	choose 1	
LIFE	1010	General Biology	4	(required)	8
PLNT	2025	Horticultural Science	3	required	
PLNT	2026	Horticultural Science Lab	1	required	
PLNT	3000	Irrigated Agriculture	3	elective	
PLNT	3300	Hort Plant Propagation	3	elective	
PLNT	4120	Organic Food Production	3	elective	
PLNT	4180	Greenhouse Crop Production	4	elective	
PLNT	4200	Greenhouse Design & Management	3	elective	Choose 12 hours
PLNT	4050	Plant Biotechnology	3	elective	
PLNT	4070	Weed Science & Technology	4	elective	
PLNT	3220	Plant Pathology	3	elective	
PLNT	4470	Seed Science & Technology	3	elective	
PLNT	4520	Plant Breeding	3	elective	

Agronomy Minor				**19**	
AECL	1000	Introduction to Agroecology	4	required	
SOIL	2010	Introduction to Soil Science	4	required	11
PLNT	3030	Ecology of Plant Protection	3	required	
PLNT	2200	Field Crop Production	3	elective	
PLNT	3220	Plant Pathology	3	elective	
PLNT	4070	Weed Science & Technology	4	elective	
PLNT	4700	Forage Crop Science	3	elective	
SOIL	4160	Soil Fertility	3	elective	
PLNT	4220	Crop Yield Physiology	3	elective	Choose 8 hours
PLNT	3000	Irrigated Agriculture	3	elective	
PLNT	4020	Sustainable Agriculture	3	elective	
PLNT	4120	Organic Food Production	3	elective	
PLNT	4470	Seed Science & Technology	3	elective	
PLNT	4520	Plant Breeding	3	elective	

Agroecology Minor				**20**	
AECL	1000	Introduction to Agroecology	4	required	
LIFE	2023	Biology of Plants & Fungi	4	choose 2	
SOIL	2010	Introduction to Soil Science	4	courses	11 credits
AECL	3030	Ecology of Plant Protection	3	(required)	
AECL	4400	Invasive Plant Ecology	3	elective	
LIFE	3400	General Ecology	3	elective	
PLNT	4020	Sustainable Agriculture	3	elective	
SOIL	4140	Soil Microbiology	4	elective	
BOT	3100	Plants and Civilization	3	elective	Choose 9 hours
ENTO	4300	Insect Ecology	3	elective	
SOIL	4540	Microbial Diversity and Ecology	4	elective	
PLNT	3220	Plant Pathology	3	elective	
PLNT	4070	Weed Science & Technology	4	elective	

Plant Protection Minor				**18**	
AECL	1000	Introduction to Agroecology	4	required	
AECL	3030	Ecology of Plant Protection	3	required	
ENTO	1000/1	Insect Biology	3/4	required	18 credits
PLNT	3220	Plant Pathology	3	required	
PLNT	4070	Weed Science & Technology	4	choose 1	
PLNT	4400	Invasive Plant Ecology	4	(required)	

Horticulture Concentration — 21

PLNT	2025	Horticultural Science	3	required	
PLNT	3220	Plant Pathology	3	required	
PLNT	3300	Hort Plant Propagation	3	required	15 credits
PLNT	4470	Seed Science & Technology	3	required	
PLNT	4180	Greenhouse Crop Production	4	(choose 1) required	
PLNT	4200	Greenhouse Design & Management	3		
PLNT	2026	Horticultural Science Lab	1	elective	
PLNT	3000	Irrigated Agriculture	3	elective	
PLNT	4050	Plant Biotechnology	3	elective	at least 6 credits
PLNT	4070	Weed Science & Technology	4	elective	
PLNT	4120	Organic Food Production	3	elective	
PLNT	4520	Plant Breeding	3	elective	

Agronomy Concentration — 24

PLNT	3220	Plant Pathology	3	required	
PLNT	4070	Weed Science & Technology	4	required	
PLNT	4700	Forage Crop Science	3	required	16 credits
SOIL	4160	Soil Fertility	3	required	
PLNT	2200	Field Crop Production	3	(choose 1) required	
PLNT	4220	Crop Yield Physiology	3		
PLNT	3000	Irrigated Agriculture	3	elective	
PLNT	3300	Hort Plant Propagation	3	elective	
PLNT	4000	Plant Disease Control	3	elective	
PLNT	4020	Sustainable Agriculture	3	elective	
PLNT	4050	Plant Biotechnology	3	elective	
PLNT	4120	Organic Food Production	3	elective	
PLNT	4180	Greenhouse Crop Production	4	elective	
PLNT	4470	Seed Science & Technology	3	elective	
PLNT	4520	Plant Breeding	3	elective	at least 8 credits
SOIL	4100	Soil Physics	3	elective	
SOIL	4105	Soil Physics Laboratory	2	elective	
SOIL	4120	Genesis, Morphology & Classification	4	elective	
SOIL	4140	Soil Microbiology	4	elective	
AECL	4130	Remote Sensing	3	elective	
AGEC	4050	Agribusiness Marketing	3	elective	
AGEC	4060	Agribusiness Management	3	elective	

Agroecology & Evolution Concentration — 21

AECL	4400	Invasive Plant Ecology	3	required	ts

LIFE	3400	General Ecology	3	required	
PLNT	4020	Sustainable Agriculture	3	required	13 credits
SOIL	4140	Soil Microbiology	4	required	
LIFE	3500	Evolutionary Biology	3	elective	
BOT	3100	Plants and Civilization	3	elective	
BOT	3600	Plant Diversity and Systematics	4	elective	
BOT	4700	Vegetation Ecology	4	elective	at least 8 credits
ENTO	4300	Insect Ecology	3	elective	
SOIL	4540	Microbial Diversity and Ecology	4	elective	
PLNT	3220	Plant Pathology	3	elective	
PLNT	4070	Weed Science & Technology	4	elective	
PLNT	4520	Plant Breeding	3	elective	

Integrated Pest Management Concentration				**25**	
PLNT	3220	Plant Pathology	3	required	
PLNT	4000	Plant Disease Control	3	required	
PLNT	4070	Weed Science & Technology	4	required	
PLNT	4400	Invasive Plant Ecology	3	required	16 credits
REWM	4300	Grass Taxonomy	3		
BOT	3600	Plant Diversity and Systematics	4	choose at least 1 (required)	
BOT	4680	Taxonomy of Vascular Plants	3		
ENTO	4684	Classification of Insects	4		
AECL	4130	Remote Sensing	3	elective	
ENTO	4300	Insect Ecology	3	elective	
ENTO	4884	Insect Behavior	3	elective	
PLNT	4020	Sustainable Agriculture	3	elective	at least 9 credits
PLNT	4050	Plant Biotechnology	3	elective	
PLNT	4120	Organic Food Production	3	elective	
PLNT	4470	Seed Science & Technology	3	elective	
REWM	4000	Poisonous Plants & Plant Toxins	3	elective	

University of Wyoming

Existing Degree Program Change Request
Title Change, Degree Designation, or CIP Change

Directions: Complete this form and proposal template to request a change to the title (name) of an existing degree program or to request a change to the Classification of Instructional Programs (CIP) code of an existing degree program. The degree program must already be on an institution's program inventory.

A degree program title consists of the following two parts:

1. degree designation, such as Bachelor of Science (BS), Master of Arts (MA), or Doctor of Philosophy (PhD); and,
2. name of the discipline, such as History, Mechanical Engineering, or Zoology.

The Classification of Instructional Programs (CIP) is the taxonomic coding scheme used for instructional programs in higher education. Its purpose is to facilitate the organization, collection, and reporting of fields of study and program completions. The academic unit should consult with the Office of the Registrar and Office of Institutional Analysis prior to submitting the proposal to determine whether a change to the CIP code used to classify the program is recommended.

Resources:

CIP Code Information

Process:
1. Faculty of the unit develop a rational for the change.
2. The dean of the academic unit approves the rationale and change and submits the proposal to the Provost.
3. The Provost routes the proposal to the Faculty Senate for consideration by the Graduate Council or Academic Planning Committee.
4. The Provost approves the rationale and change.
5. The Provost reports the proposal to the Academic and Student Affairs Committee of the Board of Trustees.
6. The proposers hold an implementation meeting with the Registrar, Admissions, OIA, and Advising Managers, and other appropriate units to implement the change. Implementation meetings gather people from all of the units that will take part in ensuring a new or restructured academic program runs smoothly.

Administrative Information

1. <u>Proposing Unit:</u> Department of Plant Sciences, College of Agriculture & Natural Resources

2. <u>Current Degree Program Title:</u> Bachelor of Science degree with a major in Agroecology

3. <u>Current Degree Program CIP Code</u>: 01.11) Plant Sciences

4. <u>Contact Person</u>: *Provide contact information for the person who can answer specific questions about the degree program and change proposal.*

    Name: Andrew R. Kniss

    Title: Head, Plant Sciences

    E-mail: akniss@uwyo.edu

    Phone: 307-766-3104

Guidance: Name and identity are closely related. A program "brand" as represented by the name has value and so careful planning for a name or designation change is a worthwhile investment. Programs with a long history and many alumni and past employees may find that these groups express strong attachment to the existing name. Thus, the rationale for the name change should be made with full consideration for the impact on the historic connections and with a view to the long-term future. New names should be designed to reflect the nature of the program for many years to come. Ideally, consultation with and support from the program's students in course and alumni should be evident in the proposal.

Programs should also demonstrate that they have consulted with other departments and colleges on campus that may be impacted by the change.

Program names that narrow the program scope or reflect short term sub-areas or trends in research tools or methodology should be avoided. Proposals should be explicit about all the academic programs and structures that are included in a name change request. For example, list all departments, majors, degrees, certificates, centers, subject listings, minors or other academic elements that are included in the request.

Some common justifications for a change in major name or CIP code are that the new name more accurately reflects the curriculum than the old name, that the activities of the program faculty and the training they offer are more accurately reflected by the new name, and that the name of the discipline has changed and consequently the major should be renamed to reflect this change in the discipline.

<u>Request for Change in Degree Program Designation (e.g., Bachelor of Science (BS), Master of Arts (MA), or Doctor of Philosophy (PhD)</u>

Current Degree Program Designation: **Bachelor of Science (BS)**

Proposed Degree Program Designation: ***no change requested***

<u>Request Change in Name of Discipline (e.g., History, Mechanical Engineering, or Zoology)</u>

Current Name: Agroecology

Proposed Name:
Plant Production and Protection

Concentration options:
**Agronomy
Horticulture
Agroecology and Evolution
Integrated Pest Management**

Minors:
**Agronomy
Horticulture
Agroecology
Plant Protection**

Implementation Date (MM/DD/YYYY): 08/01/2022

<u>Reason for Change:</u>
- Background: An overview explanation of why the change(s) is being requested; how will it improve the degree program and benefit students and faculty?
- Proposed changes: List each proposed change and the specific rationale for that change.
- Logistics: When is the changed proposed to be effective. How will current students in the program be handled? (note: Generally changes are effective for the subsequent fall semester. Current students are assumed to be required to complete the requirements in place when they entered the program unless otherwise agreed upon by the student and program.) Document that you have consulted with alumni and current students when appropriate. Document that you have consulted with other departments and colleges that may be impacted by the change.
- Comparison of current and proposed curriculum, if applicable

Reason for change of degree name and addition of concentrations:
The Department of Ecosystem Science & Management is our partner in the Agroecology degree program. For reasons more fully explained in an attached justification document, we are requesting that the new degree program be managed solely within the Department of Plant

Sciences. We have discussed the changes with the ESM department, and they are overwhelmingly supportive of the change, including the separation from their department.

This change request has not been made lightly – it has been in discussion for at least 10 years, and was a topic of discussion of two separate faculty curriculum retreats held by the Department faculty. These discussions intensified over the last several years. The Agroecology degree was adopted at UW over 25 years ago. As Wezel & Soldat (2007) note, the word *agroecology* "can be interpreted as a scientific discipline, as a movement, or as a practice." When our *agroecology* degree was launched, it was a relatively obscure term, and so defining it simply as the scientific discipline combining ecology and agriculture made sense. Recently, however, public use of the term has evolved to much more commonly refer to a movement or a practice; and in some cases even a revolution.

Our curriculum continues to focus on the ecology of agricultural plant production, and we do not include some of the aspects that many people now associate with *agroecology*, such as social and political aspects of food distribution, social justice, and food distribution systems. While these topics are certainly worthy of study within a Bachelors degree program, they fall well beyond the scope of our curriculum. Therefore, the degree name has become a regular source of confusion for our graduates and potential employers, and makes it difficult for us to communicate and market our program to potential students who would be interested in the curriculum we currently provide.

We have also heard from employers that students with our Agroecology degree have been screened out of potential jobs by HR offices who are unfamiliar with the term. We believe our Bachelors degree program prepares students extremely well for jobs in agronomy, horticulture, and crop protection – so this change is requested to ensure we are able to recruit top students and to ensure they can market themselves for the diverse employment opportunities they are interested in upon graduation. The degree name we are requesting is a **Bachelor of Science degree in Plant Production and Protection**. We feel this name is both descriptive of what our curriculum provides to students and will also help potential employers quickly realize the skill set graduates possess.

Along with this name change, we are requesting four optional concentrations that may be added to the transcript. These concentrations will allow students to declare an area of specialization within the broad Plant Production and Protection degree program. These four concentrations are:
- Agronomy
- Horticulture
- Integrated Pest Management
- Agroecology & Evolution

Minors in all four areas will also be offered to non-majors who complete a targeted subset of courses. This model of concentrations and minors will allow our agronomy- or horticulture-interested students to concentrate in those areas, and add that information to their transcript and resume and allow themselves to market themselves better to potential employers. Retaining *Agroecology* as a concentration and minor will also allow us to continue effectively recruiting students interested in sustainable agriculture who might not otherwise consider the University of Wyoming. Although many students are confused by the term, there is a subset of students who enroll in our program *because* of that name, and this allows those students to continue to find us.

<u>Associated coursework changes:</u>
Some of the most noteworthy coursework changes include removing General Ecology (LIFE 3400) and Public Speaking (COJO 2010) as requirements. The former, as we have discovered during student exit interviews, is not taught with relevance to crop production, and our coursework already covers all relevant ecological principles within our own Plant Sciences courses. General Ecology will continue to be a required course for student who declare the Agroecology & Evolution concentration. University Studies program changes require students to take a speaking-relevant course – so we felt there was no need for us to specify a single course within our degree program. This allows students the flexibility to choose whichever communications courses suit their interests in completion of their USP coursework.

We are adding Genetics (LIFE 3050) as a required course. We feel that genetics is a fundamental component of a credible degree in Plant Production and Protection, as genetics is a core concept in crop production, plant improvement, and pest management. We are increasing our 'practical' experience requirement from 4 credit hours to 6 credit hours while also increasing the course offerings to meet this additional requirement. Our current required internship program has been a major success, and we feel strongly that students benefit substantially from hands-on and real-world experiences.

Request Change in CIP Code

       Current Code: **01.11) Plant Sciences**

       Proposed Code: ***no change requested***

       Implementation Date (MM/DD/YYYY):

Reason for Change:
- Background: An overview explanation of why the change(s) is being requested; how will it improve the degree program and benefit students and faculty?
- Proposed changes: List each program you are requesting the CIP code change for and the specific rationale for that change.
- Logistics: When is the changed proposed to be effective. How will current students in the program be handled? (note: Generally changes are effective for the subsequent fall semester. Current students are assumed to be required to complete the requirements in place when they entered the program unless otherwise agreed upon by the student and program.)

ACADEMIC AND STUDENT AFFAIRS

COMMITTEE MEETING MATERIALS

AGENDA ITEM TITLE: <u>Bachelor of Fine Arts in Visual Communication Design</u>, <u>Art and Art History Program</u> *Russell, Barrett*

☒ PUBLIC SESSION
☐ EXECUTIVE SESSION

PREVIOUSLY DISCUSSED BY COMMITTEE:
    ☒ Yes
    ☐ No

FOR FULL BOARD CONSIDERATION:
    ☐ Yes
    [Note: If yes, materials will also be included in the full UW Board of Trustee report.]
    ☒ No

☒ *Attachments/materials are provided in advance of the meeting.*

EXECUTIVE SUMMARY:
In order to bring our program degrees in line with NASAD accreditation standards and evolve to better serve a growing number of design focused students, The Art and Art History Program within the Department of Visual and Literary Arts seeks to **terminate** a current and outmoded liberal arts degree concentration (Concentration in Graphic Design within BA in Studio Art) and **offer a new** professional level degree (BFA in Visual Communication Design). This new degree will require no new faculty, no additional funding, and would increase student digital literacy and knowledge of professional-design industry practices while providing a professional degree path in Design. The degree would be offered on the UW Main Campus within the Visual Arts Building through traditional studio and lecture classes with the option for online teaching. The new professional degree (BFA in VCD) would fit into the Art and Art History Program curriculum.

WHY THIS ITEM IS BEFORE THE COMMITTEE:
Information item only.

ACTION REQUIRED AT THIS COMMITTEE MEETING:
NA

PROPOSED MOTION:

Notice of Intent: Bachelor of Fine Arts in Visual Communication Design, Art and Art History Program, Department of Visual and Literary Arts

SUMMARY

In order to bring our program degrees in line with NASAD accreditation standards and evolve to better serve a growing number of design focused students, The Art and Art History Program within the Department of Visual and Literary Arts seeks to *terminate* a current and outmoded liberal arts degree concentration (Concentration in Graphic Design within BA in Studio Art) and *offer a new* professional level degree (BFA in Visual Communication Design). This new degree will require no new faculty, no additional funding, and would increase student digital literacy and knowledge of professional-design industry practices while providing a professional degree path in Design.

NAME OF PROPOSED ACADEMIC PROGRAM AND MODE OF DELIVERY:

BFA in Visual Communication Design (VCD)

The degree would be offered on the UW Main Campus within the Visual Arts Building through traditional studio and lecture classes with the option for online teaching. The new professional degree (BFA in VCD) would fit into the Art and Art History Program curriculum as follows:

Current Degrees in Art and Art History Program
- **BA** in Art History
- **BA** in Studio Art
    - **BA** in Studio Art with Graphic Design Concentration
- **BFA** in Studio Art
- **BA** in Art Education

Future Degrees in Art and Art History Program
- **BA** in Art History
- **BA** in Studio Art
- **BFA** in Studio Art
- **BFA** in Visual Communication Design
- **BA** in Art Education

STRUCTURE OF THE MAJOR:

See Appendix A for the complete degree curriculum and credit hours. The one new class to be developed is highlighted in Appendix A and can be offered without the hiring of additional faculty. All other classes are currently being offered on a regular basis in the Art and Art History Program.

ANTICIPATED CURRICULUM AND LEARNING OUTCOMES:
- Increased skill-set offerings in advanced digital processes, including but not limited to 2D, 3D, 4D Design, Motion Graphics, User Experience/User Interaction (UX/UI), and Virtual/Augmented/Mixed Reality – with a strong understanding of traditional fine arts and design principles, critical narratives, and industry expectations and outcomes.
- Increased skill-set offerings in professional practices for Design industries rooted in traditional Fine Arts Foundation courses, and incorporating Art Historical elements and Digital-Design curriculum.
- Increased skill-set offerings in Design Thinking process principles across a wide range of media, historical antecedents and speculative work on new media approaches to a wide range of contemporary and future problems based in design entrepreneurship.
- Increased offerings in online learning to address issues of distance and time constraints on learning. The faculty have been well positioned to address the current needs of the students during the COVID crisis proving the resilience of current approaches and adding to the need for increased flexibility in addressing digital approaches to learning.
- Increased offerings in Internship opportunities as the degree raises the visibility of our students beyond the already excellent opportunities campus wide initiated and advanced by faculty in Design through collaborations and partnerships.

PLAN FOR OBTAINING A MARKET ANALYSIS OF ANTICIPATED STUDENT DEMAND AND ENROLLMENT; ANALYSIS OF POST-GRADUATION MARKET DEMAND:

Market data analysis from Gray and Associates for the relevant CIP 50.0409: Graphic Design is available in Appendix B. Also available in Appendix B is the current US Government Bureau of Labor Statistics ten year projection for employment as a Graphic Designer.

According to the BLS, "Graphic designers are expected to face strong competition for available positions. Many talented individuals are attracted to careers as graphic designers. Prospects will be best for applicants who keep up with the latest design trends, technologies, and techniques." A professional level BFA in VCD would better position UW graduates in an increasingly competitive but still vital and vibrant industry.

The Art and Art History Program plans to also reach out to AIGA and NASAD for more market analysis of student demand and better statistics regarding post-graduation market demand (which appears inconsistently low in the table when compared to actual student experiences at UW). The Art and Art History Program will also conduct a survey of Design alumni to better present the clear market demand for a BFA in VCD.

PRELIMINARY BUDGET

The new BFA in VCD would not require any additional faculty and would operate in coordination with the current curriculum for the BFA in Studio Art, with the Foundation Core and the Studio Core classes being identical, along with the Art History requirements. No additional budgetary demands are required. The Mac-lab utilized for the majority of the classes is supported by student fees, with a major technology upgrade now in planning from funds from the CAREs act and Federal Stimulus dollars. Existing faculty and staff will be able to deliver the additional required classes and curriculum within their current job description percentages. This will provide a consistent, yet flexible experience for students wishing to apply into a professional BFA degree path in either Design or Studio Art.

PROPOSED TIMELINE FOR STAGED IMPLEMENTATION OVER FIVE YEARS INCLUDING CAMPUS AND BOARD REVIEW

The Art and Art History Program would like to begin offering the new BFA in VCD degree in fall of 2021 with the goal of transitioning and graduating at least three students in the new major (the minimum for NASAD accreditation) by spring of 2022 in step with the NASAD accreditation of all degrees in the Art and Art History by that date. The existing Concentration in Graphic Design would be phased out as an option for students in the Art and Art History Program at the beginning of AY 21-22. There will be a clear application process to move all eligible current students in the BA in Studio Art with Concentration in Graphic Design into the BFA in VCD. Students who are not accepted into the new BFA in VCD would continue as a BA in Studio Art major – most likely graduating with the Concentration in Graphic Design until all are matriculated and the Concentration is finally retired.

INFORMATION ON OTHER REQUIRED APPROVALS

This proposal for a new BFA in VCD is tied to our first-time application for NASAD accreditation. This spring 2021, two external NASAD evaluators will be on campus to assess the application for accreditation. The Program would like to state in its accreditation Self-Study that the University is considering and/or has approved the BFA in VCD in order to meet accreditation standards in our application. See accreditation table Appendix C which illustrates how the new BFA in VCD meets NASAD standards regarding percentages in each content area.

EVIDENCE OF HOW THE NEW ACADEMIC PROGRAM ALIGNS WITH THE UNIVERSITY'S MISSION, STRATEGIC PLAN, AND EXISTING ACADEMIC DEGREE PROGRAM ARRAY

The University of Wyoming Mission focuses on academic excellence and measurable student outcomes. Our proposed new degree will give students a specific degree track in a highly desirable career (See institutional analysis table). *"Recruitment and retention of students who will have encountered the frontiers of scholarship and creative activity and who will be prepared for the complexities of an interdependent world upon graduation as well as gainful employment or graduate school".*

The proposed BFA in VCD is a refined restructuring of the existing Concentration in Graphic Design, currently described by our accrediting consultant as a degree within a degree. The current concentration is cumbersome and does not accurately reflect the content delivered. The new BFA in VCD ties directly to the University Mission: *Promoting and embracing continuous improvement by guiding development of academic programs, and curricula, supporting diverse modalities of instruction, and monitoring for academic quality and student success,* and stated Values: Creative thinking leads to new knowledge, inspires student achievement and brings practical innovation to our communities.

Based on the UW Strategic Plan, the BFA in VCD will connect with several goals, including:

Goal 1: *Support students entering UW from the community colleges, the workforce, or after a hiatus, by providing more pathways to completing a Bachelors' degree*. As the only Design degree in the region, we anticipate

attracting a large number of new students as well as creating a defined pathway for transfer students from the state through targeted articulation and a defined 2+2 plan.

Goal 2: *Grow the number of students at a distance enrolled in hybrid and fully online degree programs.* With a new awareness and understanding of hybrid and online teaching, certain courses within the new BFA in VCD could be taught online. And based upon student interest, the new BFA in VCD could function as both an in-person and online degree.

Goal 3: *Promote and embrace continuous improvement by guiding development of academic programs and curricula and monitoring them for academic quality, productivity, and student success.* The revised degree from the concentration to a major is an improvement of an existing degree (BA in Studio Art with a Concentration in Graphic Design), with a focus on student success in both job placement post-graduation as well as a defined degree path for graduate school.

The level of student interest in Design courses is already very high. Creating a clear degree pathway will increase enrollment, offer a strategic recruitment opportunity for students throughout the region as incoming freshmen as well as students transferring in from community colleges, and offers more opportunities for students post-graduation with a degree in hand that accurately reflects their experience and qualifications. The BFA in VCD will align with and advance the university's "four pillars" priorities of becoming more digital, more entrepreneurial, more interdisciplinary and more inclusive.

RATIONALE THAT CLEARLY DEFINES THE NEED FOR THE NEW ACADEMIC PROGRAM. THE RATIONALE SHOULD INCLUDE EVIDENCE THAT THE ACADEMIC PROGRAM WILL NOT PRODUCE UNNECESSARY DUPLICATION OF EXISTING PROGRAMS

The Art and Art History Program recently rebuilt its BFA in Studio Art to conform to NASAD accreditation standards. In doing so, the new and current BFA in Studio Art became unable to accommodate students enrolled in the old Concentration in Graphic Design due to the large number of additional credits, duplications, and need for additional time towards graduation within the BFA in Studio Art. This means that there is currently no viable path for a UW student wishing to pursue a professional level degree in Design. National accreditation by the National Association of School of Art and Design (NASAD) prefers a clear division and articulation of pathways for professional degrees in Studio Art and in Design.

According to the National Association of Schools of Art and Design (NASAD) and the AIGA (the Professional Association for Design) a BFA in Design is the appropriate and preferred professional degree in Design for an accredited department or program in the applied arts. The current Concentration in Graphic Design within the BA in Studio Art is an outdated and outmoded degree pathway, placing design as a subset within Studio Art. Both NASAD and AIGA suggest a BFA in Design as the industry standard for a professional Design degree, and as the most desirable degree option for employers in the field as well as competitive graduate study programs. The current Concentration in Graphic Design curriculum exceeds expectations and accreditation standards in credit hours for a (non-professional) liberal arts degree in Design. The addition of only six units (one newly developed course, one already existing course) and an integration into the newly built BFA in Studio Art capstone experience would provide the necessary credits for an accredited BFA in VCD.

The level of student interest in the BFA in VCD is high and warrants its own standalone degree. With the number of students in the Concentration (35 to 40) and in the Graphic Design Minor (60 to 70), many of these major and minor students would choose to apply for a BFA in VCD that is accredited and recognized by the profession. Currently 23% of majors and 30% of minors in the Art and Art History Program are declared as Graphic Design. It is expected that many of the current Graphic Design Minors would choose to switch to a professional level BFA in VCD. There would also be a clear application process to move all eligible current students in the BA in Studio Art with Concentration in Graphic Design into the BFA in VCD. Students who are not accepted into the BFA in VCD would continue as BA in Studio Art majors –graduating with the Concentration in Graphic Design until all are matriculated and the Concentration is finally retired.

Currently no duplication exists in degree programs. The new BFA in VCD would evolve the Concentration into a full-fledged professional degree based on increased demand. For the first time, it would allow students to complete a professional degree in Design within the state of Wyoming. It would model for students current professional Design practices in the industry with broad potential to take root more fully across the State. The BFA in VCD would streamline design education and eliminate confusion while building upon and growing the Art and Art History Program. This degree would also provide transfer students from Wyoming Community Colleges a clear path to enter the Design profession with a clear 2+2 agreement and course equivalencies. It will help further establish UWYO as a center for the study of Design in the Mountain West, continuing to draw students from the Front Range where only one accredited BFA in Design exists within a public institution with tuition costs exceeding those at UWYO.

APPENDIX A

STRUCTURE OF THE MAJOR
*New additional class highlighted below…

BFA IN VISUAL COMMUNICATION DESIGN
125 credit hours total; (90 inside major + 35 outside major)
42 upper division total; (6 Art History + 12 BFA core + 15 upper division VCD + upper division Studio Art)

COURSES IN THE ART AND ART HISTORY PROGRAM
(90 total … 15+12+15+12+12+15+9)

        15 CREDITS – FOUNDATIONS CORE
3	2D Design
3	3D Design
3	Color Theory
3	Drawing I
1	Digital Media
1	Portfolio Review
1	Tech

        12 CREDITS - STUDIO CORE
(12 credits from the list below; at least one core course must be from 2D and one from 3D)
3	Art 2005 – Drawing II
3	Art 2210 – Painting I
(3	Art 2112 – Graphic Design I – already included in the VCD core)
3	Art 2255/ or 2265 – Photo (either black/white or digital)
3	Art 3510 – Printmaking I
3	Art 2310 – Sculptural Practices I
3	Art 2350 – Metalsmithing I
3	Art 2410/or 2420 Ceramics I or II

        15 CREDITS – ART HISTORY / DESIGN THEORY
3	ART 2010 – Art History Survey I
3	ART 2020 – Art History Survey 2
3	ART 2030 – History of Graphic Design
6	Upper Division Art History

        12 CREDITS – BFA CORE
3	ART 4600 – Professional Practices (COM III)
3	ART 4010 – Contemporary Art Theory and Practice (COM III)
3	ART 4800 – BFA Capstone I (fall of senior year)
3	ART 4810 – BFA Capstone II (spring of senior year)

        12 CREDITS – VISUAL COMMUNICATION DESIGN CORE
3	ART ???? – Typography for Visual Communication* (will be covered by reassigning current faculty)
3	ART 2112 – VCD I: Visual Thinking (currently Graphic Design I)
3	ART 2122 – VCD II: Visual Programming (currently Computer Graphics I)
3	ART 2255 or ART 2265 - Intro to Photo (Digital) or Intro to Photo (B&W)

        15 CREDITS – UPPER DIVISION VISUAL COMMUNICATION DESIGN
3	ART 3112 – TYPE: Type, Images & Narrative (Advanced Type)
3	ART 3120 – VCD III: Visual Making (currently Graphic Design II)
3	ART 3150 – VCD IV: Visual Imaging in Time (currently Computer Graphics II)
3	ART 4120 – Senior Design Studio (currently Senior Portfolio)

3   ART 4400 or Art 4425 – Internship / Graphics Internship

   9 CREDITS - UPPER DIVISION STUDIO ART ELECTIVES
       9   Upper Division Studio Art classes

COURSES OUTSIDE MAJOR (35 TOTAL … 21+6+8)

       21 CREDITS – UW USP REQUIREMENTS
       3   FYS
       6   PN
       (6)   (Human Culture – covered by Foreign Language)
       3   Q
       3   U.S. / Wyoming Constitution
       3   COM I
       3   COM II
       (3)   (COM III) – embedded in BFA Degree

   6 CREDITS – A&S REQUIREMENTS
       3   Diversity
       3   Global

   8 CREDITS – BFA DEGREE REQUIREMENTS
       8   Foreign Language

APPENDIX B

Market Analysis by Gray and Associates

CIP Code	Title	Market	Delivery	Award Level	Student Demand	Employ Demand	Degree Fit	Compet Intensity	Overall Score
50.0409	Graphic Design	WY	F2F	Bachelor	5	-5	2	2	4
			Online	Bachelor	22	-5	2	7	26
		Laramie 360	F2F	Bachelor	12	-3	2	-6	5
			Online	Bachelor	23	-3	2	5	27
		National	F2F	Bachelor	9	-3	2	-6	2
			Online	Bachelor	16	-3	2	4	19

Program Description

A program that prepares individuals to apply artistic and computer techniques to the interpretation of technical and commercial concepts. Includes instruction in computer-assisted art and design, printmaking, color theory, imaging, studio technique, still and life modeling, multimedia applications, communication skills and commercial art business operations.

Brief Analysis

There is a moderate student demand for a campus face-to-face program, while there is a strong to very strong student demand for an online program in all markets surveyed. Most notable in Wyoming. Degree fit is appropriate. The competitive intensity score also supports the need and desire for an online program. Competition is tight when looking at campus face to face programs, while online programs are less competitive suggesting opportunity for this delivery method, in all markets surveyed .

Bureau of Labor Statistics

From: https://www.bls.gov/ooh/arts-and-design/mobile/graphic-designers.htm

Employment of graphic designers is projected to decline 4 percent from 2019 to 2029.

While overall employment in this occupation is expected to go down, specific projections vary by industry. For example, employment of graphic designers in newspaper, periodical, book, and directory publishers is projected to decline significantly. In contrast, employment of graphic designers in computer systems design and related services is projected to grow. Companies are continuing to increase their digital presence, which sometimes requires graphic designers to help create visually appealing and effective layouts of websites.

Job Prospects

Graphic designers are expected to face strong competition for available positions. Many talented individuals are attracted to careers as graphic designers. Prospects will be best for applicants who keep up with the latest design trends, technologies, and techniques.

APPENDIX C

NATIONAL ASSOCIATION OF SCHOOLS OF ART AND DESIGN
Accreditation Standards and Percentages for a BFA in VCD

	Studio or Related Areas	Art/Design History	Visual Communication Design	General Studies	Electives	Total Number of Units
NASAD standards	20-30% 24 units minimum	10-15% 15 units minimum	25-35% 30 units minimum	25-35% 30 units minimum		100% 120 units minimum
	At least 78 units needed total 65%			At most 42 units allowed 35%		
NEW UW BFA in Visual Communication Design	27 units 22.5 %	15 units 12.5%	48 units 40%	35 units 29%		125 104%
	90 units (75%)			35 units (29%)		

ACADEMIC AND STUDENT AFFAIRS

COMMITTEE MEETING MATERIALS

AGENDA ITEM TITLE: <u>Green Dot</u> *O'Neil/Chestnut*

☒ PUBLIC SESSION
☐ EXECUTIVE SESSION

PREVIOUSLY DISCUSSED BY COMMITTEE:
    ☒ Yes
    ☐ No

FOR FULL BOARD CONSIDERATION:
    ☐ Yes
    [Note: If yes, materials will also be included in the full UW Board of Trustee report.]
    ☒ No

☐ *Attachments/materials are provided in advance of the meeting.*

EXECUTIVE SUMMARY:
Here at The University of Wyoming, we are committed to reducing and preventing power-based personal violence such as sexual assault, relationship violence, and stalking. Green Dot is a bystander intervention program to reduce these forms of violence with one thought; If everyone does one thing, no one will have to do everything. The program, trainings, and implementation will be reviewed with the Academic and Student Affairs committee with consideration reviewed on how to best share with the full board.

WHY THIS ITEM IS BEFORE THE COMMITTEE:
University of Wyoming has now been able to implement Green Dot to all campus constituencies groups and would like to provide an update to the committee and discuss next steps.

ACTION REQUIRED AT THIS COMMITTEE MEETING:
Academic & Student Affairs Committee can guide at what level Green Dot information should, including training, should be shared with the full board.

PROPOSED MOTION:
N/A

ACADEMIC AND STUDENT AFFAIRS

COMMITTEE MEETING MATERIALS

AGENDA ITEM TITLE: <u>Summer/Fall Student Experience</u> *Alexander/Chestnut*

☒ PUBLIC SESSION
☐ EXECUTIVE SESSION

PREVIOUSLY DISCUSSED BY COMMITTEE:
      ☒ Yes
      ☐ No

FOR FULL BOARD CONSIDERATION:
      ☐ Yes
       [Note: If yes, materials will also be included in the full UW Board of Trustee report.]
      ☒ No

☐ *Attachments/materials are provided in advance of the meeting.*

EXECUTIVE SUMMARY:
Continue committee discussion on looking at the student experience for fall 2021.

WHY THIS ITEM IS BEFORE THE COMMITTEE:
Information item only.

ACTION REQUIRED AT THIS COMMITTEE MEETING:
N/A

PROPOSED MOTION:
N/A